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USM Undergraduate Academic Catalog 2014-15
Welcome

Dear Student:

Hello and welcome to the University of Southern Maine! Here, student success is our first commitment. Your experience at USM will be a journey filled with opportunity, excitement, and challenge. Our faculty and staff will work with you every step of the way to ensure that you succeed at every challenge and accomplish your goals. At USM we are dedicated to providing you with a high-quality, accessible, and affordable education. We offer courses in liberal arts and sciences, engineering and technology, health and social services, education, business, law, and public service. With such a wide variety of classes to choose from it may be hard to decide which ones to take! But not to worry! USM’s faculty and staff are knowledgeable and committed to guiding students in class selection to guarantee success in achieving career goals.

I am happy that we can be a part of your journey here at USM! I encourage becoming involved in our community and sharing your success with others! Be active, be engaged, and stay positive and you can overcome any obstacle that you encounter! I wish you the best of luck here at USM.

Sincerely yours,

Theodora J. Kalikow

President
The University

The University of Southern Maine, the state's metropolitan university, prepares students to play vital roles in the growth and improvement of the economic, civic, social, and cultural fabric of central and southern Maine, while providing engaged learning opportunities both inside and outside the classroom.

As a member of the University of Maine System, USM offers its nearly 9,300 students more than 50 undergraduate and 27 graduate programs in the College of Arts, Humanities, and Social Sciences; the College of Management and Human Service; the College of Science, Technology and Health; Lewiston-Auburn College; and the University of Maine School of Law.

USM offers courses at the University Colleges in Saco and Bath, as well as on the Web, over instructional television, and at work sites.

USM further addresses the broad range of student interests with its Weekend College, Winter Session, Summer Session, Study Abroad, and Early Studies program for high school juniors and seniors.

USM's faculty have a passion for communicating the excitement of learning and the joy of discovery. These women and men represent a wide range of knowledge and expertise; among them are Fulbright and Guggenheim Fellows, advisors to state and local governments, and authors of national note from a variety of academic disciplines.

USM's locations in central and southern Maine, viewed nationally as among the most livable regions in the country, offer a variety of educational, cultural, and recreational opportunities. The student body is the most diverse in Maine—approximately half are full-time students, 59 percent are women, and the average age of an undergraduate is 28 years. This diversity of age, background, and purpose provides a lively, challenging environment for learning.

The University of Southern Maine is accredited by the New England Association of Schools and Colleges. The nursing programs are accredited by the Commission on Collegiate Nursing Education (CCNE). The athletic training education program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The health fitness major within the exercise science program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). The School of Education is accredited by the National Council for Accreditation of Teacher Education. The School of Business is accredited by AACSB International—the Association to Advance Collegiate Schools of Business. The School of Social Work is accredited at the baccalaureate level by the Council on Social Work Education. Several departments are accredited through specialized agencies. The University of Maine School of Law is approved by the American Bar Association and the Association of American Law Schools.

USM is a vital university dedicated to student success and the transformative power of public higher education. Serving the needs and aspirations of central and southern Maine communities, the University of Southern Maine prepares its students for personally and professionally fulfilling lives after graduation.

Expected Results of a University Education

Consistent with the educational mission of a comprehensive university, it is the aspiration of the faculty at the University of Southern Maine that students achieve the following results from their investments in higher education:

- They should possess the knowledge and skills necessary to enter the work force or be admitted to graduate or professional school. Graduates of the University of Southern Maine should also possess the attributes and skills that lead to rich and fulfilling lives.
- They should be intelligent readers of their own culture and be able to use analysis and historical context to interpret cultural practices, artifacts, and documents of various kinds.
- They should appreciate the many ways of knowing, including the arts, the humanities, and the natural, applied, and social sciences; they should be aware of how these disciplines help define and shape the world; and they should understand the joy and wonder that can arise from rigorous inquiry leading to fresh discoveries and modes of expression in these fields.
- They should be able to appreciate basic ecological and physical processes, how their lives are affected by environmental trends and characteristics, and how each of us shares in the responsibility for sustaining the life forces, cycles, and processes upon which all life depends.
- They should understand the nature of at-risk behaviors and be able to make informed decisions about their own well-being.
- They should be able to communicate effectively, both orally and in writing, think critically and creatively, and use effectively both information technology and the skills of quantitative decision making.
- They should know how to work in teams, take responsibility, exercise leadership, and manage resources effectively.
- They should be aware of the world's complexities beyond their own set of experiences and assumptions, have an appreciation for other peoples' values and customs, and think effectively about ethical and social issues.
- They should have the capacity for self-education so they can enjoy a lifetime of continuous learning.
- They should be responsible citizens committed to fostering the ideals of a democratic society: civic and social participation, free inquiry and informed decision making, and equal opportunity.
Disclaimers

The University of Southern Maine is accredited by the New England Association of Schools and Colleges which accredits schools and colleges in six New England states. Membership in the Association indicates that the institution has been carefully evaluated and found to meet standards agreed upon by qualified educators.

The University of Southern Maine does not discriminate on the grounds of race, color, religion, sex, sexual orientation, including transgender status and gender expression, national origin, citizenship status, age, disability, genetic information or veterans status in employment, education, and all other programs and activities. The following person has been designated to handle inquires regarding non-discrimination policies: Director of Equity & Compliance, 209 Deering Avenue, Portland campus, voice - 207-228-8304, TTY - 711 (Maine Relay System).

The University of Southern Maine reserves the right to revise, amend or change items set forth in this catalog from time to time. Accordingly, readers of this catalog should inquire as to whether any such revisions, amendments or changes have been made since the date of publication. The University reserves the right to cancel course offerings, to set minimum and maximum size of classes, to change designated instructors in courses, and to make decisions affecting the academic standing of anyone participating in a course or program offered by the University of Southern Maine.

The University of Southern Maine supports the efforts of secondary school officials and governing bodies to have their schools achieve regional accredited status to provide reliable assurance of the quality of educational preparation of its applicants for admission.
Undergraduate Admission

The University of Southern Maine is an academic community that welcomes applications for admission from qualified women and men with various backgrounds and interests regardless of race, color, religion, gender, sexual orientation, national origin or citizenship status, age, physical or mental disability, or veteran status. The University seeks candidates whose academic achievement and motivation indicate potential for success in an undergraduate program.

The Office of Undergraduate Admission invites prospective students to visit the campus to discuss their educational interests. The Office will provide information about academic programs, discuss admission requirements and procedures, and arrange personal interviews and campus tours. Prospective students are encouraged to contact the Office of Undergraduate Admission at 1 (800) 800-4USM, or (207) 780-5670, or usmadm@usm.maine.edu. For more information on Lewiston-Auburn College, call (207) 753-6536.

Admission Requirements

With the exception of early admission applicants, a high school diploma or GED/HiSET is required for admission to the University. Students who are home educated/home schooled should contact the Office of Undergraduate Admission for information regarding the alternate documentation required for admission. Although secondary school preparation may vary, please find below the minimum college preparatory subjects required for regular admission to the University. In addition to these, further requirements may be imposed by individual University schools and colleges.

General subject minimum requirements (University-wide)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
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<tbody>
<tr>
<td>English</td>
<td>4 units</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3 units (Algebra I, Algebra II, and Geometry)</td>
</tr>
<tr>
<td>Science</td>
<td>2 units (with laboratory)</td>
</tr>
<tr>
<td>History/Social Science</td>
<td>2 units</td>
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</table>

Highly Recommended College Preparatory Courses

An optimal college preparatory course of study extends beyond the minimum requirements. Students who do best in college and graduate on time have the following high school course of study:

- Four years of English in courses that present a variety of readings (fiction, non-fiction, essays, memoirs, journalism) and emphasize expository and analytic writing about texts
- At least three years of laboratory science that include the study of biology, chemistry, and physics, offered as separate courses or as an integrated core. Science courses should include writing technical reports and quantitative representations and analyses of data as well as the traditional course content
- Four years of math that include Algebra I and II and Geometry; a college preparatory math course during the senior year
- Three years of history and social science that include reading primary as well as secondary texts, writing analytic and expository essays, and using quantitative social science data, in addition to the traditional course content
- Two years of study of one language other than English: Foreign languages and American Sign Language (ASL)

Additional requirements for majors in a particular college or program

College of Arts, Humanities, and Social Sciences:

- French
  - Three units of French.

School of Music

- Successful completion of a music audition administered by USM

College of Management and Human Service:

School of Business

- Four units of mathematics exceeding Algebra II.

College of Science, Technology, and Health:
Engineering

- Laboratory chemistry and physics, and four units of mathematics exceeding Algebra II.

Mathematics

- Four units of mathematics exceeding Algebra II.

Sciences

- Three units of laboratory science.

Athletic Training, Exercise Physiology, Health Fitness, and Health Sciences

- Laboratory biology and chemistry.

Nursing

- Laboratory biology and chemistry. In addition, nursing candidates must also satisfy specific academic standards in order to qualify for the clinical portion of the degree program. For further details, please refer to the School of Nursing section of this catalog.

Admission Procedures, Policies

Application Requirements

- Completed application form, paper or online: University of Maine System application or the Common Application
- $40 application fee payable to the University of Southern Maine
- Official transcript sent by your high school, listing all courses and grades received to date or official GED/HISET scores
- Official SAT/ACT scores sent directly from the testing agency or included on the official high school transcript. (If you have completed more than 12 college credits or are age 20 or older, these scores are not required.)
- Official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores (may be required of those applicants whose primary language is not English)

First year applicant additional requirements:

Completed school counselor statement and/or letter of recommendation from a teacher (not required if you are no longer in high school)

Homeschooled Students

Students who are satisfying any or all of their high school requirements in a homeschool setting should submit an official school transcript or an annual assessment of courses they have completed. A letter of recommendation may come from a family member, but must also come from someone outside the family.

Adult Students

If you graduated from high school or earned your GED/HISET more than three years ago, it is recommended you submit a current resume of your life and work experiences. An electronic file of your resume can be sent to usmadm@usm.maine.edu.

Transfer applicant additional requirements:

- Official transcripts from all colleges attended, whether or not credit was earned, sent directly from each institution.
- International College Transcript Evaluation: Official evaluation of college level transcripts from a USM approved transcript analysis agency. For a list of approved agencies, go to usm.maine.edu/admit/international-students
- Nursing applicants only: Supplemental application. Go to Nursing website for more information: usm.maine.edu/nursing

International applicant additional requirements:

- Official secondary school transcripts, exam certificates, and college level transcripts including certified English translations
- Official transcripts from all colleges attended, whether or not credit was earned, sent from the institution
- International College Transcript Evaluation: Official evaluation of college level transcripts from a USM approved transcript analysis agency. For a list of approved agencies, go to usm.maine.edu/admit/international-students
- Declaration of Finances accompanied by the appropriate financial documentation

Reactivating or Readmission Applicant requirements

You should only complete the Reactivation of Application/Readmission Application if one of the following two categories applies:
Reactivation of Application: You applied to USM within the last year but did not enroll in classes as a degree (matriculated) student.

Readmission: You received an undergraduate degree from USM and are pursuing a second undergraduate degree OR you began your studies at USM as a degree (matriculated) student and stopped attending for five or more consecutive years.

Application materials should be sent to:

University of Maine System Application Processing Center

PO Box 412

Bangor, ME 04402-0412

Colleges and universities that participate in electronic submission of transcripts can send official transcripts to edocs@maine.edu.

For a complete listing and more information, go to: usm.maine.edu/admit/application-instructions

Early Admission Applicants

Students who have completed their junior year of high school may apply for consideration of admission (as non-matriculated students) under the Early Admission Program. Undergraduate Admission will consider high-achieving students who display both the intellectual ability and the social maturity to succeed in a university course of study.

To be eligible for admission, candidates must have completed a minimum of three years of college preparatory subjects in high school according to the general University admission requirements, and submit SAT or ACT test results.

Interested applicants will be required to submit the University of Maine System application in addition to an Early Admission Application. Early admission candidates may be required to have a personal interview with a member of the admission staff. High school students who enter the University of Southern Maine prior to graduation from high school are not eligible for federally funded financial aid and may not participate in intercollegiate athletics.

Early Admission applicants may apply for the fall semester only. Application forms must be submitted by April 15.

Priority Dates and Deadlines

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<td>April 1</td>
<td>First Year Nursing deadline</td>
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<td></td>
<td>May 1</td>
<td>Academic scholarship completed application deadline</td>
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<td></td>
<td>July 1</td>
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<td>January 2</td>
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<td>Summer*</td>
<td>May 1</td>
<td>Priority filing application date</td>
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<td></td>
<td>October 1</td>
<td>Accelerated Nursing deadline</td>
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<tr>
<td></td>
<td>January 15</td>
<td>Transfer Nursing deadline</td>
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<tr>
<td></td>
<td>February 15</td>
<td>First Year Nursing deadline</td>
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*For those who have earned a high school diploma or GED/HiSET by priority filing application date of May 1

Applications are reviewed throughout the year on a rolling admission basis. Although applications are reviewed on a rolling basis, as some degree programs admit only a limited number of students, applicants are urged to submit their credentials at their earliest possible convenience in order to receive consideration. Applications may be made to enter the University in the fall, spring, or summer semester. Offers of admission may be revoked because of unsatisfactory performance in the final semester of high school or college.

Admission to the University is offered for a specific semester. Anyone choosing to defer his or her offer of admission may do so by submitting a written request to the director of Undergraduate Admission prior to the start of the semester and paying a $100 non-refundable enrollment
deposit. Deferments are granted for up to one year. Students attending another college are not allowed to defer.

Admission Decisions

The University recognizes that its prospective students may come with differing academic backgrounds and/or with significant time having elapsed since completion of secondary school. The following categories of admission exist to accommodate this wide range of applicants.

Regular Admission

Applicants whose academic backgrounds demonstrate the ability to pursue regular, entry level coursework may be granted regular acceptance to the University. This admission decision is based upon a comprehensive evaluation of the student's educational record, including standardized test scores (if required), as well as individual talents and activities.

Enrollment as an Undeclared Major

Applicants who are undecided regarding their major field of study may request admission as an "Undeclared Major." Undeclared students are assigned an advisor in the Student Success Center to assist with appropriate course selection and academic planning while exploring a major field of study. This admission option provides students the opportunity to select their major at an appropriate time during the first 60 credit hours of coursework.

Admission to the GO Program

Applicants whose academic credentials are not complete in some way (e.g., missing academic units, low SAT or ACT scores), but who show significant promise, may be granted acceptance to GO, an academic success and support program. Students are fully admitted to the University and pursue their first year of study under the direction of the Student Success Center. Students who are admitted to GO are required to fulfill terms of an academic support plan that outlines their responsibilities. Students admitted to GO are expected to meet the requirements of their academic support plan within their first 30 credit hours.

To achieve transition to regular status, the student must complete the minimum college readiness requirements of the University as well as successfully complete a minimum of 12 credit hours of 100-level coursework (including College Writing), complete a learning strategy and decision-making course, and have a minimum grade point average of 2.0. Transition to regular status prior to completion of 12 credit hours may be approved if the student earns an exceptional grade point average. The student's assigned advisor will assist in completing the transition.

All applications are considered for regular admission to the University. As part of the review process, the Undergraduate Admission Committee will determine which applicants are to be offered admission to GO.

Admission to the English Language Bridge Program

Students applying to the University who meet regular admission requirements but whose TOEFL or IELTS scores fall below the required level may be eligible for admission to the University through the English Language Bridge Program offered through the ESOL Department.

Admission to the Intensive English Language Program with Conditions

The Intensive English Language Program with Conditions is for students whose first language is not English and who are seeking admission to USM. Students are considered for this program if they are academically qualified, may or may not have taken the TOEFL or IELTS exam, and still need a semester or two of English language instruction. Students will be admitted with the condition that they successfully complete at least one semester of Intensive English courses prior to enrolling in other courses offered at USM.

Enrollment as a Non-matriculated Student

The University encourages members of the local community to take advantage of its diverse course offerings. Non-matriculated students (those not enrolled in a degree program of study) may take regular credit courses for self-interest and enrichment. Non-matriculated students are enrolled each semester on a space-available basis and are not eligible for student financial aid awards, guaranteed student loans, veteran's benefits, campus housing, or participation in intercollegiate athletics. Interested persons are invited to contact Professional and Continuing Education or the Student Success Center.

Non-matriculated students are required to meet the same academic progress standards as matriculated students. In order to apply degree credits earned at the University of Southern Maine, the student must be admitted into a degree program as a result of the application process.

Transfer Admission

Applicants who have attended a postsecondary institution beyond the secondary school level are considered transfer students and must submit official copies of collegiate and secondary school records. SAT or ACT test results are not required for students who have completed more than 12 college credits or are age 20 or older. Quality points and grade point average do not transfer.
Students applying for transfer from regionally accredited institutions of higher education must have a grade point average of at least 2.0 (on a 4.0 scale) to be considered for admission. Some academic programs require higher grade point averages. Transfer credit may be awarded for coursework completed at a regionally accredited institution of higher education. Courses graded C- or higher are considered for transfer credit.

Students applying for transfer from non-regionally accredited institutions of higher education must have a minimum 2.75 grade point average (on a 4.0 scale) to be considered for admission. No transfer credit will be awarded for coursework completed at non-regionally accredited institutions of higher education. Under special circumstances, students may, in individual cases, petition the dean of the appropriate college for consideration of coursework earned from institutions that were candidates for accreditation.

From within the University of Maine System

Trustee policy is to provide the maximum opportunity for transfer within the University of Maine System. When a student is accepted for transfer, all undergraduate credits successfully completed with a grade of C- or better at any unit of the University System will be transferable to any other unit of the University System, but will not be automatically applied to the specific academic degree program to which the student has transferred. Each student will be expected to meet the established requirements of the academic program into which transfer is made, and appropriate application of transfer credit is to be the responsibility of the particular academic unit.

University of Maine System Transfer Policies and Practices

1. Transferring students must provide official transcripts reflecting all previous post-secondary coursework.
2. An evaluation of transfer credit will be prepared by the Transfer Officer for each accepted transfer student, and will be available in the student's MaineStreet Student Center. The transfer student should meet with an academic advisor at the receiving university to review how the transfer credit will be applied toward the student's degree program. Transfer evaluations will be prepared based on the following principles:
   1. Within the University of Maine System. Undergraduate courses completed with a C- or higher, including P grades, will transfer from one UMS university to another. Grades will be recorded on the student's transcript but not computed into the cumulative GPA.
   2. Outside the University of Maine System. Credit earned with a C- or higher in courses from regionally accredited colleges/universities outside the UMS will be considered for transfer. Pass-fail courses taken outside the UMS must have "pass" defined as a C- or higher in order to transfer.
   3. Generally, course grades do not transfer from one college/university to another. Semester and cumulative GPA's reflect only those courses taken at the home university. Students in cooperative degree programs should inquire about any exceptions that may apply.
   4. Coursework defined as developmental by the university to which the student is transferring will not be awarded degree credit. Developmental courses are considered preparatory to college-level work, and will not count towards a degree.
   5. Courses from colleges and universities outside the United States will be accepted for transfer consistent with established University policies and practices.
3. Credit may be awarded for high school Advanced Placement (AP) exams, College Level Examination Program (CLEP) exams, or college-level knowledge gained through life experience (e.g., prior learning, such as military or other training) when validated through the approved campus processes.
4. Students with coursework from non-regionally accredited schools may inquire into the possibility of validating some or all of their learning through testing and/or approved university credit for prior learning processes. Students interested in this option should contact the Transfer Officer for more information.
5. If a student has concerns about the transfer evaluation, the student should contact the Transfer Officer at the receiving university. After such referral, the student may appeal through the academic appeals process at the receiving university.
6. Transfer students should consult the University's catalog and/or meet with an appropriate advisor to determine requirements regarding the number and distribution of credits that must be completed at the University to earn the desired degree.
7. Students must meet the established requirements of the academic program or college into which they are transferring. Transfer credits do not necessarily count towards these requirements.
8. Students may also confer with the Transfer Officer and/or an academic advisor regarding possible flexibility in the application of their credits to their program, through approved campus processes.
9. Current UMS students who plan to take courses at another university, inside or outside of the UMS, are strongly encouraged to seek prior approval of their plans from the UMS university where they are matriculated.

Transfer Credit Evaluation

Undergraduate coursework completed at other institutions of higher education will be evaluated for transfer credit on the basis of the following: whether or not the previous institution was regionally accredited at the time of attendance, grades achieved in previous coursework, and comparability of courses taken with courses at the University. Courses for which credit is awarded through another institution's credit-by-examination policy may be granted transfer credit provided both earned credits and grades appear on the transcript and the course is applicable to the student's work at this University. The applicability of transfer credits to USM's core curriculum and to a student's intended major field of study shall be determined by the Office of Transfer Affairs in conjunction with the appropriate academic department, school, or college. Transfer evaluations are assumed to be correct if a student does not direct questions to or enter an appeal with the Office of Transfer Affairs within one year of the completion of the evaluation. At that time, the evaluation becomes permanent and will not be changed.
Maine Community College Articulation Agreements

The University of Southern Maine has formal articulation agreements in certain academic disciplines with the Maine Community College System. In addition, USM participates in AdvantageU, a guaranteed admission program for qualified Maine Community College students who elect to participate. These agreements facilitate transfer to USM for graduates from specific associate degree programs. For more information, students should contact either the academic department at USM to which transfer is being considered, or the USM Office of Transfer Affairs.

Placement Exam

Placement Examination Program

SAT and ACT scores are used for course placement in mathematics. All newly admitted degree candidates whose SAT mathematics score is below 550 or ACT mathematics score is below 22 must take the math placement examination. Only SAT or ACT test results administered within the past five years are valid. TOEFL and IELTS scores are used for course placement in English. Only TOEFL and IELTS test results administered within the past three years are valid. Students who transfer credits from another institution may meet college readiness in mathematics as determined by the Office of Transfer Affairs. Non-matriculated students are encouraged to take the placement examination and should contact the Office of Academic Assessment for details. For more information on the Placement Examination Program, go to usm.maine.edu/assessment. Note: The placement exam results will not be used in place of SAT/ACT test results for admission purposes.

Prior Learning Assessment

The Office for Prior Learning Assessment (PLA) believes that students should be rewarded for knowledge acquired outside the traditional classroom if it fulfills the academic criteria set forth and evaluated by the USM faculty.

PLA is a process that builds a bridge between students' practical, applied learning experiences and their theoretical, college-level knowledge. There are several pathways across this bridge: testing options, credential reviews, military evaluations, and academic portfolio development, paving the way to academic credit where appropriate. Proof of competency rests with the student. Transcripts older than twenty years cannot be used for credit. For further details regarding credit options, students should contact the Office for Prior Learning Assessment at usm.maine.edu/pla.

Advanced Placement

The University participates in the Advanced Placement program (AP) of the College Board. AP exams are given in secondary schools. For credit consideration at USM, an official AP transcript and a minimum score of 3 are required.

International Baccalaureate

The University recognizes IB and is committed to considering credit for students who score 5 or better on the Higher Level exams. No credit is offered for Standard Level IB exams. An official score transcript must be sent from the IB Organization to the Office for Prior Learning Assessment for evaluation.

Standardized Examinations

College Level Examination Program (CLEP) and DANTES exams are used for either course-equivalency or elective credits. For credit consideration at USM, an official transcript must be submitted and cut-off scores must be achieved. Several Excelsior College exams are also recognized for credit. PLA also offers credit for 50 language exams through an external testing program. For more information on all these options, visit the PLA Web site at usm.maine.edu/pla.

Academic Portfolio Assessment Program

The academic portfolio is a formal collection of evidence in support of a person's claim for college credit. The process is reflective and challenging, yet rewarding. To earn course equivalency credit or elective credit with an academic department through portfolio assessment, the candidate's documentation must prove understanding and learning competency, subject to evaluation by appropriate faculty. Academic portfolio assessment may also be used to earn general elective credit, which can be earned regardless of one's academic major. Applicability of credits toward meeting graduation requirements varies by school and college within the University.

Credential Review

Credential review requires original and current documentation for individualized learning situations, submitted for college credit, reviewed by appropriate USM faculty or in consultation with national guidelines. All credentials are considered on a case-by-case basis. PLA reviews professional certifications, educational and training courses, and certain college-level experiential learning that may have earned selected licenses, certificates, and/or credentials for organizations outside the University. Credit is not awarded for attendance certificates.

Credit for Military Service

Students who have been active members of the armed services may qualify for credit. Official service documents are required for credit
consideration.

Challenge Examination Program

Challenge exams may be developed individually by faculty members for USM students in coordination with the Office for Prior Learning Assessment. These exams are used selectively and may result in the student earning equivalency course credit.

Pre-professional Programs

Pre-Law

There is no specific course of study required of students who are planning to apply to law schools. Since the practice of law covers all fields, the only recommendation that law school admissions officers give to students is that they pursue challenging courses in areas of interest to them and that they do well in these courses. Participation in an honors program definitely enhances a student's admission as does a well-written senior thesis or an independent study.

- Students must be able to write clearly. They should take upper level, writing intensive courses in English or other fields.
- Students must be able to think clearly and critically. Courses in philosophy, science, and language will be helpful.
- Students should understand the social and political context within which the law exists. Courses in sociology, history, and political science are appropriate.
- Students may wish to take substantive courses in the law and in legal reasoning. Courses in law and society, civil liberties, civil rights, constitutional law, business law and the rule of law--some of which are offered as undergraduate courses by professors from the University of Maine Law School--may be of interest.

Students who are interested in law should be advised that their overall academic record and performance on the LSAT are much more important than a specific undergraduate major for law school admission.

Students should meet with USM's pre-law advisor early in their undergraduate careers to discuss the legal profession and design a path to law school admission. Students should also become active members of USM's Pre-Law Society. For more information, contact Ronald Schmidt, associate professor, at (207) 780-4581 or e-mail rschmidt@usm.maine.edu.

Pre-pharmacy Program

A two-year, non-degree program of study is offered to prepare students to apply to a four-year doctoral program in pharmacy (a 2+4 program). Most schools and colleges of pharmacy require 60-75 credits in their two-year pre-pharmacy phase, depending on the number of general education credits required. Individual programs vary in the general education courses they require, e.g., economics, social science, humanities, and fine arts, so students should consult those programs accordingly. The pre-pharmacy concentration is a time-intensive program that students will need to commit to upon entering the University. Students are encouraged to take summer courses to reduce the number of credits taken each semester. If students choose not to take summer courses, they should consider extending the program to three years. If they do well in this program of study, they will be competitive with students from other universities applying for entry into professional pharmacy programs. If students decide not to transfer after two years, they will be well along the path toward earning a B.S. in biology degree. For further information contact Jeffrey Walker, associate professor, 305A Science Building, Portland. (207) 228-8166 or e-mail walker@usm.maine.edu.

Pre-Medical, Pre-Dental, Pre-Veterinary

USM, like most universities, does not have a major in pre-medical, pre-veterinary, or pre-dental studies. USM offers a degree in biology with a concentration in human biology. By completing the concentration in human biology a student will have completed all the required courses for admission to professional school and many of the recommended courses. Pre-veterinary students should complete the general biology degree. Most students who are accepted in a professional school majored in biology or zoology as undergraduates. However, a student does not have to major in science to be accepted to medical, dental, or veterinary medicine school. Approximately one-third of all students accepted to professional schools took the required science courses as electives while pursuing their undergraduate degrees in non-science fields.

Every undergraduate course taken is important regardless of its subject area. Admissions officers in professional schools pay particular attention to the overall academic record and performance on entrance exams when evaluating a candidate's application for admission.

It is also important to have experience in the field of medicine. Most veterinary schools require some type of animal care experience, e.g., volunteer work in an animal hospital. Many medical schools require some type of patient-care experience, e.g., Emergency Medical Technician training, volunteer work in an emergency room.

As minimum entrance requirements, most professional schools recommend:

- 1 year of college biology with lab (BIO 105, 106; BIO 107, 108)
- 1 year of inorganic chemistry with lab (CHY 113, 114; CHY 115, 116)
- 1 year of organic chemistry with lab (CHY 251, 252; CHY 253, 254)
- 1 year of physics with lab (PHY 111, 114 or PHY 121, 114)
• 1 semester of mathematics (statistics recommended)

Some recommended courses are:

Psychology (PSY 101J)
Genetics (BIO 301)
Microbiology (BIO 311, 312)
Comparative or Human Anatomy (BIO 205 or 211/212)
General or Human Physiology (BIO 401/402)
Human Anatomy and Physiology (BIO 111)

For more information, please contact Jeffrey Walker, associate professor, 305A Science Building, Portland. (207) 228-8166 or e-mail walker@usm.maine.edu.

New England Regional Student Program (RSP)

In cooperation with the New England Board of Higher Education (NEBHE), the University offers undergraduate and graduate programs of study at reduced rates of tuition to qualified candidates from the New England states. Because the listing of programs varies from year to year, candidates should check the most up-to-date listings. The following schedule represents the fields of study available at the University in the New England Regional Student Program (RSP) for 2014-15. Further information is available at nebhe.org/tuitionbreak.

Undergraduate Programs

<table>
<thead>
<tr>
<th>Field</th>
<th>CT, MA, NH, RI, VT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Technical Leadership</td>
<td>CT, MA, NH, RI, VT</td>
</tr>
<tr>
<td>Athletic Training</td>
<td>RI</td>
</tr>
<tr>
<td>Criminology</td>
<td>NH, RI</td>
</tr>
<tr>
<td>Environmental Planning and Policy</td>
<td>VT</td>
</tr>
<tr>
<td>Exercise Science (with concentration in Health Fitness)</td>
<td>VT</td>
</tr>
<tr>
<td>General Management (with concentration in Risk Management)</td>
<td>CT, MA, NH, RI, VT</td>
</tr>
<tr>
<td>General Management (with concentration in Sustainable Business)</td>
<td>CT, MA, NH</td>
</tr>
<tr>
<td>Liberal Studies: Humanities</td>
<td>MA</td>
</tr>
<tr>
<td>Linguistics</td>
<td>RI</td>
</tr>
<tr>
<td>Linguistics (with concentration in American Sign Language)</td>
<td>CT, MA, VT</td>
</tr>
<tr>
<td>Musical Theatre</td>
<td>MA</td>
</tr>
<tr>
<td>Natural and Applied Science</td>
<td>CT, VT</td>
</tr>
<tr>
<td>Recreation and Leisure Studies (with concentration in Community Recreation)</td>
<td>RI</td>
</tr>
<tr>
<td>Recreation and Leisure Studies (with concentration in Therapeutic Recreation)</td>
<td>MA, RI, VT</td>
</tr>
<tr>
<td>Technology Management</td>
<td>RI, VT</td>
</tr>
<tr>
<td>Technology Management (with concentration in Construction Management)</td>
<td>MA, NH</td>
</tr>
<tr>
<td>Tourism and Hospitality</td>
<td>CT, RI</td>
</tr>
</tbody>
</table>

Graduate Programs

See listing in Graduate Catalog at usm.maine.edu/catalogs.

Immunization Requirement

Maine State law requires all individuals born after December 31, 1956, who plan to enroll in a degree program or plan to take twelve or more credits, to show proof of immunity against measles, mumps, rubella, diphtheria, and tetanus before registering for classes. Immunization Records should be sent to: Shared Processing Center, P.O. BOX 412, Bangor, ME 04402. Immunization records must be on file with the University before students will be allowed to register for classes. Specific information about immunization requirements can be found at usm.maine.edu/health.

E-mail Communication Policy

In order to meet the academic and administrative needs of the University community, the University has established e-mail as an official and primary means of communication to its students, accepted and/or enrolled. In some cases, e-mail may be the only form of communication. Official University assigned e-mail accounts are created for all accepted and/or enrolled students usually in the form of FirstName.LastName@maine.edu. Students are responsible for reading all information sent to them via their University assigned e-mail account. The University has the right to expect that such communications will be received and read in a timely fashion.
It is imperative that students understand that a majority of University information will be communicated to them via their assigned e-mail account. Confidential information will not be sent via e-mail. If the University needs to convey sensitive information to the student and the information cannot be conveyed using the password-protected student self-service venue, the University will send the information via United States Postal Service.

The University reserves the right to notify students via e-mail when any action on the student's part may be necessary. Some actions can be accomplished using the University's Student Information Systems, made available through special password-protected links. Students should activate their assigned e-mail accounts at mail.maine.edu. For assistance in activating your University account, visit usm.maine.edu/computing/computing-help-desk or contact the HelpDesk at (207) 780-4029, or helpdesk@usm.maine.edu. The complete E-mail Communication Policy can be found at usm.maine.edu/doit/email-communication-policy.
Financial Information

Each year in May, as part of the annual budget process, the Chancellor shall present recommended tuition, fee, and room and board rates to the Board of Trustees for approval. (Tuition and fee rates become effective after the end of the summer term). The Board may alter any of these rates at its discretion. A student acknowledges this reservation by applying for admission or registering for courses.

Tuition charges are calculated by multiplying the number of credit hours attempted by a rate established by the Board of Trustees. Courses being audited are included in this calculation. The type of tuition is usually determined by the level of the course.

**Tuition**

Tuition rates for the 2014-2015 academic year

**Undergraduate Tuition Charges Per Credit Hour**

<table>
<thead>
<tr>
<th></th>
<th>Maine Resident</th>
<th>Non-Maine Resident</th>
<th>New England Regional Student Program</th>
<th>Canadian Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$253.00</td>
<td>$665.00</td>
<td>$380.00</td>
<td>$380.00</td>
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</table>

**Graduate and Law Tuition Charges Per Credit Hour**

<table>
<thead>
<tr>
<th></th>
<th>Graduate</th>
<th>Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maine Resident</td>
<td>$380.00</td>
<td>$743.00</td>
</tr>
<tr>
<td>Non-Maine Resident</td>
<td>$1026.00</td>
<td>$1112.00</td>
</tr>
<tr>
<td>New England Regional Student Program</td>
<td>$570.00</td>
<td>$1014.00</td>
</tr>
<tr>
<td>Canadian Resident</td>
<td>$570.00</td>
<td>$1014.00</td>
</tr>
</tbody>
</table>

Additional information about Law tuition and fees can be found at [http://mainelaw.maine.edu/admissions/tuition-fees.html](http://mainelaw.maine.edu/admissions/tuition-fees.html)

**New England Regional Student Program** In cooperation with the New England Board of Higher Education, the University offers certain programs of study at a reduced tuition rate for qualified candidates from the New England states. Because the listing of available programs can vary from year to year, candidates should consult the information provided at [http://www.nebhe.org/programs-overview/rsp-tuition-break/overview/](http://www.nebhe.org/programs-overview/rsp-tuition-break/overview/). Details are also available at University admissions offices.

**Fees**

Fees for the 2014-2015 academic year

**For All Students**

- **Community Standards Fee** A $35.00 fee is charged to any student who is sanctioned under the Conduct Code.
- **Course Fees** To defray the costs associated with some courses, additional fees ranging from $5.00 to $360.00 are assessed. These fees are associated with courses requiring additional instructional resources.
- **Distance Learning Technology Fee** Students registered at University College Centers and sites are charged a $6.00 per credit hour technology fee.
- **Insufficient Funds Fee** A $25.00 fee is charged when a check is returned due to insufficient funds or when a credit card payment is declined.
- **Payment Plan Fee** A $30.00 fee is charged to students enrolling in a University three, four, or five installment payment plan.
- **Late Payment Fee** A $50.00 fee (to a maximum of $200.00) is charged to student accounts not paid when bill is due.
- **Online Course Enrollment Fee** Students registering for online classes are charged a $25 per credit hour fee for all blended and online courses to help pay for additional student services including tutoring, advising and library services. The fee also provides for faculty support services, technology infrastructure, maintenance and upgrades.
- **Student Health and Counseling Fee** A mandatory $80.00 health fee is charged to students registered for six or more credits of instructional activities emanating from the Portland and/or Gorham campus for fall and spring semesters. Such activities include independent study, internships, field experiences, etc. Credits for regular classes taken at off-campus locations are omitted when determining this fee.

Optional coverage is available to students who register for fewer than six credits. For more information about the services covered by the student health and counseling fee and the cost of enrolling after the four-week open enrollment period, contact University Health Services.
- **Student Health Insurance**  All undergraduate students enrolled in 9 or more credit hours and graduate students enrolled in 6 or more credit hours are required by the University of Maine System to maintain health insurance coverage. Additional information about the health insurance requirement is available from University Health and Counseling Services at 207-780-5411 or at [http://usm.maine.edu/uhcs](http://usm.maine.edu/uhcs).

- **Summer Session Administration Fee**  Students registering for Summer Session classes are assessed a $35.00 fee to support summer administrative costs.

- **Transportation Fee**  A mandatory semester fee is assessed to all students registered for courses that are held on the Portland and/or Gorham campuses. It funds parking and other transportation-related projects, as well as busing between campuses. It eliminates the need to pay for required parking decals.

<table>
<thead>
<tr>
<th>Credits Attempted</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1-5.9</td>
<td>$55.00</td>
</tr>
<tr>
<td>6-11.9</td>
<td>$83.00</td>
</tr>
<tr>
<td>12+</td>
<td>$110.00</td>
</tr>
</tbody>
</table>

- **Lewiston-Auburn College Parking Fee**  A mandatory $3.00 per credit hour fee is assessed to students registered for courses held on the LAC campus.

- **Unified Fee**  A mandatory $28.00 per credit hour fee assessed to cover fixed costs of providing educational services not already supported by tuition charges.

### Additional Undergraduate Fees

- **Activity Fee**  Students taking undergraduate courses are assessed a mandatory student activity fee. The amount charged depends on the number of credit hours attempted. Students registering for undergraduate courses taught at Lewiston-Auburn College or University of Maine System Off-Campus Centers are charged $1.50 per credit hour.

<table>
<thead>
<tr>
<th>Credits Attempted</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5.9</td>
<td>$19.00</td>
</tr>
<tr>
<td>6-11.9</td>
<td>$37.00</td>
</tr>
<tr>
<td>12+</td>
<td>$55.00</td>
</tr>
</tbody>
</table>

- **Administrative Fee**  for Study Abroad /National Student Exchange  A one-time $150.00 fee is charged to students applying to study abroad or through the National Student Exchange.

- **Application Fee**  A $40.00 fee is charged when a student applies for admission to an undergraduate program.

- **Enrollment Fee**  A mandatory $175.00 fee is charged to newly admitted undergraduate students. This fee is charged only once.

- **Prior Learning Assessment Fee**  Charges for exams offered by the Office of Prior Learning Assessment can be found at [http://usm.maine.edu/pla](http://usm.maine.edu/pla).

- **Reactivation/Readmission Fee**  A mandatory $20.00 fee is charged to students who have previously applied for admission but did not complete the admission process, or who leave for several years and wish to become degree candidates again.

- **Specialty Accreditation Fee**  A $26.00 per credit hour fee is charged to students enrolling in upper-level undergraduate courses (300-400 level) offered by the School of Business. Students enrolling in graduate level courses will be charged $67.00 per credit hour. A $17.00 per credit hour fee is charged to students enrolling in lower-level undergraduate (100-200 level) courses offered by the School of Business. The fee will support research and scholarship activities that help assure the school's continued accreditation by an international organization.

### Additional Graduate Fees

- **Application Fee**  A mandatory $65.00 fee is charged at the time of application to a graduate program. A mandatory $50.00 fee is charged at the time of application for admission to the School of Law.

- **Distance Learning Course Support Fee**  Students registering for ITV and videoconferencing courses are charged a $12.00 per credit fee to defray mailing costs.

- **Graduate Certificate Application Fee**  A one-time fee charged to applicants to a certificate program.

- **Graduate Student Enrollment Fee**  A one-time $60.00 fee charged to newly matriculated graduate students.

- **Graduate Non-Matriculated Student Fee**  A $25.00 fee charged per semester to non-matriculated graduate students.

- **Law Student Activity Fee**  A $50.00 fee is charged to all students registered for 6 or more credit hours.

- **MBA Orientation Fee**  An $80.00 fee is charged to all students admitted to the M.B.A. program. The fee covers the cost of a one-day experiential learning exercise, required during the first year of enrollment.

- **MFA Graduation Residency**  A $530 fee is charged during the final residency in the MFA (Stone Coast) program.

- **Reapplication Fee**  A $15.00 fee is charged to students who have previously applied for admission to a graduate program but did not complete the admissions process, or who returns after an absence and wishes to reapply.

### Room and Board

USM Undergraduate Academic Catalog 2014-15  22
USM Meal Plans

The University offers several different resident student meal plans. Information about resident meal plans is available from the Department of Residential Life. A description of meal plan choices and current rates can be found at [http://usm.maine.edu/reslife](http://usm.maine.edu/reslife).

Commuter Meal Plans

Commuter meal plans allow students to purchase food at a discount. Information about the plans is available from the Department of Residential Life, Dining Services, and Campus Card Services.

Room

University residence halls are located on the Gorham campus. Information about housing is available from the Department of Residential Life, 100 Upton Hall, Gorham (780-5240). While the student is billed by the semester, the housing contract is for the full academic year. A description of room types and current rates can be found at [http://usm.maine.edu/reslife](http://usm.maine.edu/reslife).

Other Expenses

Books and Supplies

Students are responsible for the purchase of books and supplies. Payment is made at the time of purchase.

Deposits

For Undergraduate Applications

When a student is notified of acceptance into a University undergraduate degree program, a $100.00 enrollment deposit is due by May 1 for the fall semester and January 2 for the spring semester. If admitted for the fall semester after May 1, a deposit is due within 15 days. The deposit will be applied to tuition charges. The deposit will be forfeited if the student notifies Undergraduate Admission of their intention to withdraw after May 1 or January 2.

For Law School Applications

Students admitted to the School of Law must pay a nonrefundable $250.00 deposit by April 15 or within two weeks of acceptance if admitted after April 1. An additional $250.00 deposit is due by June 15. Checks should be mailed directly to the School of Law. This deposit will be applied to tuition charges if the student registers and remains enrolled; otherwise it is forfeited. With permission of the Law School, payment may be postponed in cases of extreme hardship.

For Graduate Applications

Graduate programs requiring a deposit include occupational therapy, creative writing, extended teacher education program, and the nursing option for non-nurses with baccalaureate degrees. Other graduate programs do not require a deposit. Students should consult their letter of admission for deposit due dates.

For Students Living in Campus Housing

Students who are approved for on-campus housing must pay a $75.00 room deposit. Usually the deposit is applied to the fall bill. If a student notifies Residential Life in writing that housing is not desired before June 1, the deposit will be refunded. If notification is received after June 1, the deposit is forfeited. Students applying for Spring housing, should contact Residential Life for payment and refund deadlines.

Payment Policies and Procedures for all students

Billing

Students can access MaineStreet billing statements, specific semester due dates, and other important account information at [http://usm.maine.edu/studentaccounts](http://usm.maine.edu/studentaccounts). The University is not obligated to mail paper billing statements.

It is critical that official University e-mail accounts are checked often by all students. In many cases, it will be the only means of receiving important information from Student Accounts and other University departments.

It is the student's responsibility to ensure that all addresses recorded on MaineStreet are correct.

Payment options:

- **ACH (electronic check)** ACH payments are made online. A fee is not charged for this type of payment.
- **Cash** Cash payment may be made at the Student Accounts Office or at an off-campus center. Cash should not be mailed.
- **Checks** Paper checks should be made payable to the University of Southern Maine. The student's name and student I.D. number should be shown on the check.
- **Credit Cards** USM uses an outside vendor to process card payments. The student is charged a convenience fee by the vendor. All credit
card payments are made online.

- **Financial Aid from USM** The University offers eligible students grants, scholarships, loans, and employment opportunities. Grants, scholarships, and loans are credited for payment of University charges. Additional information can be obtained from Student Financial Aid.

- **Installment Payment** The University offers a variety of payment plans. Information about these plans is available from Student Accounts.

- **Outside Scholarships** A student must notify Student Accounts of any non-University scholarships, to be used to pay University charges, prior to the date payment is due. Upon receipt of proper documentation, the University may extend the payment due date.

- **Third Party Payments** A student must give Student Accounts written authorization from the agency/employer prior to the payment due date. No conditional payment offers will be accepted. Please note: if, for any reason, the third party does not make payment, the student is liable for all charges.

Each semester, the University establishes specific dates payment is due and notifies students of these dates on bills, through University publications, and at [http://usm.maine.edu/studentaccounts](http://usm.maine.edu/studentaccounts).

All charges posted to student accounts after the posted semester or term payment due date must be paid when incurred.

A late fee is charged if payment is not received by the due date. Students with past due charges are not allowed to re-register. Students who show a pattern of late payment may be required to pay all University charges before registration is allowed. The University reserves the right to cancel a current semester's registration, preventing a student from receiving grades or credit for courses, if outstanding charges are not paid.

Transcripts, certification of graduation, and other records will be withheld from students who have not paid all bills and loans due the University. This includes bills for damage to University property and unpaid charges or fines owed to other University departments.

**Financial Adjustments for Tuition, Fees, Room and Board**

**Adding Courses** Adding courses at any time may result in additional charges to the student’s account.

**Dropping Some Courses** A student who remains registered is not charged for any dropped course that meets for **twelve weeks or longer**, if the course is dropped prior to the end of the second week (14 days). All charges remain on a student account for a course dropped after the 14 day deadline.

For courses that meet for **less than twelve weeks**, the deadline to drop with a 100% reduction of charges is one day for each week the course is scheduled to meet (e.g. the deadline to drop a five week course is prior to the end of the fifth day). All charges remain on a student account for a course dropped after the deadline.

**Withdrawing from All Courses** A student is not charged when withdrawing from all University of Maine System courses that meet for **twelve weeks or longer**, if the withdrawal is submitted prior to the end of the second week (14 days). Tuition and mandatory fees are adjusted at a percentage for students withdrawing from all courses after 14 days. The adjustment schedule is available at [http://usm.maine.edu/studentaccounts](http://usm.maine.edu/studentaccounts).

For courses that meet for **less than twelve weeks**, the deadline to withdraw with a 100% reduction of charges is one day for each week individual courses are scheduled to meet (e.g. the deadline to drop a five week course is prior to the end of the fifth day). All charges remain on a student account when a student withdraws from all courses after the deadline.

**Determination of Attendance** For purposes of calculating financial adjustments for students dropping from some or withdrawing from all courses, attendance includes weekends and holidays and ends on the student’s last date of attendance as determined when (s)he notifies the institution's designated official office that (s)he has stopped attending. The length of a class is defined on the official class schedule. Changes in scheduled classes (beginning or ending) by the instructor are not considered when calculating adjustments.

**Room and Board Adjustments** All adjustments to room charges are governed by the terms of the Residence Hall Contract. Students who withdraw from the University are charged for meals at an established pro-rated daily rate. Additional information is available from the Department of Residential Life or at [http://usm.maine.edu/reslife/](http://usm.maine.edu/reslife/)

**Involuntary Withdrawals** Consideration for financial adjustments of charges for involuntary withdrawals (e.g. extended illness, military service) will be considered on a case-by-case basis. Such requests will be considered only if received within 90 days of the end of the semester involved. Charges will not be reduced for voluntary absence from classes. Contact the Student Accounts Office for additional information about this appeal process.

Administrative dismissals are not entitled to an adjustment of institutional charges.

Students registering at other University of Maine System campuses should contact billing offices at those institutions with questions regarding financial adjustments.
Rules Governing In-State and Out-of-State Tuition

There are many factors that will be considered in determining residency for in-state tuition purposes. No one factor can be used to establish domicile; rather, all factors and circumstances must be considered on a case-by-case basis. A domicile or residency classification assigned by a public or private authority neither qualifies nor disqualifies a student for University of Maine System (UMS) in-state status.

A student applying for admission to a degree program is classified as eligible, or not eligible, for in-state tuition at the time of acceptance to the University. A non-matriculated (non-degree) student is classified as eligible, or not eligible, for in-state tuition at the time of registration. The decision, made by the director of Student Accounts, or other officials designated by the campus, (this authority is granted to all Admission directors), shall be made based on information and documentation furnished by the student and other information available to the University. No student is eligible for in-state tuition classification until he or she has become domiciled in Maine, in accordance with University guidelines, before such registration. If the student is enrolled full-time in an academic program, as defined by the University, it will be presumed that the student is in Maine for educational purposes, and that the student is not in Maine to establish a domicile. A residence established for the purpose of attending a UMS campus shall not by itself constitute domicile. The burden will be on the student to prove that he or she has established a Maine domicile for other than educational purposes. An individual who has lived in the state of Maine, for other than educational purposes, one year prior to registration or application to a campus is considered an in-state student.

In general, members of the Armed Forces and their dependents will be granted in-state tuition during such periods of time as they are on active duty within the state of Maine or if their military state of residency is Maine as evidenced by appropriate official documentation. A Maine resident who is absent from the state for military or full-time educational purposes will normally remain eligible for in-state tuition. Honorably discharged veterans are eligible for the in-state tuition rate.

A student, spouse, or domestic partner of a student, who currently has continuous, permanent full-time employment in Maine before the student decides to apply for degree status at the University will be considered in-state for tuition purposes.

A student who is dependent on his/her parent(s) and/or legally appointed guardian (or to whom custody has been granted by court order) is considered to have a domicile with the parent(s) for tuition purposes.

In-state tuition is not available to anyone who holds a non-immigrant U.S. visa. If an individual is not a domiciliary of the United States, they cannot be a domiciliary of the state of Maine.

A student who attended an out-of-state educational institution at in-state tuition rates in the immediately preceding semester, shall be presumed to be in Maine for educational purposes and not to establish a domicile. Again, the burden will be on the individual to prove that he or she has established a Maine domicile for other than educational purposes.

To change tuition status, the following procedures must be followed:

A "Request for Change of Residence Status" must be filed with the director of Student Accounts or designee on or before the campus's first day of classes for the summer session, fall or spring semester for which residency is requested. All applications shall be prospective.

If the director of Student Accounts' written decision, to be issued within 30 days of the first day of classes, is considered incorrect by the student, the student may appeal that decision in writing, within 30 days, to the chief financial officer of the campus.

In the event that the director of Student Accounts, or other designated official, possesses facts or information indicating a student's change of status from in-state to out-of-state, the student shall be informed in writing of the change in status and will be given an opportunity to present facts in opposition to the change. The student may appeal the decision of the director of Student Accounts or other designated official as set forth in the preceding paragraph.

"Request for Change of Residence Status" applications are available at http://usm.maine.edu/studentaccounts or at the Student Accounts Office, 100 Bailey Hall, Gorham, or the Student Accounts Office, 118 Payson Smith Hall, Portland. Completed applications should be returned to the Student Accounts Office.
Financial Aid

The Office of Financial Aid administers, coordinates, and recommends a variety of programs of financial aid to enable students who lack adequate financial resources to attend USM. The U.S. Department of Education offers eligible students low interest student loans. Some employers offer assistance in the form of tuition reimbursement, flexible scheduling, or paid educational sabbaticals. Scholarship assistance may also be available from organizations, clubs, or religious groups of which the student or his or her family is a member. The University is also approved by the Veterans Administration for payment of veteran's benefits. During the most recent academic year, approximately $95 million in financial aid was available to USM students.

Financial Aid offices are located in Gorham in Bailey Hall, in Payson Smith Hall in Portland, and at Lewiston-Auburn College. For more detailed information about the application process, the funds available and the priority filing dates and deadlines, visit us on the Web at http://usm.maine.edu/fin.

Eligibility for Aid

To receive financial assistance, a student must be admitted into a degree program at the University and, in most instances, must be enrolled for at least six credit hours for a semester. Aid can be granted only to U.S. citizens and eligible non-citizens. Students must also be registered with the Selective Service if you are a male, at least 18 years old, and born after December 31, 1959. If you believe you are not required to be registered, please call the Selective Service Office for information regarding exemption.

It is important to remember that financial aid is intended to supplement a student's resources. A basic principle of financial aid programs is that the student and his or her family are expected to contribute, when able, from income and assets to meet college costs.

The deciding factor in the establishment of a student's eligibility for most financial aid programs is that of documented financial "need"; that is, when an applicant has been determined to have insufficient family resources to meet the cost of attending the University of Southern Maine, she or he is eligible for assistance. Since the federal government provides most of the funds the University allocates to its students, family resources are assessed in accordance with a formula required by the U.S. Department of Education.

Aid applicants must also meet standards of Satisfactory Academic Progress in their chosen course of study. These standards are set by the University in accordance with federal financial aid regulations and are in addition to the requirements established by the dean or director of an academic program. A full explanation of these standards may be found at the following Web site: http://usm.maine.edu/fin.

A student must not owe a refund on a federal grant or be in default on a federal educational loan. Students who are in default or owe a repayment are not eligible for assistance.

No student should fail to apply for admission because she or he cannot pay the full cost of an education. The Office of Financial Aid administers a significant and versatile program. When a student's financial resources are insufficient to meet educational expenses, then grants, loans or employment can usually be made available. If funds are not available from the University, the Office of Financial Aid helps students explore other potential sources of aid.

Satisfactory Academic Progress for Continued Financial Aid Eligibility

Every school participating in the federal student financial aid programs must monitor its financial aid recipients to ensure that they are meeting satisfactory progress standards. Federal regulations mandate that the school's satisfactory progress policy must include both a qualitative measure (such as the use of cumulative grade point average) and a quantitative measure (such as a maximum time frame for completion) of the student’s progress. While the qualitative measure is determined and monitored by the academic standards of the institution, the quantitative measure administered by the Financial Aid office is used to determine the number of credit hours completed when compared to those attempted. To quantify academic progress, the school is required to set a maximum time frame in which a student is expected to finish a program. For undergraduate and graduate programs, the maximum time frame may not exceed 150 percent of the published length of the program, as measured in credits attempted.

To ensure that the student is making sufficient progress throughout the course of study, the school must divide the program into equal evaluation periods called increments. Once the school defines the length of each increment, the school must compare the number of hours the student attempted with the number of hours the student successfully completed. This calculation enables the school to determine whether the student is progressing at a rate that will allow him or her to finish the program within the maximum time frame. As is the case in USM's progress policy, a school is permitted to apply a more lenient completion standard in the student's first academic year and then gradually increase the completion standard for each subsequent academic semester. USM's satisfactory progress policy explains how withdrawals, grades of incomplete, courses that are repeated, noncredit remedial coursework, and other attempted coursework that is not completed affect the satisfactory progress determination. Procedures have been established that enable a student to appeal a determination that finds him or her not to be making satisfactory progress. The quantitative and qualitative standards used to judge satisfactory progress must be cumulative and include all periods of the student's enrollment. Even periods in which the student did not receive financial aid funds must be counted. If the student does not meet the
school's standards for satisfactory academic progress, he or she is not allowed to receive further funds from federal student aid programs. For specific details regarding satisfactory academic progress for financial aid, please refer to the USM financial aid Web site at http://usm.maine.edu/fin.

Additional Requirements for Graduate and Doctoral Students

To be eligible for federal financial aid (including deferment of student loans) a matriculated graduate or Ph.D. student must meet one of the following conditions:

- is enrolled in at least 6 academic graduate credits
- has obtained a certificate of adequate academic progress from the chair of the committee, indicating that the student is continuing to actively pursue studies leading to the master's or doctoral degree, and is registered for GRS 602 or GRS 701. (Note: This applies to students taking anything less than six academic credits.)

GRS 602 is a 1-credit course that permits master's degree candidates registered for less than six credits to retain eligibility for financial aid, University-funded fellowships, scholarships, graduate assistantships, student health insurance, loan deferment, visa compliance, and access to University services, including USM computers, library, and recreational facilities. This course option is primarily intended for students who have completed coursework for the master's degree, but have not completed their thesis or capstone. Enrollment in GRS 602 requires that students have certification of adequate academic progress by their program faculty advisor or program chair and approval from the Office of Graduate Studies.

GRS 701 is a 1-credit course that permits doctoral degree candidates registered for less than six credits to retain eligibility for financial aid, University-funded fellowships, scholarships, graduate assistantships, student health insurance, loan deferment, visa compliance, and access to University services, including USM computers, libraries, and recreational facilities. Prerequisites include passing qualifying exams, receiving certification of adequate academic progress from the program chair and dissertation/capstone chair, and obtaining approval from the Office of Graduate Studies.

Application Procedures

To apply for financial assistance from the University of Southern Maine, you should file your Free Application for Federal Student Aid (FAFSA) or your Renewal FAFSA on the Web at http://www.fafsa.gov.

Students are encouraged to apply for assistance as early as possible. To ensure a fair distribution of funds, a priority filing date is established. To meet USM's deadline, applicants must ensure that their FAFSA data is received at the institution by March 1. Students should submit the FAFSA online at http://www.fafsa.gov by February 15 to meet the USM March 1 deadline.

Applications are accepted after the priority filing dates, although the type and amount of aid offered may be reduced subject to funding limitations. Applicants who file after the priority filing date will probably receive delayed notification and may not have the funds available in time to pay semester bills.

Additional financial records required to verify information reported on the FAFSA may be requested under separate cover.

How Financial Aid is Allocated

The University begins reviewing student aid applications in early spring. Once a student is accepted, all necessary financial aid application materials are received, and the University is told how much federal aid it will have for students, a notice of eligibility is sent. If a student receives outside scholarship funds, the amount of aid from the University may have to be reduced.

The amount a student receives is determined by subtracting the student's resources from a budget computed by the Office of Financial Aid. This budget is based on typical living and educational costs for students and may be adjusted if unusual non-discretionary expenses exist.

Students are offered aid in a package which may consist of grant and/or loan and/or work-study. Undergraduate students with prior bachelor's degrees are not eligible to receive grants.

Even after a student is allocated aid, the amount may be adjusted if the student's financial situation changes. Students and parents must promptly report any of the following to the Office of Financial Aid: a change in the number of credit hours attempted; changes in family circumstances; the receipt of financial aid from sources other than the Office of Financial Aid.

Types of Aid Available

For All Students

- **Federal Work Study** This is a program funded by the University and the federal government. A student's financial need governs the amount that can be earned.
• **Federal Perkins Loans** Funded by the federal government, the University, and former borrowers repaying loans, this program lends money to needy students. No repayment is required until after the student ceases his or her education or drops to below 6 credit hours of enrollment. Once repayment begins, the student is charged 5% simple interest on the amount borrowed. While the monthly repayment amount varies with the amount borrowed, a minimum of $40 must be repaid each month.

• **Federal Direct Unsubsidized Loans** This program provides access to borrowing for both students who do and do not qualify for need-based assistance. The student is responsible for the interest as it accrues.

• **Alternative Loans** These are private, credit-based loans which provide long-term financing options for qualified students or families. Additional information about these programs may be obtained from the Student Financial Aid Office or online at http://usm.maine.edu/fin.

• **North American Indian Programs** Tuition, mandatory fees, and on-campus room and/or board will be waived for qualified and eligible North American Indians residing in Maine. Eligibility is extended to (1) the person whose name is included on the current census of either the Passamaquoddy or Penobscot Tribes; and (2) the person who has resided in Maine for at least one year and whose name, or the name of at least one of their grandparents, was included on the census of a North American Tribe or held a band number of the Maliseet or Micmac Tribes with direct blood lineage. For additional information, contact the Wabanaki Center at (207) 581-1417. Visit the Office’s Web site at http://www.naps.umaine.edu.

• **Veterans Educational Benefits** Students eligible for educational assistance from the Veterans Administration are encouraged to contact the Veterans Affairs Office thirty days before the start of each semester. The Veterans Affairs Office is located in the Registrar's Office.

For Undergraduate Students

• **Federal Pell Grants** This is a federally funded program to help needy students. In 2013-2014 grants will vary between $574 and $5645 per academic year.

• **Federal Supplemental Educational Opportunity Grants** This is a federally funded program to help needy students. Grants range from $100 to $4,000.

• **University and Miscellaneous Scholarships** These are funded by the University and private donors. Awards have ranged from $100 to $4,000 and are given on the basis of financial need.

• **Federal Direct Subsidized Loans** This program, administered by the federal government, allows students to secure low-cost loans. Eligibility for subsidized Direct Loans is based on demonstrated financial need.

• **Federal Nursing Student Loans** Funded by the federal government, the University, and loans repaid by former borrowers, money is lent to needy nursing students. Repayment terms are similar to those of the Perkins Loan. Loans range from $400 to $2,500.

• **Federal Direct PLUS Loans for Parents** This credit-based program, sponsored by the federal government, allows parents to secure relatively low-cost loans. Direct Parent Loan for Undergraduate Students (PLUS) application request forms are available from the Student Financial Aid Office or can be printed from http://usm.maine.edu/fin, under the section entitled Direct PLUS Loans.

• **Merit Scholarships** Merit awards are based on academic achievement and promise, special talents, potential to make unique contributions to the University community, and USM's commitment to expanding the pluralistic character of its student body. Further information may be obtained from the Admissions Office.

For Graduate Students

• **Graduate Assistantships** These are available in most programs. Graduate assistantships serve three purposes: to provide financial support for students, to enhance students’ professional and scholarly development, and to support faculty scholarship and teaching. The assistant is required to pursue graduate studies (at least 6 hours of credit per semester). In compensation, the assistants are paid a yearly stipend. Some assistantships are accompanied by a limited tuition waiver. Assistantships are awarded by the Office of Graduate Studies on the recommendation of the individual graduate programs. Interested students should first contact their graduate program director or the Office of Graduate Studies at 780-4877.

• **Direct PLUS Loans for Graduate and Professional Degree Students** This program, sponsored by the federal government, allows graduate and law students to secure relatively low-cost, credit-based loans. Graduate and law students are able to borrow up to their cost of attendance minus other estimated and actual financial assistance under the Direct PLUS Loan program. Graduate and law students must file a FAFSA and must have their annual loan maximum eligibility under the Direct Loan program determined before they apply for a Direct PLUS Loan. Direct PLUS Loan request forms for graduate and law students are available at the Student Financial Aid Office or at http://usm.maine.edu/fin.

• **University Tuition Waivers** A limited number of tuition waivers are granted to outstanding entering graduate students. Students are nominated by faculty admission committees. Applications for admission to graduate study must be completed and received by January 15 to qualify for these waivers.

For additional information

Contact the Office of Student Financial Aid, University of Southern Maine, Bailey Hall, College Avenue, Gorham, Maine 04038 or telephone (207) 780-5250, or online at http://usm.maine.edu/fin.

*Offers of financial aid are conditional upon receipt of funds from all funding sources. The Office of Student Financial Aid reserves the right to revise offers of financial aid at any time during the year based on availability of funds and/or changes in regulations and/or procedures mandated by University, state, or federal authorities.*
Academic Policies - Undergraduate

Office Policies

- Absence from a Final Examination
- Academic Forgiveness Policy
- Academic Record Changes
- Academic Suspension/Dismiss
- Add
- Drop
- Attendance Policy
- Auditing Courses
- Catalog Effective for Graduation Requirements
- Change of Major
- Class Membership
- Clinical Course Requirements
- Confidentiality Policy
- Course Numbering
- Coursework at Other Institutions
- Credit Hour Definition
- Dean’s List
- Enrollment Status
- Examination Policy
- Grading System
- Grade Point Averages GPA
- Graduation Requirements
- Graduation Honors Policy
- Independent Study
- Matriculation Status (Leave of Absence)
- Minimum Grade and Academic Suspension
- Non-Matriculated Students
- Office of Support for Students with Disabilities
- Pass-Fail Option
- Permanent Academic Record
- Post-Baccalaureate Study for Second Degree
- Professional Licensure and Certification Notice
- Re-enrollment after Academic Suspension
- Registrar
- Registration
- Repeated Courses
- Residence Requirement
- Semester Withdrawal from the University
- Student Academic Integrity Policy
- Student Academic Appeals Policy
- Student Administrative Appeals Policy
- Student Complaints
- University Degree Requirements
- Unsatisfactory Progress

University Degree Requirements

To be eligible for a baccalaureate degree from the University, a student must meet the following:

- College readiness requirements
- Core curriculum requirements
- School or college major requirements

The Core curriculum requirements apply to all students who entered the University beginning September 1982 and thereafter. Transfer students should refer to the section, “Transfer Credits and the USM Core.”

College Readiness Requirements

The University has defined measures of college readiness in writing and math. All students must demonstrate college readiness in these subjects. Some courses at other institutions may be used to meet the college readiness requirements in math or writing; please consult the Transfer Affairs office for specifics. These requirements can also be met through CLEP scores; consult the office of Prior Learning Assessment for an evaluation.

In math, students can demonstrate college readiness by any ONE of the following measures:

- An SAT Quantitative score of 550 or above.
- An ACT Math score of 22 or above.
- A passing score on the mathematics placement examination.
- A grade of C- or better in MAT 101 (4 credits)

Students whose first language is not English can demonstrate college readiness by any ONE of the following measures:

- An SAT Writing score of 500 or above.
- A TOEFL score of 79 or above.
Non-native speakers of English whose writing falls below these measures must complete ESL 104 Reading, Writing & Vocabulary, with a grade of C or better (and any prerequisite courses based on the ESOL Program's placement test). To complete their Core writing requirement, these students must then move on to ESL 100 College Writing.

### Course Numbering

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>001-099</td>
<td>No Degree Credit</td>
</tr>
<tr>
<td>100-199</td>
<td>Introductory Level</td>
</tr>
<tr>
<td>200-399</td>
<td>Intermediate Level</td>
</tr>
<tr>
<td>400-499</td>
<td>Senior Level others by permission</td>
</tr>
<tr>
<td>500-599</td>
<td>Undergraduate and Graduate Students</td>
</tr>
<tr>
<td>600-799</td>
<td>Graduate and Professional Students Only</td>
</tr>
</tbody>
</table>

Note:

- All courses with number 100 or greater carry credit and quality points toward a baccalaureate degree.
- Matriculated baccalaureate students should not register for courses with numbers less than 100 unless meeting minimum proficiency requirements.

### Registrar

The Office of the Registrar serves as the legal custodian of University academic records and is responsible for the appropriate recording, production, and disbursement of those records. The Office is also responsible for recording such critical functions as academic honors, sanctions, and dismissals. The Office of the Registrar is located in Gorham in Bailey Hall (207-780-5230). Registration services are also available in the Student Account's Office in Portland at Payson Smith Hall (207-780-5233) and at Lewiston-Auburn College (207-753-6500).

### Registration

The registration process is conducted by the Registrar, Business Office, and many academic departments. It includes selection of courses, completion of proper forms, and payment of University charges. Newly admitted students are notified by Student Success of their schedule for orientation, advising, and registration. Student Success coordinates the new student academic advising process and initiates the registration procedure by approving course schedules prior to processing by the Registrar and Business Office.

Continuing degree students may advance register in priority order, based on credits earned and class level. Advance registration is conducted near the end of each semester for the following semester. Non-matriculated (special) students may register only during the open registration period. Degree students may need to obtain advisor approval prior to registration. No student may register for more than 18 credits in one semester without the permission of his or her advisor and the dean.

### Enrollment Status

Undergraduate students are considered to be full-time if they are enrolled for 12 or more credits; three-quarter time requires at least 9 credits; and half-time requires at least 6 credits.

### Grading System

Grades at the University are given in terms of letters, with the option of a plus or minus designation, representing levels of achievement. The basis for determining a grade is the relative extent to which the student has achieved the objectives of the course. The student's work in each course is graded as follows:

- **A**: High honors (A+ is not a valid grade.)
- **B**: Honors
- **C**: Satisfactory, successful meeting of the course objectives
D  Low-level work, below the average required for graduation for an undergraduate, and a failing grade for a graduate student. In addition, individual departments may limit the number of D grades accepted, as stated in the departmental sections of this catalog. The paragraphs on Minimum Grade and Academic Suspension and Repeated Courses should also be noted.

F  Failure to meet the course objectives

P  Pass: pass with a grade of C- or better in a pass-fail course

H  Honors performance in a pass/fail course

LP  Low Pass; pass with a grade of D-, D, or D+ in a pass/fail course

I  Incomplete; a temporary grade given when the student, because of extraordinary circumstances, has failed to complete the course requirements. Incomplete grades must be resolved by the end of each subsequent semester. If the incomplete is not resolved, an I grade will be converted to an F.

INC  Permanent Incomplete: When a temporary incomplete (I) grade is not resolved to a normal letter grade, a permanent incomplete may be assigned in extraordinary circumstances as determined by the instructor and the dean. In unusual circumstances wherein the faculty member is no longer available, the dean may exercise this function. The grade of INC has no impact on GPA; no credits awarded.

L  Stopped attending: The grade of L may be assigned to students who stopped attending a course without officially dropping the course. The grade of L will be computed as an F for purposes of the student's grade point average.

MG  Missing Grade: Faculty may fail to submit a grade for a particular student in a course. In these cases, the Registrar's Office will note this act by designating a missing grade, or MG. Missing Grades must be resolved by the end of each semester. If the missing grade is not resolved the MG will be converted to an F.

W  Withdrawal after the end of the add period through 60% of a course. If a student has not officially withdrawn before 60% of the course has been completed, an F will be assigned. The W notation may be obtained after completion of 60% of the course under unusual circumstances if so determined by the instructor and the dean. A threat of failure is not considered to be an unusual circumstance. The grade of W has no impact on GPA.

DG  Satisfactory progress after one semester of a two-semester course; grade and credits to be given upon completion of second semester.

AU  Student attended courses on a noncredit basis.

Grade Point Averages

The academic standing of each student is computed by the Registrar at the end of every semester. The following table represents the rating scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
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<td>A–</td>
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<tr>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>B–</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
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<tr>
<td>C</td>
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<td>D</td>
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<td>D–</td>
<td>0.67</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
</tbody>
</table>

To compute the grade point average for a semester, first multiply the grade points earned in each course by the number of credit hours assigned to that course. The resulting product is the number of quality points for that course. Then divide the total number of quality points earned during the
semester by the total number of credits carried in that semester (exclude classes where grades are P,H,LP,I and W). The result is carried out to two decimal places to produce the grade point average for that semester.

To compute the cumulative grade point average, divide the total quality points earned by the total credits attempted in all semesters.

Credit Hour Definition

A credit hour is defined as one hour of classroom or direct faculty instruction and no less than two hours of out of class student work each week for approximately fifteen weeks for one semester or the equivalent amount of work over a different amount of time.

Dean's List

At the end of each semester, full-time, undergraduate degree students (12 credit hours or more, with a minimum of 12 letter graded credits (A-F), and excluding developmental credits (course numbers less than 100)), with grade point average of 3.4 or above will be placed on the Dean's List. Students with incomplete or missing grades (I or MG) at the point when the Dean's List is produced (35 days after the end of a fall or spring semester) will not be eligible for the Dean's List. Those students on the Dean's List whose names appear in the public directory of the University will have their names released to the news media. Students who attend both the fall and the spring semesters as part-time degree students and who meet the above full-time Dean's List criteria when the fall and spring semesters are combined are eligible for the Dean's list at the end of the spring semester. A notation will be placed on the transcript of those who are placed on the Dean's List.

Minimum Grade and Academic Suspension

Minimum cumulative grade point averages for all undergraduate programs at the University are as follows:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>For Good Standing</th>
<th>For Probationary Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-30</td>
<td>1.70</td>
<td>1.50</td>
</tr>
<tr>
<td>31-60</td>
<td>1.80</td>
<td>1.60</td>
</tr>
<tr>
<td>61-90</td>
<td>1.90</td>
<td>1.70</td>
</tr>
<tr>
<td>91+</td>
<td>2.00</td>
<td>1.80</td>
</tr>
</tbody>
</table>

Students may be suspended from the University by the dean of the appropriate academic unit. Students who have two consecutive semesters of probationary standing may be suspended at the discretion of the dean. Ordinarily, a student may be suspended by the dean in consultation with the department chair or the student's advisor if the student's semester average falls below 1.0. While under suspension, students may not take coursework, either at the University of Southern Maine or at other institutions, to be applied for credit at the University of Southern Maine without permission of the dean of the suspending academic unit. Academic suspensions are imposed for a length of one academic semester. Other standards vary from college to college and are outlined in the letter of suspension directed to the student from the appropriate dean. For details concerning disciplinary suspension and dismissal, consult the Student Conduct Code.

Re-enrollment after Academic Suspension

Matriculated degree candidates are eligible for re-enrollment at the University in accordance with the stipulations outlined in their letter of suspension. Unless noted otherwise in the letter of suspension, the student has the right to re-enroll after one semester.

Unsatisfactory Progress

A student who is a degree candidate is expected to complete and pass the courses for which he or she is registered during a given semester. A student who fails or withdraws from more than two courses during a semester may be placed on academic probation or suspended by the dean of the college, school, or division.

Academic Dismissal
Students placed on academic suspension for a second time may be dismissed from the University. In rare cases, students may be readmitted if they can provide evidence of significant academic improvement to the dean of their school or college. Such evidence would normally include high quality academic coursework at another institution. For details of disciplinary dismissal, consult the Student Conduct Code.

Professional Licensure and Certification Notice

Students who are pursuing degrees leading to application for professional licensure or certification, and/or who will be participating in clinical placements, internships, or practica through their USM program should be aware that their host facility may require a criminal background check, finger printing, or drug screening. In such situations, each student is responsible for obtaining and paying for the background check or other screening process and for delivering required documentation to the facility. Although the University will make reasonable efforts to place admitted students in field experiences and internships, it will be up to the host facility to determine whether a student will be allowed to work at that facility. Students should further be aware that a criminal record may jeopardize licensure by the state certification body. Students may consult the certification body corresponding to their intended occupation for more details. Successful completion of a program of study at USM does not guarantee licensure, certification, or employment in the relevant occupation.

Non-Matriculated Students

Non-matriculated students may register on a space-available basis for courses providing the student meets the prerequisites for the course. Non-matriculated students, while not required to apply for admission, should be aware that, in addition to meeting Departmental/school/college/University requirements, a minimum of 30 USM credits must be taken as a matriculated USM degree student in order to receive a baccalaureate degree.

Class Membership

A minimum of 120 credit hours is required for graduation in most baccalaureate-level programs. To progress through the University in the traditional four years, full-time students should earn at least 30 credits each year, carrying at least 15 credit hours each semester. Permission must be obtained from the advisor and the appropriate dean to carry more than 18 credit hours in a semester.

For standing as a sophomore, a student shall have completed at least 24 credit hours, for junior standing 54 credit hours, and for senior standing 84 credit hours.

Add

Students may self add classes of 12 or more weeks in length through the end of the first week of the semester, provided that there is space available in the class and the student has satisfied all associated requirements for the class. An instructor's signature, or departmental permission, is required in all situations where the student is unable to self-register. Classes that are less than 12 weeks in length, the period of self-add will be 7% of the class length (1 day for each 2 weeks of the class length).

Students who find that their names are not on the instructor's official list or listed in their semester enrollment in Mainestreet should check immediately with the Registrar's Office to make necessary corrections in the registration records.

Drop

Students may self drop from a course at any time before the end of the course. If the course is dropped during the first 2 weeks of a class that is 12 weeks or more in length, or during the first 14% of the class for classes less than 12 weeks in length, there will be no notation on the transcript.

-Classes that appear on the transcript dropped through 60% of the class will receive the grade notation of W.
-Students who register for a course and neither complete the course objectives nor officially withdraw according to any one of the procedures described above will be graded F or an L in that course and must assume all financial obligations associated with the course.

Please check your Maine Street Schedule in the Student Center and click on the icon (Academic Calendar Deadlines) before each class for the exact deadline dates.
Pass/Fail Option

The purpose of the pass-fail grade option is to encourage a student to broaden his or her educational experience with a reduced risk of lowering the overall grade point average. The instructor will assign pass grades of H (honors performance) or P (pass) when a letter grade of C- or better would have been assigned, a grade of LP (low pass) when the letter grade would have been D+, D, or D-. Note that F and L grades earned in pass/fail classes will be included in the grade point average calculation.

Unless otherwise specifically stated in this catalog, courses taken to satisfy Core curriculum, University Honors Program, major, or minor requirements may not be taken pass-fail. Undergraduate degree candidates may register for a maximum of six hours of pass-fail credits in any one semester, up to a maximum of 18 hours of the total credit hours required for graduation.

Students may exercise the pass-fail option for a class up to the end of the drop period (corresponding to no notation on the transcript). Requests after this period must be made through the Dean's office of the school/college offering the course; in general, requests for reversal of the pass-fail option will only be granted if a grade is necessary to meet the student's particular degree requirements. Prior to exercising this option, students are encouraged to contact the instructor of the course.

Repeated Courses

When a student repeats a course and earns a grade of A, B, C, D, F, H, P, or LP, the initial grade remains on the transcript but only the later grade is used in computing the grade point average or for credit. No course in which one of the above grades has been earned may be repeated more than once without written permission of the dean or director of the appropriate school, college, or division. This policy does not apply to courses specifically designed to be repeated. Students should complete a Course Condition form each time they repeat a course. Courses intended to repeat University of Southern Maine courses may be taken at other institutions; such courses will be accepted in accordance with the University's transfer policy. The transferred course accepted as a USM equivalent will receive USM credit but will not be calculated in the GPA; the original USM course that was repeated will remain on the student's transcript but will be removed from both the credit and GPA calculations.

Academic Forgiveness Policy

Occasionally, a student's academic performance early in his or her career may not be reflective of academic performance at a later time. Academic forgiveness permits a student to remove credits and grades from one semester of attendance. All credits and grades in the forgiven semester are removed regardless of the grade received in any given course. The forgiven semester's academic detail (including grades and attempted credits) will continue to be displayed on the transcript, but these grades and credits will not be included in the student's grade point average or total credits earned. Once academic forgiveness is granted, it is not reversible.

The following criteria must be met before academic forgiveness will be granted: 1) The semester to be forgiven must have been completed at least three years prior to the declaration and any earned credits from that semester must not have been applied to a previously awarded degree; 2) the student has taken at least 15 credits at USM for which a grade point average of at least 2.5 is earned subsequent to the declared semester; 3) the student is a matriculated, undergraduate degree candidate when the forgiven semester is declared; 4) forgiveness can only be provided for credits and grades earned at USM; and 5) academic forgiveness can be declared only once and for one complete semester. No tuition or fee refunds shall be made.

Office of Support for Students with Disabilities

If a documented disability precludes successful completion of a particular course required by a degree program or successful completion of Core curriculum requirements, a request for substitution of either the degree program, or most Core curriculum requirements can be initiated by a student. A student may not request that Core area A (writing proficiency), or Core area C (writing competence), be modified. Written communication is considered to be an integral part of the classroom experience and substitution of this requirement would substantially change the nature of the educational preparation and experience at USM. In all requests, the student has the responsibility to provide information supporting the need for a degree program or Core curriculum substitution based upon disability. A copy of the complete policy and procedures statement may be obtained from the Office of Academic Assessment, 242 Luther Bonney, Portland campus, 207-780-4706; TTY 207-780-4395.

Auditing Courses

Students who register to audit a course receive no credit for the course but will have an audit grade (AU) recorded on their transcripts. Audit courses must be declared by the end of the add/drop period. Questions about this policy should be directed to the Registrar's Office.
Independent Study

Independent study is intended to encourage supervised undergraduate research. With permission of the instructor, junior and senior students may elect independent study related to their major or minor. Normally, no more than four credits may be earned in a semester. No more than 12 credits of completed independent study shall be counted towards an undergraduate degree. The student submits an independent study application to the department chair which includes a detailed description of his or her proposed program of study. The independent study form must be filed with the Registrar before registration will be allowed.

Permanent Academic Record

The permanent academic record, including transfer credit evaluation, is maintained by the Office of the Registrar for all students of the University. While grades may be reported unofficially to the student, academic dean, and advisor, the only true and valid documentation of academic work and student status is an official transcript of the academic record, stamped with the Registrar's signature and embossed with the seal of the University. The transcript is available only with the signature of the student and will be released to that student or a designee provided there are no outstanding charges against his or her account with the Business Office. Other types of transcripts are: Unofficial-Issued Directly to Student, available after grades are posted for that semester; Placement Transcript, provided for the student's placement folder.

Academic Record Changes

Considerable care is taken to ensure that course registration and grades entered on a student's permanent record are accurate. Any student who suspects an error has been made should contact the Registrar's Office immediately. Records are assumed to be correct if a student does not report to the Registrar's Office within one year of the completion of the course. At that time, the record becomes permanent and cannot be changed.

Coursework at Other Institutions

Matriculated students at the University are expected to secure written approval from the appropriate dean prior to taking coursework at another institution. Credit approved for courses taken at other institutions will count towards the total degree hours required but will not be computed in the student's cumulative grade point average. For further information, contact the Transfer Affairs Office.

Residence Requirement

For all baccalaureate degrees at the University a minimum of 30 credits hours of the last 45 hours completed, including at least 9 hours in the major field, must be completed while matriculated in the school or college from which the degree is sought. A student may earn no more than six of these 30 credit hours at another campus of the University of Maine System. Under extraordinary circumstances and with supporting documentation, students may request a waiver of this requirement from the dean of the school or college from which the degree is sought. Waivers are not automatically granted, and shall not be granted until at least 30 credits hours, including at least 9 hours in the major field, have been completed while matriculated in the school or college from which the degree is sought.

Graduation Requirements

In addition to the minimum requirements of 120 credits for a baccalaureate degree, a candidate must (a) receive passing grades in courses required by the University, the school or college, and the major department; (b) accumulate the number of credit hours required by the school or college in which the student is registered; (c) achieve an accumulative average grade point average of not less than 2.00 (some majors require a higher GPA for graduation); (d) meet the requirements of the major department; and (e) complete an Application for Degree form with the Office of the Registrar at the beginning of the semester of graduation. Responsibility for successfully completing the requirements of the program resides with the student.

Graduation Honors Policy
Graduation with distinction is based on the student's GPA at the University of Southern Maine. Students must complete at least 60 credit hours (with a minimum of 45 credit hours graded A through F) at USM in order to qualify. Graduation with distinction categories are (a) at least 3.80 for summa cum laude; (b) at least 3.60 and less than 3.80 for magna cum laude; and (c) at least 3.40 and less than 3.60 for cum laude.

In the event a student meets the graduation with distinction GPA requirement at USM, but fails to meet the 60 credit hour requirement, distinction will be determined by a calculation of the student's GPA for the last 60 credit hours wherever they were completed.

Honor Cords at Commencement

For purposes of wearing honor cords at Commencement: (gold cords, summa cum laude; blue cords, magna cum laude; white cords, cum laude) a student must meet the GPA requirements listed above, and be registered for enough credits to meet the 60 credit hours at USM requirement. Grades entered after April 1 may not be calculated in the GPA for determining GPA for honors cords at Commencement.

Post-Baccalaureate Study for Second Degree

A second bachelor's degree may not be granted a student until he or she has completed an additional year of college work, as represented by a minimum of 30 semester hours beyond the requirements for the first degree. Such work must be completed in accordance with all other University regulations.

It is the responsibility of the Office of the Dean of the school or college in which the second degree is sought to provide the approval for undertaking the second degree and certifying the completion of all requirements prior to receipt of the second degree.

Students who have already earned one baccalaureate degree from an accredited institution and are undertaking work for a second baccalaureate degree are not required to satisfy Core curriculum requirements.
The University is not bound by its previous catalog and maintains the right to control its course offerings. Where program/degree requirement changes have occurred that have resulted in changes to course offerings and/or availability, reasonable substitutions will be made to facilitate degree/program completion.

Changing/Adding Majors, Minors or Concentration

Students should obtain the proper form from the Registrar's Web Site and give to the proper department for approval. When approved, the Registrar's Office will update the student's record. Note that some programs require a minimum grade point average (GPA) for a major or minor change. See the appropriate department section for specific details.

Attendance Policy

The attendance policy is left to the discretion of the faculty member. Each semester, it is the responsibility of the faculty member to inform the students in each class of the attendance requirements for that class.

Student Academic Integrity Policy

Everyone associated with the University of Southern Maine is expected to adhere to the principles of academic integrity central to the academic function of the University. Any breach of academic integrity represents a serious offense. Each student has a responsibility to know the standards of conduct and expectations of academic integrity that apply to academic tasks. Violations of student academic integrity include any actions that attempt to promote or enhance the academic standing of any student by dishonest means. Cheating on an examination, stealing the words or ideas of another (i.e., plagiarism), making statements known to be false or misleading, falsifying the results of one's research, improperly using library materials or computer files, or altering or forging academic records are examples of violations of this policy which are contrary to the academic purposes for which the University exists. Acts that violate academic integrity disrupt the educational process and are not acceptable.

Evidence of a violation of the academic integrity policy will normally result in disciplinary action. A copy of the complete policy may be obtained from the Office of Community Standards (207-780-5242).

Examination Policy

The examination policy states that it is the responsibility of the faculty member to inform the students in each class of the examination requirements for that class. Usually, two to four preliminary examinations are administered in each course and count heavily toward the final grade. Giving a final exam is not mandatory; however, in classes where they are given, the examinations must be scheduled within the specific final exam period. Take-home exams are also due within the final exam period. By action of the Faculty Senate, no test or examination may be scheduled during the last week of classes.

Absence from a Final Examination

A student who misses a final examination should immediately contact the instructor to apply for a special examination. Students who miss a final examination and are failing the course at the time will usually be given the grade of F instead of being marked I for the semester grade.

Confidentiality Policy

The University complies totally with the Family Rights and Privacy Act of 1974 (the Buckley Amendment). Click the following link for the complete University Confidentiality Policy.

Clinical Course Requirements

Many divisions of study at the University require as a condition of graduation the completion of one or more training programs or courses in an outside clinical or professional setting, such as a hospital, clinic, professional office, or public classroom. These outside institutions sometimes impose additional requirements upon students as conditions of participation in their programs. Such requirements might include evidence of a
recent medical examination, evidence of health, auto or other insurance, a written agreement to accept and abide by the rules and regulations of that institution, or the execution of an indemnity agreement or release. The University assumes there will be assent to and compliance with such requirements, rules, and regulations by each student upon his or her enrollment in those courses involving outside clinical study.

**Student Complaints**

The Chief Student Affairs Officer ("CSAO") provides undergraduate students with assistance in resolving disagreements with University employees. The CSAO will provide impartial guidance to students to assist in identifying whether the nature of the disagreement concerns an academic appeal or an administrative appeal, and the appropriate University policy or procedure that can be used to resolve it. The academic appeals and administrative appeals policies do not apply to student complaints about unlawful discrimination or sexual harassment. The CSAO can advise the student about other University policies and procedures used to address student complaints about unlawful discrimination and sexual harassment.

**Student Academic Appeals Policy**

Public institutions of higher education function for the common good, not to further the interest of either the individual faculty member or the institution as a whole. The common good depends upon the free search for truth and its free expression. Academic freedom is essential for protection of the rights of the teacher in teaching, and the rights of the student to freedom in learning. Teachers must be accorded freedom of speech under the First Amendment of the U.S. Constitution, and are entitled to freedom in the classroom in discussing their subjects. Controversy lies at the heart of free academic inquiry, and provocative teaching techniques are often effective. Rights carry corresponding duties; both faculty and students should exercise this freedom in a responsible manner.

A fundamental premise of academic freedom is that decisions concerning the quality of faculty scholarship, teaching, and service are best made by reference to standards of the academic profession, as interpreted and applied by the community of scholars who are qualified by academic expertise and professional training to establish them. Possible violations of professional standards are most appropriately remedied through supervision of faculty peers. This occurs during regular performance appraisals of faculty, in which adequate consideration of student teaching evaluations is required.

Academic appeals generally involve such matters as appeal of grades granted by individual members of the faculty, or instances of perceived unfair treatment which a student believes may have negatively impacted his or her grade. To be considered, an appeal of a grade must be initiated within 30 days after a final grade is posted.

In order to guarantee fair and equitable consideration of student academic appeals, a student must first reduce an appeal to writing and discuss it with the faculty member whose actions gave rise to the appeal, in a good faith attempt to resolve any misunderstanding. If, after such discussion, the student is not satisfied with the result, he or she may appeal to the department chair.

After receiving an academic appeal of a grade, the department chair shall interview the student, the faculty member, and any witnesses; review the course syllabus and all graded assignments; and ascertain the facts of each case. Because the faculty member who issued the grade is in the best position to evaluate the performance of students enrolled in a course, the academic judgment used to determine the merits of the grade awarded shall not be reviewable. A department chair may request a faculty member reconsider a student's grade. A faculty member may decline to reconsider a student's grade; reconsider a grade and change it; or reconsider a grade and decide not to change it. There must be compelling evidence of unfair treatment for a department chair to change a grade, and this may be done only after a vote supporting that decision by faculty peers within the department.

The department chair shall issue a decision in writing to the student and the faculty member within a reasonable period of time, normally not to exceed 14 days. Either the student or the faculty member may appeal that decision to the dean of the school or college and, if not satisfied with the result, to the vice president for Academic Affairs. Responses to these appeals shall be made in writing to the student and the faculty member within a reasonable period of time, normally not to exceed 14 days.

The individual receiving an academic appeal of a grade shall review the record compiled by the department chair and evaluate the manner in which the appeal was decided. Because faculty peers within the department are in the best position to evaluate teaching within their scholarly expertise, there must be compelling evidence of unfair treatment or violation of the academic appeals procedure for a grade to be changed. The individual receiving an academic appeal shall issue a decision in writing to the student, with copies to the faculty member and the department chair. A decision by the vice president for Academic Affairs shall be final and not subject to further review.

**Student Administrative Appeals Policy**

Appeals of administrative decisions generally involve all matters affecting a student while at USM other than matters affecting grades. An administrative decision is any final decision made in an official capacity by any employee or group of employees of the University, including academic matters other than those affecting grades governed by the Student Academic Appeals Policy and violations of the Student Conduct Code. Decisions by a departmental, college or University faculty group making or changing policies are not final...
administrative decisions. Grading matters are appealed through the Student Academic Appeals Policy described above. To be considered, an administrative appeal must be initiated within 30 days after the decision is made.

In order to guarantee fair and equitable consideration of student administrative appeals, a student must first reduce an appeal to writing and meet and discuss it with the University employee whose actions gave rise to the appeal, in a good faith attempt to resolve any misunderstanding. If, after such a meeting, the student is not satisfied with the result, he or she may appeal to the head of the academic department or administrative supervisor of the employee.

The head of the academic department or administrative supervisor of the University employee receiving an administrative appeal shall interview the student, the employee, and any witnesses; review relevant written materials; and ascertain the facts of each case. For the individual receiving an administrative appeal to change a decision there must be compelling evidence the University employee exceeded his or her authority or engaged in an arbitrary and capricious abuse of discretion unsupported by the record.

The individual deciding an administrative appeal shall issue a decision in writing to the student and the University employee within a reasonable period of time, normally not to exceed 14 days. Either the student or the University employee may appeal that decision to the head of the appropriate administrative division and, if not satisfied with the result, to the vice president for Academic Affairs or the appropriate vice president for the area involved. A decision by the vice president for Academic Affairs or the appropriate vice president for the area involved shall be final and not subject to further review.

No person shall present to any individual receiving a student academic appeal or student administrative appeal any oral or written communication not on the record relevant to the appeal. The substance of any prohibited communication shall be disregarded by the person receiving an appeal when making any official decision on that appeal.
Academic Support Services

The University offers students a wide range of academic support services to facilitate and enhance their education. The breadth of these services is designed to accommodate the needs of a diverse student population.

Academic Advising and Career Development

The Student Success Centers offer USM students an integrated approach to academic advising and career development. Student Success Advisors provide academic advising and career planning assistance to support the development and achievement of students educational and career goals. Following orientation and initial registration, students, during their first semester at the University, are assigned a permanent advisor within their respective academic departments. Students are encouraged to maintain close contact with their department advisor once this assignment has been made.

Students who have not declared a major are provided academic advising by professional Student Success Advisors in USM's Student Success Centers. Student Success Advisors assist students in the development of educational and career goals as well as the selection of an appropriate major. Students should be ready to declare a major before completing 60 credits of coursework at the University.

Students admitted to GO are provided academic advising through the Student Success Centers. Student Success Advisors work with students during the period they complete required coursework. The Student Success Advisor works with students to develop individual academic support plans. Upon completion of the requirements of the academic support plan, students are transitioned from GO and also assigned an advisor in his or her major department.

Non-matriculated students are students who are enrolled in courses at the University on a space available basis and who have not applied for admission. They are advised by the advisors in the Student Success Centers.

The USM Early Study–Aspirations Program offers opportunities for high school students to take college courses to enrich their high school experience. The program is designed to help students supplement, not supplant, the academic program of the high school. Academic requirements must be met, and permission from high school and parent(s) is expected. Financial assistance is available. For more information call (207) 780-4040.

Students who have questions regarding general academic policies and procedures, as well as about other aspects of University programs, are encouraged to contact one of USM's Student Success Centers in 119 Payson Smith Hall on the Portland campus (780-4040), 119 Bailey Hall on the Gorham campus (780-5652), and 119 Lewiston-Auburn College in Lewiston (753-6500).

COMMUNITY-BASED LEARNING

The Office of Community-Based Learning on the Portland campus serves as a catalyst for community partnerships that enhances student learning and benefits the Greater Portland community. It provides information and support for students exploring internships, service-learning and community service experiences. This office also serves as the portal for community organizations and businesses interested in collaborating with USM, hosting internships and service opportunities.

Most internships offered for 3 credits require between 90 and 140 hours of work at the internship site. This varies by department and some require up to 200 hours. Some majors allow internships to be taken for variable credits ranging from 1 to 15 per semester. The latter would constitute almost full-time work, which typically happens during the summer.

If your major offers an internship course contact the instructor for information about specific requirements. If you are interested in an internship not offered in your major, contact our office where we will work with you to create an experience.

Community service is an opportunity for you to gain valuable experience, pursue passions and interests, and give back to the community. We offer meaningful programs that link you with local K-12 students to be a mentor or tutor and annual days of service. We also have strong relationships with many community partners addressing a wide variety of issues to who we are happy to connect you.
USM offers an increasing number of service-learning courses, in which students, faculty, and community organizations work together to address community-identified needs. Most disciplines offer service-learning courses, but they can also be sought out as an elective. Visit www.usm.maine.edu/cbl to explore a list of current service-learning courses.

Students needing assistance with or interested in internships or community engagement and service experiences should contact our office at 23 Brighton Ave, on the Portland campus, call at 207-228-8555, or email at internships@usm.maine.edu.

University Libraries: Centers of Learning, Research, Writing and Technology

The University Libraries provide a full range of resources and services in person and virtually. The Libraries are open long hours and conveniently located on each of USM’s three campuses (Gorham, Portland, Lewiston-Auburn). The Libraries offer a range of comfortable spaces for studying, group work and assistance. Find out more at http://usm.maine.edu/library.

Learning Commons at Glickman Library (2nd Floor) and Gorham Libraries offer research and writing help, learning assistance, group study rooms and computers and technology support. Similar services are offered at the Lewiston-Auburn Library Information Commons. Find out more at http://usm.maine.edu/library/learning-commons.

Selected Services

- Circulation (Laptop and Kindle check out)
- Interlibrary Loan (ILLiad)
- Information and research instruction and assistance
- Ask-a-Librarian email and chat assistance
- Student Computers, full wireless access, printing and scanning
- Research and instruction guides and tutorials
- Tutoring in math, writing, ESOL
- Tutoring in technology assistance
- Recording Vault (Glickman Library)
- Course Reserves
- Group Study Rooms

Collections and Resources

- Over 240 library databases, most full text
- Access to over 35,000 electronic journals via our databases with most articles available in full text
- URSUS Catalog access to 375,000 books supplemented by more than 1.5 million print titles held in the libraries of the other campuses of the University of Maine System, the Maine State Library and the Bangor Public Library with two or three day intercampus delivery
- E-Books, audio books and DVDs

Find out more at http://usm.maine.edu/library/collections.

The University Libraries also include two special collections:

Osher Map Library and Smith Center for Cartographic Education is the only separately established history of cartography library in northern New England. The cartographic collections contain fine examples of original maps, atlases, geographies, and globes spanning the years 1475 to the present augmented by a 4,000-volume reference collection of related works. Find out more at http://usm.maine.edu/maps/.

Special Collections consists of a rare books and manuscripts collection, the University Archives and the Jean Byers Sampson Center for Diversity in Maine. Find out more about the various special collections at http://usm.maine.edu/library/specialcollections.

Computing Services

The Computing Services departments provide a variety of technology support services to students, faculty, and staff at the University.

Computer labs for general student use are located on the Gorham, Lewiston-Auburn, and Portland campuses and in the University Libraries. The computer labs have Microsoft Windows and Apple Macintosh computer systems, and academic software applications. Black and white or color printing is available for a nominal fee using the USM Card. Computer classrooms are available on all three campuses for class activity periods.
Resident students are provided an Internet connection in each room as part of their room package. The ResNet program, located in Upton Hall, Gorham, assists with setup and maintenance of the resident student computers on a walk-in and appointment basis. A walk-in and call-in Helpdesk, located in Luther Bonney Hall, Portland, assists all faculty, staff, and students with computer problems, including some common University login, e-mail, and Internet problems. Assistance can be requested by phone at 780-4029, by e-mail at helpdesk@usm.maine.edu, or on the Web at http://usm.maine.edu/computing. The Campus Computer Store, located in Luther Bonney Hall, Portland, sells computers and accessories at educational discount rates to faculty, staff, and students. In addition discounted high speed Internet service from Time Warner is available to faculty, staff, and students.

More information about any of the services offered by Computing Services can be found at helpdesk@usm.maine.edu.

**Instructional Technology and Media Services**

The Instructional Technology and Media Services (ITMS) Department provides classroom and instructional technology support for the academic programs of the University. This support includes group or individual sessions on instructional applications of technology in Portland, Gorham, or Lewiston-Auburn.

Other services include the delivery and maintenance of classroom equipment on all three campuses. The Department maintains a collection of non-print materials, with electronic listings available on the USM Web site (http://usm.maine.edu/itms). ITMS staff are available to help with the rental of materials for classroom use.

Offices are located at 232 Luther Bonney Hall in Portland, (207) 780-4280, 3 Bailey Hall in Gorham, (207) 780-5356, and LAC Library Commons in Lewiston-Auburn, (207) 753-6540.

**Academic Assessment**

The Office of Academic Assessment coordinates the administration of various testing programs, such as USM's Mathematics Placement Program (e.g., Accuplacer Math Tests) for incoming and transfer students, in addition to certification and national tests for graduating students (e.g., Miller Analogies Test, GRE Subject Tests, LSAT, PRAXIS, and others). Students are encouraged to contact the office for further information at 628 Law, Portland campus and visit our Web site for test registration and schedules at http://usm.maine.edu/assessment.

The Office also conducts student assessment studies and student surveys, assists departments in evaluating courses and programs, develops tests and assessment instruments, and provides technical support to the faculty.

**Support for Students with Disabilities**

The Office of Support for Students with Disabilities (OSSD) provides a wide range of services to qualified students with sensory, mobility, physical, psychological, cognitive, learning and attention disabilities enrolled in USM credit and noncredit bearing courses and programs. Contact OSSD for information regarding particular needs. Documentation may be required. The office is located in 242 Luther Bonney Hall, Portland; 207-780-4706 or TTY 207-780-4395 or visit our Web site: http://usm.maine.edu/oassd.

**Learning Assistance and Tutoring: The Learning Commons**

The Learning Commons at University Libraries supports students in achieving their academic goals at USM. Designed as a collaborative learning environment, it is an ideal place to meet with other students, consult with a librarian or tutor, or work with a faculty member. The Learning Commons offers guidance with the research and writing process, ranging from the navigation of hundreds of available articles and databases to the review of the final draft of a paper. Students can access free tutoring in multiple subject areas, with an emphasis in writing and math. The Learning Commons also provides students opportunities to discover and practice learning strategies in order to maximize academic time on task.

At The Learning Commons, students can:

- Work with a Reference Librarian
- Participate in individual and group tutoring sessions
- Attend weekly workshops
- Receive assistance with technology needs
- Work alone or with other students in a relaxed, appealing environment

Our spaces include movable tables and chairs, semi-private study pods, small group study rooms, and comfortable seating options. Students can use one of the many available computers or bring their own laptop, with wireless printing on site. The Portland location includes a small recording studio with a video camera, lighting, sound-proofed walls, and a computer for editing audio and video files.

The Learning Commons is located on the first floor of the Library in Bailey Hall on the Gorham campus, as well as on the second floor of the Glickman Library on the Portland campus.

Phone: (207)780-4228
Student and University Life

Athletics

Athletics is an exciting part of student life at USM. Few institutions can match the success of the Huskies' nationally recognized non-scholarship athletic program. The Huskies compete in the Little East Conference, an eight-member conference comprised of public institutions in New England and recognized as one of the most competitive Division III conferences in the nation. We have 23 intercollegiate sports including: baseball, basketball, cross-country, field hockey, golf, ice hockey, indoor/outdoor track and field, lacrosse, soccer, softball, tennis, volleyball, and wrestling. Nine different teams and countless individual performers have participated in national championship competitions, highlighted by the Huskies baseball team that captured the NCAA Division III National Championship in both 1991 and 1997. The women's basketball team has played in the four-team national championship tournament five times since 1998. Annually, several USM teams achieve a national ranking and qualify for postseason play sponsored by the NCAA or ECAC.

USM student-athletes are supported in their efforts to excel with a strong system of academic support services which include mandatory study hours for first year students and progress checks with University faculty members. The Department of Athletics offers an 18-credit hour coaching certificate program that prepares individuals to coach at all levels.

FMI: (207) 780-5430, http://www.southernmainehuskies.com

Safety & Wellness

Health & Counseling

Each semester, students who are enrolled in six or more credits are automatically assessed a Health Fee. This fee entitles students to unlimited office visits in the University Health Center and 12 counseling sessions in University Counseling Services. Students taking three to five credits may opt to pay the Health Fee in the first four weeks of the fall or spring semester. The health fee is not health insurance. Proof of health insurance is required of all students as a condition of course enrollment if they meet the following criteria:

- Undergraduate students taking 9 credits or more
- Graduate or Law students taking 6 credits or more
- All USM students enrolled in the School of Nursing
- All USM students enrolled in the Athletic Training Program
- All USM students enrolled in the Occupational Therapy Program

FMI: (207) 780-5411, or TTY (207) 780-5646 or visit usm.maine.edu/uhcs, 125 Upton Hall.

Strict standards regarding confidential information is observed in the University Health Center and in the University Counseling Centers. Staffing includes mental health clinicians, professional nurses, certified nurse practitioners, and physicians who understand college health issues and the diversity of the USM community. A broad array of services and programs are available through University Counseling and Health Services. Please utilize the contact information below for more information and/or a referral to off-campus health and counseling services if needed.

Health Services

(207) 780-5411, or TTY (207) 780-5646. Immunization hotline (207) 780-4504. usm.maine.edu/uhcs. First floor Upton Hall in Gorham.

Counseling Services

(207) 780-4050, usm.maine.edu/uhcs, 105 Payson-Smith Hall, Portland Campus & 110 Upton Hall, Gorham Campus, Lewiston-Auburn College call (207) 753-6500.

Student Wellness (The Well)

The Well is a resource center dedicated to helping USM students develop and increase their awareness of every aspect of wellness including substance abuse prevention and intervention services. Located on the first floor of Upton Hall in Gorham and in Woodbury Campus Center in
Recreation & Fitness
Gorham Recreation and Fitness

The Gorham Recreation and Fitness Center offers many recreational activities regardless of skill level or previous experience. Team sports may include flag football, volleyball, basketball, ultimate Frisbee, six-on-six soccer, softball, volleyball, floor hockey, and arena football. Other activities include tennis, table tennis, darts, badminton, three-point shoot-out, free-throw competition, and nine-ball pool tournament, ice hockey, broom ball, and ice skating. The fitness facility includes universal machines, free weights, and cardiovascular machines. Group exercise classes, personal fitness consultations, and a variety of other workshops are offered as well. White-water rafting, deep-sea fishing, and whale watching activities as well as trips to see the Red Sox, Bruins, and Celtics are frequently organized.

FMI: (207) 780-5649 or visit usm.maine.edu/recsports, 102 Hill Gym.

Sullivan Recreation and Fitness Complex

The Sullivan Recreation and Fitness Complex has three courts lined for basketball, indoor tennis, badminton, volleyball, and indoor jogging. There are squash, wallyball, and racquetball courts, and two multi-purpose rooms for aerobics, dance, yoga, martial arts, and more. The Fitness Centers offer Selectorized Power circuit stations, free weight equipment, treadmills, exercise bikes, steppers, climbers, elliptical fitness cross trainers, rowers, and stability balls. Equipment for wallyball is available for sign-out. A range of programs designed for busy commuters is available: aerobics, yoga, martial arts, racquetball, introductory dance classes, personal fitness consultations, and relaxation workshops. Outdoor recreation clinics and trips include camping, canoeing, cross-country skiing, sea kayaking and more.

FMI: (207) 780-4939 or visit usm.maine.edu/sullivancomplex, 104 Sullivan Complex.

Public Safety and Parking & Intercampus Transportation

USM Public Safety is responsible for keeping the peace, preventing crime, and delivering a variety of public safety related services including: Emergency Response, security and crowd control, crime investigation, 24-hour campus safety coverage, management of Public Safety Services (including parking and transportation), escort services and educational programs.

The University provides a shuttle bus that runs between Portland and Gorham campuses (Monday-Saturday). Schedules are available at usm.maine.edu/police/parking-and-transportation.

Parking permits are available at the Parking and Transportation Office located inside the parking garage on Bedford Street on the Portland Campus and in Gorham at USM Public Safety and in the USM Card Offices in Upton Hall (Gorham) and Payson Smith Hall (Portland). University motor vehicle rules and instructions to appeal violations are available at usm.maine.edu/police/parking-and-transportation.

FMI: EMERGENCY: Call 911 from a campus phone or (207) 780-5211. Non-emergency business 780-5211.

To register for USMALERT emergency messages, go to usm.maine.edu/usmalert.

Student Life & Co-Curricular Programs

Dining Services

Dining facilities are located on all campuses. In Gorham, options include the Residential Restaurant, the Husky Hideaway Snack Bar and Convenience Store in the Brooks Student Center, the Ice Arena Kiosk, and the Bailey Hall Cafe. In Portland, options include the Food Court in the Woodbury Campus Center, the University of Maine School of Law Cafe, and the Luther Bonney P.O.D. and Mini-Mart. The Lewiston-Auburn campus features Café-LA.


Residential Life

The Department of Student Life provides clean, safe, and attractive living and learning environments for approximately 1300 students in five residential facilities on the Gorham Campus. Accommodations are coeducational and offer convenient access to classes and campus events.
Students living on campus may choose to apply to live in one of our special interest housing areas or living-learning communities.

FMI: (207) 780-5240, email reslife@usm.maine.edu, or usm.maine.edu/reslife, 100 Upton Hall, Gorham Campus.

**Student Centers**

**Brooks Student Center**

The Brooks Student Center (BSC) serves as the "hub" for student life in Gorham. Whether you want to relax and study, grab a snack, or attend an event, the BSC has something for you. BSC amenities include 24/7 access to a UCU ATM and cash-to-card machines, campus bookstore, student mailboxes, computer stations, lounge space, bulletin boards, and two campus dining locations: the Residential Restaurant, the Husky Hideaway and Convenience Store. BSC is also home to the Office of Student Life & Campus Involvement and Activities.

FMI: (207) 780-5081 or visit usm.maine.edu/studentlife.

**Woodbury Campus Center**

The Woodbury Campus Center serves as the "living room" of the Portland campus, with campus dining, the USM bookstore, UCU ATM, and many other services available. Also located in the Woodbury Campus Center is the Student Life Office, Area Gallery, the Center for Sexualities and Gender Diversity, Student Government Offices, Student Legal Services Office, the Veterans' Resource Center, and the Multicultural Student Center. Support services for commuter students including off-campus housing options, parking and transportation information, and more are also available.

FMI: (207) 228-8200 or visit usm.maine.edu/studentlife.

**Student Government and Student Organizations**

**Graduate Student Government**

usm.maine.edu/grad/graduate-student-government

**Undergraduate Student Government Association**

usm.maine.edu/studentlife/sga

**USM/LAC Student Government Association**

usm.maine.edu/lac/student-government-association

**Student Organizations**

www.usm.maine.edu/studentlife

**Student Legal Services**

student-groups.usm.maine.edu/sls/

**Greek Life**

Greek letter organizations offer students the opportunity to participate in a community emphasizing leadership, community service, academic achievement, and self-governance. Several social fraternities and sororities are affiliated with USM.

FMI: visit usm.maine.edu/studentlife/greek-life

**Student Life and Student Services**

The following programs and services are dedicated to supporting student learning and promoting student development. Additional information is available on the individual Web sites and/or at the offices listed below. Questions regarding all areas in this section may be addressed to Dr. Susan Campbell, Chief Student Affairs Officer, at (207) 780-4547 or by email to scamp@usm.maine.edu.

Admission (undergraduate), Athletics, the Campus Safety Project, the Center for Sexualities & Gender Diversity, the Dean of Students Office, Dining Services, Disability Services Center, Health & Counseling, the Learning Commons and Learning Support, Multicultural Student Affairs, Prior Learning Assessment, Public Safety, Recreation & Fitness, the Registrar, Residential Life, Student Life, Student Success Centers, Student
Student Support & Campus Conduct Policies

Dean of Students

The Office of the Dean of Students administers the Student Conduct Process. Through the Student Code of Conduct, the office maintains community standards of behavior that support the University's educational mission, promote students' academic achievement, and protect the rights of University community members. Violations of state or federal law and/or a University policy or regulation, will be addressed through student conduct action and/or action through the appropriate criminal/civil process.

FMI (including a copy of the Student Conduct Code): (207) 780-5242, usm.maine.edu/deanofstudents, or visit 113 Upton Hall on the Gorham Campus.

Campus Safety Project

The Campus Safety Project is a university-wide effort to promote healthy relationships by providing prevention education and response training on sexual assault, stalking, and relationship abuse for students, faculty, and staff and coordinating campus and community-based programs and services.

FMI: usm.maine.edu/campussafetyproject/overview including details regarding on-campus sexual assault and relationship violence advocacy support.

Diversity & Inclusiveness

Take advantage of opportunities to celebrate our community and to explore the broad diversity of background, traditions and points of view that makes the USM campuses so vibrant. The work of the Centers and programs below are grounded in an understanding and celebration of our diverse community which includes people of all abilities, ages, ethnicities, genders, nationalities, races, religions & spiritual traditions, socioeconomic classes, and sexual orientations.

The Center for Sexualities & Gender Diversity

132 Woodbury Campus Center, Portland Campus, (207) 780-5767

The Center for Sexualities and Gender Diversity seeks to ensure a University environment that is positive, safe, and supportive for members of the gay, lesbian, bisexual, transgender, questioning, and allied (GLBTQA) community. The Center oversees the USM Safe Zone Project, a program that conveys an inclusive message to the University community. Safe Zone Project volunteers attend a short orientation program and then display a rainbow-striped sticker with the words "safe zone USM." This shows that they are committed to being identified as safe and supportive contacts for GLBTQA students, faculty, and staff members.

Religious & Spiritual Life

Woodbury Campus Center, Portland Campus, (207) 228-8091

The Chaplaincy offers programs and services to support religious and spiritual life in all its expressions. Associate chaplains sponsored by their respective faith communities offer services to students and student groups in religious or spiritual traditions, and work together to offer programs encouraging spiritual life and interfaith dialogue. A space is provided for reflection, meditation, or prayer for individuals and groups.

Office of Equity & Compliance, 209 Deering Street, Portland Campus
The USM Core Curriculum

Students with catalog year (requirement term in Maine Street) prior to 2011 should consult the corresponding catalog edition. Additional details on Core requirements are available at the USM Core website.

- Vision and Goals
- Meeting USM Core Requirements
- USM Core Requirements and Sequencing
- USM Core Curriculum Regulations
- Transfer Credits and the USM Core
- Students with Catalog Year Prior to 2011

Vision and Goals

The USM Core Curriculum is a coherent, integrative, and rigorous liberal education that enables our graduates to be world-minded, intentional, life-long learners. The USM Core engages the academic community in learning experiences that both illuminate and transcend the perspectives of various disciplines. It systematically fosters the values and dispositions, knowledge, and skills that prepare students for successful citizenship in a complex and dynamic world.

Students will

- Demonstrate informed understanding of interrelationships between human cultures and the natural world
- Engage in analytical, contextual and integrative thinking about complex issues
- Demonstrate effective communication using multiple forms of expression
- Engage in critical reflection upon and informed action in your roles as a participant in multiple communities; and
- Engage in ethical action and contribute to the social and environmental welfare of local and global communities.

The USM Core enables students to achieve these goals through active learning that occurs both within and outside of the classroom. It provides opportunities and incentives to connect learning in the Core with the major, and build knowledge and skills throughout the academic career.

Meeting USM Core Requirements (back to top)

Core requirements are met by passing (with a grade of D minus or better) courses that satisfy specific Core requirements. Lists of courses that satisfy the requirements appear at the end of this section of the catalog and in Maine Street Class Search. Students matriculated at Lewiston-Auburn College from fall 2007 on will complete the Lewiston-Auburn College Common Core curriculum requirements. For more information about the Common Core curriculum, refer to the Lewiston-Auburn College section of this catalog.

Students in the University Honors Program or the Russell Scholars Program should refer to the corresponding section of this catalog for information on how Honors and Russell Scholars courses satisfy USM Core requirements.

USM Core Requirements and Sequencing (back to top)

USM Core requirements are sequenced. Students should pay careful attention to the associated course pre- and co-requisites in planning their course of study.

- Entry Year Experience
  All new, entering students with fewer than 24 transfer credit hours must complete an EYE course in their first semester. Students who have completed an EYE equivalent at another institution are not required to complete the EYE requirement. Pre or co-requisite: College Writing.

- College Writing
  All students must complete a College Writing course, either at USM or in transfer. College writing is a pre or co-requisite for the Entry Year Experience requirement. The College Writing requirement can be met in any one of three ways:
  - Successfully complete ENG 100, ENG 101, ESL 100, HON 100, LCC 110, or RSP 100
  - Score 50 or above on the CLEP General English Composition Test (See Prior Learning Assessment for details) 3 credits
  - Earn credit for the requirement through AP or transfer or by receiving a score of B or better on the Excelsior English Composition examination (see Prior Learning Assessment or Transfer Admissions for details).
  - Non-native English speakers whose SATs fall below 500 or whose TOEFL score is below 79 must take the ESOL program’s
Quantitative Reasoning
Students must meet USM’s mathematics readiness requirement before registering for a Quantitative Reasoning course
- The Quantitative Reasoning requirement can be met in one of three ways:
  - Pass a locally administered examination (no credit)
  - Successfully complete an approved quantitative reasoning course
  - Pass a CLEP examination in mathematics (see Office of Prior Learning Assessment for details)
- Students whose majors require a specific mathematics course should consult their major advisor or a Student Success Advisor for guidance in selecting a course in this area.

Creative Expression, Cultural Interpretation, Science Exploration, Socio-cultural Analysis
These requirements may be completed in any order. Some majors may require completion of particular courses or a particular sequencing of these requirements. Students who transfer in 24 or more credit hours are not required to take EYE prior to registering for these courses.
- Creative Expression: pre or co-requisite: EYE
- Cultural Interpretation: pre or co-requisite: EYE
- Science Exploration (lecture and corresponding lab): pre or co-requisite: EYE and Quantitative Reasoning
- Socio-cultural Analysis: pre or co-requisite: EYE

Ethical Inquiry, Social Responsibility, and Citizenship
Prerequisites: Any three of the four requirements of Creative Expression, Cultural Interpretation, Science Exploration, Socio-cultural Analysis. Individual courses in this area may include additional prerequisites. Some majors may require students to complete specific courses to satisfy this requirement. See the relevant department section of the catalog for more information.

Thematic Cluster or minor
Prerequisites for courses in the Thematic Clusters vary by course. Please check the individual course listing in Maine Street for course-specific prerequisites. Satisfying the thematic cluster requirement involves successfully completing any three courses in the cluster, from at least two different prefixes; one of the three courses may have the same prefix as the student's major. Students may complete a minor or a double major in lieu of a thematic cluster.

Diversity
Prerequisites for courses that satisfy the Diversity requirement vary by course. Please check the individual course listings in Maine Street for course-specific prerequisites. Some courses that satisfy the Diversity requirement may also satisfy other Core or major requirements. Students must complete two distinct courses to satisfy the Diversity and International requirements.

International
Prerequisites for courses that satisfy the International requirement vary by course. Please check the individual course listings in Maine Street for course-specific prerequisites. Courses that satisfy the International requirement may also satisfy other Core or major requirements. Students must complete two distinct courses to satisfy the Diversity and International requirements. Study abroad involving an academic experience may be used to satisfy the International requirement. Prior approval form required.

Capstone
Prerequisites include Ethical Inquiry, Social Responsibility, and Citizenship, and other courses as specified by the department. Students should check the section of the catalog associated with their major for information on this requirement.

USM Core Curriculum Regulations (back to top)

- The student has primary responsibility for ensuring that she or he completes the minimum college readiness requirements in writing and mathematics and the USM Core curriculum requirements. Undeclared majors should seek advice from the Student Success Centers. Students in the Go program are expected to complete their college readiness requirements as outlined in their academic support plan. Declared majors should consult their college, school, or department advisors.
- Courses taken to satisfy the Core curriculum requirements may not be taken on a pass-fail basis or audited.
- Satisfying a core curriculum requirement involves passing (with a grade of D minus or better) an approved USM course in that requirement area, transferring an equivalent course, or demonstrating other prior learning through approved prior learning assessment processes.
- Overlaps between Core and major requirements: Only one course in the student's chosen thematic cluster may overlap with the prefix of the student's major. There are no other restrictions on overlaps between Core and major requirements except those that may be imposed by the major. See the section of the Undergraduate Catalog corresponding to your major for additional information.
- Overlaps between Core requirements: Overlaps are permitted between the diversity requirement and other core requirements (except international), and between the international requirement and other core requirements (except diversity). Students must complete two distinct courses to satisfy the Diversity and International requirements. Some courses which satisfy the Ethical Inquiry requirement also apply toward one or more of the Thematic Clusters.
- Repeating courses to satisfy Core requirements: A failing grade in an EYE course may be replaced by a passing grade in any EYE course. All other failing grades may be replaced only by a passing grade in the same course. See Academic Policies section of the Undergraduate Catalog for additional information on repeating courses and replacement grades.
- Waivers of and substitutions for USM Core curriculum requirements may be sought from the Assistant Provost for Undergraduate Programs and Core Curriculum at smcwilms@usm.maine.edu.
- Prior Degree: Students who have already completed one baccalaureate degree from an accredited institution and are undertaking work for a second baccalaureate degree are not required to satisfy Core curriculum requirements.
Students receive appropriate transfer credit for their Core curriculum requirements through USM’s transfer admission and evaluation process. Transfer credits may be applied to all Core requirements with the exception of the Capstone, which is normally completed within the major and as a part of major requirements.

Students with 24 or more transfer credit hours or who transfer an EYE equivalent are exempt from the Entry Year Experience (EYE) requirement.

Transfer credit for the Ethical Inquiry and the Thematic Cluster requirements must be at the intermediate to advanced level (normally 200-level or above). Inquiries regarding receiving transfer credit for Core requirements should be directed to the Office of Transfer Admission at (207-780-5340 or transfer@usm.maine.edu).

Prior Degree: Students who have already completed one baccalaureate degree from an accredited institution and are undertaking work for a second baccalaureate degree are not required to satisfy Core curriculum requirements.

Students with Catalog Year Prior To 2011

Students whose Core requirement term (career term in MaineStreet) is prior to 2011 should consult the undergraduate catalog associated with their career year. Students whose Core requirement term (career term) is fall 2011 or after must complete the USM Core requirements as outlined here.

Returning/reactivating USM students who completed the Core requirements associated with their previous Core requirement term may have their Core requirement (career) term set to a pre-fall 2011 date. Contact the the Assistant Provost for Undergraduate Programs and Core Curriculum for additional information.

Courses Approved to Satisfy USM Core Requirements

Lists of courses that satisfy the requirements appear below by requirement area. Please consult with your advisor or use Class Search in Maine Street to determine the availability of these courses in any given semester.

- **Entry Year Experience**
- **College Writing**
- **Quantitative Reasoning**
- **Creative Expression**
- **Cultural Interpretation**
- **Science Exploration**
- **Socio-cultural Analysis**
- **Ethical Inquiry, Social Responsibility, and Citizenship**
- **Thematic Clusters**
- **Diversity**
- **International**
- **Capstone**

**Entry Year Experience**

Entry Year Experience courses engage students in exploration of significant questions about human culture and the natural world. The courses facilitate the students’ transition to college by engaging them in active and collaborative learning that enhances their inclination and ability to view complex issues from multiple perspectives.

- EYE 102 Sustainability, Culture and the Environment
- EYE 103 Shopping: American Consumerism
- EYE 105 Life is a Matrix
- EYE 107 HIV/AIDS: Science, Society and Politics
- EYE 108 Culture, Identity and Education
- EYE 109 Gender, Representation and Resistance
- EYE 110 Literature and Medicine
- EYE 111 A World of Words
- EYE 112 The Built Environment: Energy
- EYE 113 The Pleasure of Eating/Animals
- EYE 114 Globalization
- EYE 115 What is Sex?
- EYE 116 Nature-Nurture
College Writing (back to top)

College Writing introduces students to practices and conventions of expository academic writing. Students read expository writing and use the ideas they encounter to develop and refine their own arguments and perspectives. Students learn how thinking and writing change through processes of reading, drafting, rereading, revision, editing, and proofreading. At the end of the semester, students in College Writing demonstrate an understanding of sentence structure and syntax as central to meaning. Students can compose, in coherent and correct written English, essays that reflect a point of view, engage with readings, and focus on a central thesis or project.

ENG 100 College Writing
ENG 101 Independent Writing
ESL 100 College Writing
HON 100 Thinking and Writing in Honors
LCC 110 Language and Literacies in a 21st Century World
RSP 100 Russell Scholars Writing I

Quantitative Reasoning (back to top)

Students in quantitative reasoning courses will acquire introductory mathematical concepts and skills that are necessary for everyday life and to successfully complete their chosen field of study. In quantitative reasoning courses students will gain an awareness of the utility of mathematics in life and an appreciation of the scope and nature of its decision making potential. These skills include critical thinking, mathematical reasoning, the use of technological tools, computation, interpretation, inquiry, and application of mathematical concepts to issues and problems in the contemporary world.

ECO 120 Lying with Graphs
GYA 202 Research Methods
HON 105 An Interdisciplinary Introduction to Logic and Mathematics
LCC 150 Statistics for Informed Decision Making
MAT 105 Mathematics for Quantitative Decision Making
MAT 120 Introduction to Statistics
MAT 140 Pre-Calculus Mathematics
MAT 148 Applied Calculus
MAT 152 Calculus A
MAT 210 Business Statistics
PSY 105 Statistics in Psychology
SOC 307 Quantitative Research Methods

Creative Expression (back to top)

Creative Expression courses engage students in learning the value of creative process, using it for developing talents and interests in the arts, and learning a set of skills that will enable them to engage in creative thinking in non-arts aspects of their lives.

ART 141 2-D Design
ART 151 Drawing I
CMS 150 The Writing Process
ENG 201 Creative Writing
ENG 202 Memoir and Autobiography
HON 207 Illuminated Autobiography
HUM 105 Basic Photography
Cultural Interpretation courses engage students in the close analysis and interpretation of cultural representations to learn how people make sense of themselves and their world. Students critically evaluate and develop arguments about cultural representations or the contexts that produce them or give them meaning.

ARH 111 Art History: Prehistoric through Medieval
ARH 112 Art History: Renaissance to the Present
ASL 102 Beginning American Sign Language II
ASL 201 Intermediate Sign Language I
ASL 202 Intermediate Sign Language II
CLA 283 Epic Hero in Ancient Literature
ECO 105 A Novel Approach to Economics
ENG 120 Introduction to Literature (no longer offered)
ENG 145 Literature and History
ENG 150 Topics in Literature (no longer offered)
ENG 244 Introduction to Cultural Studies
FRE 102 Beginning French II
FRE 107 Intensive Beginning French
FRE 201 Intermediate French I
FRE 202 Intermediate French II
FRE 207 Intensive Intermediate French
FRE 293 Topics in French/Francophone Cinema
HON 102 Confrontation and Cross-Fertilization among Medieval Cultures
HON 202 Progress, Process, or Permanence: All that is Solid Melts into Air
HUM 120 Introduction to Literature
HUM 213 Metaphor in Literature, Science, and Religion
HUM 250 Song as Literature
LCC 200 Creative Critical Inquiry into Modern Life
LCC 350 Global Past and Present
MUH 105 Multicultural Perspectives of American Popular Music and Jazz
MUH 222 Music until 1900
MUS 100 Music Appreciation and History
MUS 102 Music of the Portland Symphony
MUS 103 Introduction to Jazz
PHI 102 Introduction to Philosophy: Quest for Certainty
PHI 103 Introduction to Philosophy: Human Alienation
PHI 105 Introduction to Philosophy: Philosophy through its History
PHI 106 Introduction to Philosophy: Why Philosophize?
PHI 107 Introduction to Philosophy: World Philosophy
PHI 109 Introduction to Philosophy: Law, Politics, and Society
PHI 110 Introduction to Philosophy: Sex, Gender, and Society
PHI 111 Introduction to Philosophy: Philosophical Reading (and Writing)
PHI 112 Introduction to Philosophy: Feminist Perspectives
PHI 310 History of Ancient Philosophy
PHI 312 Women Philosophers from Africa and the Diaspora
PHI 320 History of Medieval Philosophy
PHI 330 History of Early Modern Philosophy
Science Exploration

To think like a scientist, students must know how science knowledge is created and interpreted. In a Science Exploration course, content should serve as a vehicle to illustrate how experiment, observation and critical evaluation drive scientific understanding and progress. Science literacy and quantitative reasoning skills will be developed as tools to interpret and apply to natural processes. The Science Exploration course should give the student an appreciation of the applications and limitations of a science that investigates natural processes. To satisfy the Science Exploration requirement the student must successfully complete the lecture and corresponding lab.

ANT 102 Biological Anthropology (with ANT 102 Lab)
AST 100 Astronomy
AST 103 Astronomy: Activities and Experiments
BIO 101 Biological Foundations
BIO 102 Biological Experiences
BIO 103 Introduction to Marine Biology
BIO 104 Marine Biology Laboratory
BIO 107 Biological Principles II: Evolution, Biodiversity, Ecology
CHY 101 Introduction to Chemistry
CHY 102 Introduction to Laboratory Measurement
CHY 110 Chemistry, Life, and the Environment
CHY 113 Principles of Chemistry I
CHY 114 Laboratory Techniques I
ESP 101 Fundamentals of Environmental Science
ESP 102 Fundamentals of Environmental Science Laboratory
ESP 125 Introduction to Environmental Ecology
ESP 126 Introduction to Environmental Ecology Lab
GEO 102 Physical Geography
GEY 100 Volcanoes, Earthquakes, and Moving Plates
GEY 101 Lab Experiences in Geology
GEY 102 Field Lab in Physical Geology
GEY 103 Floods, Glaciers, and Changing Climates
GEY 105 Ocean Planet
GEY 106 Ocean Planet Laboratory
GEY 110 Field Studies in Environmental Geology on the Island of Lesvos, Greece
HON 200/201 Interdisciplinary Inquiry in the Sciences of the Human Body/lab
LCC 130 The Biology of Human Health with Lab
LCC 230 Environmental Science, Policy, and Sustainability with Lab
PHY 101 Introduction to Physics
PHY 102 Introduction to Physics Laboratory
PHY 111 Elements of Physics I
PHY 114 Introductory Physics Laboratory I
PHY 121 General Physics I
SCI 250 Applied Physics
Socio-cultural Analysis courses engage students in examination of socio-cultural systems and phenomena over time and across cultures. Students learn to use conceptual frameworks that shed light on human behavior in social contexts. This includes examination of influences on and effects of behavior associated with public and private roles students may experience.

ANT 101 Anthropology: The Cultural View
ANT 201 Human Origins
ANT 202 Origins of Civilization
ANT 220 North American Indians
ANT 230 Hunters and Gatherers
ANT 232 The Anthropology of Sex and Gender
ANT 233 Food and Culture
CLA 285 Classical Mythology
CLA 291 The Golden Age of Greece
CLA 292 Rome, from Republic to Empire
CMS 102 Introduction to Communication
COR 142 Baseball and American Society
CRM 100 Introduction to Criminology
ECO 100 Introduction to Economics
ECO 101 Introduction to Macroeconomics
ECO 102 Introduction to Microeconomics
ECO 103 Critical Thinking about Economic Issues
ECO 104 U.S. in the World Economy
ECO 106 Economic, Social, and Cultural Change
ECO 108 Economic Journalism
ENG 230 Literacy Studies
FRE 283 Contemporary French Thinkers
FRE 292 French Civilization II
GEO 101 Human Geography
GEO 103 Human-Environmental Geography
GEO 104 World Regional Geography
GEO 120 Geography of Maine
GEO 203 Urban and Regional Development
GEO 207 Maps: Knowledge, Technology, Society, Culture
GER 102 Beginning German II
GER 107 Intensive Beginning German
GER 201 Intermediate German I
GER 202 Intermediate German II
HON 103 Religious and Scientific Perspectives on Human Origins and the Human Body
HRD 200 Human Growth and Development
HTY 101 Western Civilization I
HTY 102 Western Civilization II
HTY 121 U.S. History to 1800
HTY 122 U.S. History to 1900
HTY 123 U.S. History since 1900
HTY 141 African-American History to 1865
HTY 142 African-American History from 1865
HTY 152 The Islamic Near East
HTY 171 Traditional East Asia
HTY 172 Modern East Asia
HTY 181 Latin America I
HTY 182 Latin America II
HUM 136 United States Studies II
HUM 246 The Viet Nam Era
HUM 260 Themes of Popular Culture
HUM 301 French North American Studies
HUM 310 French Settlement in the Northeast
HUM 325 Issues in World History and Geography I
HUM 326 Issues in World History and Geography II
HUM 330 Labor, Literature, and the Arts
HUM 340 World Native and Indigenous Studies
HUM 350 Cultural Fieldwork
LAC/SBS 340 - Language Acquisition & Literacy Development
Ethical Inquiry, Social Responsibility, and Citizenship courses focus on a theme that engages students in critical reflection on their responsibilities for informed decision making and action in their public and private roles. They require students to frame, analyze, and evaluate ethical issues, as well as to articulate and evaluate their own viewpoints and actions in relation to the ethical frameworks introduced. Examples of Ethical Inquiry, Social Responsibility, and Citizenship courses are listed below. Full information on courses that satisfy the Ethical Inquiry, Social Responsibility, and Citizenship requirement may be found online in MaineStreet by using the general education drop-down menu in class search. Some majors may require students to complete specific courses to satisfy this requirement. See the relevant department section of the catalog for more information.

- ADS 300 Ethics and Youth with Exceptionalities
- ARH 312 Art as Social Action
- BUS 347 Triple Bottom Line Business
- CLA 384 What Would Antigone Do?
- CMS 323 Understanding Technology
- COR 301 Thoughtful Giving: Philanthropy and American Culture
- EDU 310 What is the Purpose of Education in a Democracy?
- ENG 348 Empire, Ethics and Globalization
- ESP 200 Environmental Planning
- ESP 308 Global Environmental Problems and Sustainability
- GEO 209 Introduction to Land Use Planning
- HON 310 Honors Global Ethical Inquiry
- HTY 394 The Civil Rights Movement (this title only)
- LCC 370 Toward a Global Ethics
- LIN 410 Ethical Decision Making in ASL/English Interpreting
- MUE 310 Proseminar 5 Internship
- MUH 329 Devils, Dwarfs, and Dragons
- PHI 211 Media Ethics
- PHI 212 Environmental Ethics
- PHI 235 Philosophy of Social Media
- PHI 240 Political Philosophy
- PHI 241 Work, Society, and Subjectivity
- PHI 245 Africa, Social Justice, and Exile
- PHI 275 Compassion
- PHI 291 Death and Dying
- PHI 285 Genetics and Society
- PHI 295 Medicine, Madness, and Disease
- POS 280 Issues Before the United Nations
- REL 300 Religion and the Creation of the Human
- THE 375 Performance Art
Thematic Clusters

Thematic clusters provide students with opportunities to explore an issue, theme or topic from a variety of perspectives. The clusters encourage students to integrate their learning by juxtaposing competing and complementary ways of framing complex issues and problems at a more advanced level. To satisfy the Thematic Cluster requirement students complete three courses in the cluster of their choice. Only one of these three courses may overlap with the student's major requirements. See class search in Maine Street or the USM Core website for details on cluster courses and prerequisites.

Aging Well
American Society and Culture
Applied Science and Technology
Casco Bay Region
Early Childhood Education
Education in a Democratic Society
Environment and Society
Film and Society
Geospatial Technologies
Health and Wellness
Humans and Animals
Law
Leadership
Media Arts, Technology and Design
Modernism
Professional Practices
Public Health
Religious Experience and Human Culture
Resilience and Vulnerability
Resource Use and Global Change
Theory, Culture and Politics
Things French
War and Peace
Working Class Studies

Diversity

Courses that satisfy the diversity requirement engage students in critical examination of and self-reflection on issues of difference and diversity. In the context of the course topic, the diversity requirement will enhance students’ analytic sophistication about issues related to difference and diversity and will foster the interpersonal skills necessary for engaging with diverse populations within the U.S. or in other parts of the world.

ANT 232 Sex and Gender
ARH 310 Art History: Cross Cultural Perspectives
EDU 305 Foundations of Cultural and Linguistic Relativity
ENG 383 Harlem Renaissance
EYE 109 Gender, Representation and Resistance
GEO 402 Urban Geography
HON 102 Confrontation and Cross-fertilization among Medieval Cultures
HON 351 Virtual Sunset vs Real Sunset
MUH 105 Multi-cultural Perspectives on American Popular Music and Jazz
LIN 185 Language, Mind and Society
LIN 203 Introduction to Deaf World
NUR 326 Dominican Republic Community Nursing
NUR 327 Dominican Republic Community Nursing
NUR 339 Community Nursing Partnerships I
NUR 341 Community Nursing Partnerships II
NUR 419 Community Nursing Partnership
NUR 436 Community Nursing Partnership I
NUR 437 Community Nursing Partnership II
PHI 312 Gender in African Film and Literature
PHI 245 Africa, Social Justice, and Exile
POS 104 Introduction to International Relations
POS 280 Issues Before the United Nations
SBS 345 Race, Class, Gender: Diversity
Courses that satisfy the international requirement help students become world-minded learners who are knowledgeable about and have a comparative understanding of international social, political, economic or cultural issues in context. Courses that satisfy this requirement develop students’ knowledge and skills in relation to international issues of relevance to the course topic and focus. Study abroad involving an academic experience may be used to satisfy the International requirement. Advanced submission or syllabi or other documentation to the Office of International Programs is required to confirm that the program in question satisfies this requirement.

ANT 232 Sex and Gender
ANT 255 Cultures of Africa
ARH 111 Art History: Prehistoric through Medieval
ARH 112 Art History: Renaissance to the Present
BUS 335 International Business
BUS 361 International Marketing
CMS 286 History of International Cinema to 1945
EDU 310 What is the Purpose of Education in a Democracy?
ENG 326 Women and Islam
ENG 397 Irish Film
ESP 308 Global Environmental Problems and Sustainability
FRE 202 Intermediate French II
GEO 101 Human Geography'
GEO 103 Human-Environment Geography
GEO 104 World Regional Geography
GEO 203 Urban and Regional Development
GEO 285 Global Environmental Issues and Sustainability
GEO 481 Megacities and Global Planning
HON 310 Honors Global Ethical Inquiry
HTY 171 Traditional East Asia
HTY 172 Modern East Asia
HTY 181 Latin America I
HTY 182 Latin America II
HTY 377 Chinese Thought
HTY 388 Revolutions of Modern China
HTY 390 Traditional Japan: Court and Warriers
ITP 230 Project Management
MUH 222 Music History Survey I
PHI 312 Gender in African Film and Literature
PHI 245 Africa, Social Justice, and Exile
POS 104 Introduction to International Relations
POS 280 Issues Before the United Nations
REC 373 Belize
REC 374 New Foundland
SWO 322 Culture and Community Services in Belize
THE 201 Cultural History of Theatre

The capstone experience engages students with a significant theme, issue, topic, or problem. The capstone requires the development of a substantial oral, written, creative or applied final project that integrates disciplinary learning with general education and the perspectives of other disciplines. As the concluding experience, the capstone provides opportunities for students to think about how their education at USM, especially in the major, informs their future academic, professional and personal lives. See the section of this catalog pertaining to your declared major for information on capstone courses.
Honors Program

Program Overview

Director: Nancy Artz, Ph.D.

Faculty Teaching in Honors: Artz (Honors/Business), Bertram (English), Dean (English), Gilbert (Communication and Media Studies), Giles (English), Gish (English), Goodale (Art), Hausman (Chemistry), Kent (Theater), Lynn (Muskie/Assoc. Provost), Moore (Biology), Reimer (English), Ryden (American & New England Studies), Schmidt (Political Science), Vassallo (Political Science), Vella (Psychology), Waldrep (English), Walker (English), Wininger (Philosophy).

Honors students are eligible for small, dynamic courses that meet USM Core requirements. Students in any major may sample individual honors courses, complete our USM Core Thematic Cluster (Casco Bay Region: Where We Live), or graduate with an honors designation by completing a specified set of courses.

Our seminar-style format enables students to interact closely with peers and receive individualized attention from excellent faculty and staff. Honors courses tap into student curiosity and creativity while exploring intellectually-rich topics from multiple perspectives; our interdisciplinary approach enriches and complements any major. Students hone their communication skills and become better able to tackle complex challenges while working respectfully with others. The honors experience also includes challenging reading, reflection on meaningful contemporary and enduring questions, student research, and student performance such as oral presentation or civic engagement. Seniors can maximize their honors experience by writing a self-designed thesis. For all of these reasons, honors education is prized by employers and graduate schools.

Honors is more than a set of stimulating courses; the honors community is a home for engaged learners. In a collaborative setting, students attain the confidence that comes from honing their thoughts through questioning, writing, dialogue, and integrative thinking. Honors is meant to be a satisfying journey in which students rise to their potential as individuals and citizens – becoming the persons they want to be.

Honors courses are offered on the Portland and Gorham campuses. Dormitory students can choose to reside in the Honors Living-Learning Community in Hastings Hall. The Honors dorm floor houses a seminar classroom, lounge space, and a faculty/staff office. The Honors Center on the Portland campus offers seminar rooms, lounge space, student study space, and faculty/staff offices.

Please ask about competitive Honors scholarships available after one semester of honors coursework or about flexible program requirements for students with demanding major requirements or study abroad plans. For additional information, visit http://usm.maine.edu/honors.

Admission to Honors Courses

The Honors Program accepts motivated, intellectually curious students who value individual challenge and enjoy working closely with faculty and peers. Honors student status – and thus the ability to enroll in honors courses – may be requested any time between admission to USM and graduation. Traditional students, transfers, adult learners, and part-time students are all welcome. When students request honors student status, we consider motivation for honors study (which could be evident from prior academic performance, life experience, faculty recommendation, or an interview). As part of the general USM application process, honors status is automatically granted to recent high school graduates with a record of strong performance.

To enroll in your first honors course, visit the Honors Center (253 Luther Bonney Hall) or contact us at (207) 780-4330 or honors@usm.maine.edu.

Note: The Honors Program and the Russell Scholars Program are separate Learning Communities offering different USM Core courses (see http://usm.maine.edu/rscholar). Honors students are not required to reside on campus, may apply for an honors scholarship, and are eligible for an honors designation on their college transcript.

Honors Program Graduation Requirements

Thesis Track: Graduation with General University Honors requires a cumulative USM GPA of at least 3.4 and the following coursework:

• HON 101 - Honors Entry-Year Experience (or approved substitute)*

• HON 200/201 - Honors Science Exploration (HON 210 approved substitute)*

• HON 310 - Honors Global Ethical Inquiry (or approved substitute)*
• HON 311 and HON 411/412 - Honors Thesis I and II/III (minimum grade of B-)

• Three credits of additional honors coursework

* Course substitution is possible if you cannot use the required course toward your USM Core requirements because of prior credit, major requirement, study abroad, etc…

Non-thesis Track: An alternate honors designation is available for those who take an additional three credits of honors coursework in lieu of the six- to-nine-credit thesis. The minimum USM GPA is 3.2.

Honors courses cannot be taken pass/fail, unless the thesis advisor grants the option in HON 311. To remain in good standing as an honors student, and thus able to enroll in honors courses, students must meet a minimum grade standard of C+ in HON 100/101 and B- in all other HON courses. These minimum grade requirements function as prerequisites for other honors courses and as honors graduation criteria, unless the director grants an exception. If a minimum grade is not met, the student is to work with the honors staff to develop a plan to return to good standing. Dismissal from the program can result if a student does not meet with the staff; does not develop an approved plan; is unable to return to good standing within the plan's timeframe; or, after returning to good standing, subsequently fails to remain in good standing.

Note: the General University Honors designation is separate from, and in addition to, cum laude, magna cum laude, and summa cum laude awarded solely on overall USM grade point average (see Graduation Honors Policy in the Academic Policies section of this catalog).

Honors Course Descriptions

Course Descriptions

(listed by USM Core curriculum category – all standard Core prerequisites apply)

College Writing:

HON 100 Thinking and Writing in Honors
As a foundational course in the Honors program, this course sets out to expose you to writing skills related to narration, description, exposition and argumentation, skills that will prepare you for all your classes in the Honors program. The course is recommended for entering Honors students. Prerequisite: honors student (or permission). Cr. 3

Entry-Year Experience (EYE):

HON 101 Honors Entry-Year Experience
Each instructor uses a theme listed below to engage students in exploration of significant questions about human culture and the natural world. The course facilitates student transition to college by engaging students in active and collaborative learning that enhances their inclination and ability to view complex issues from multiple perspectives. Corequisites: College Writing, first year student, honors student (or permission).

(HON 101) Myth, Monsters, and Metamorphoses - What does it mean to be human? What is the difference between a human being and an animal, a human being and a god, a human being and the natural world? How does technology challenge our assumptions about what it means to be human? The course approaches answers to these questions from the ancient and modern worlds, including texts recognized as “foundational” or “canonical” in western intellectual tradition but expanding to include modern, post-modern, and non-western perspectives as well. As its title implies, the course interrogates texts of metamorphosis, texts whose characters challenge and in some cases transgress boundaries among the categories proposed. Prerequisite: honors student (or permission). Cr. 3

(HON 101) Literature and Medicine - How can literature and medicine relate to each other? This course explores the similarities and differences among the sciences and humanities and uses literature as the basis for examining concerns of health, illness, and healing. Topics include the moral and ethical issues of the health care worker-patient relationship, historical approaches to healing, and their implications for modern medical practices, and the cultural, racial, and gendered aspects of these issues. Prerequisites: honors student (or permission). Cr. 3

(HON 101) Culture, Identity & Education - This course focuses on the interrelationships among group affiliation, a quest for inquiry and learning, one's role in society, and one's personal identity. The course explores the basic questions of "Who are you?" and "What/who has influenced who you are and whom you wish to become?" Students will engage in a personal examination of culture and education as components of personal identity. Drawing from concepts borrowed from sociology and educational psychology, students will be asked to analyze educational materials, settings, aims, and procedures, compare these to their own successes or challenges with institutional learning, and frame their future
(HON 101) Power, Corruption and Foundings in the Ancient World - The American founding is ubiquitous in the politics and popular culture of the United States; public figures routinely cite 18th century arguments in support of their actions, and some political advocates even dress in the costumes of 18th century Americans. The authority provided by the founding shapes our politics, and its meanings are constantly invoked, reinterpreted, and adapted; in this, the American republic is similar to political bodies in antiquity. In this class we will study the powerful influence of foundings and the difficult questions they raise. Does reverence for the founding enable politics, undermine them, or both? By what authority can a people break with the past and create something new? Can a polity change its founding over time? Why are so many founding stories violent, including stories of fratricide, infanticide and regicide? In exploring these questions and others, we will study mythical and historic founding narratives from Classical Greece and early Imperial Rome, as well as reinterpetations of founding narratives from ancient philosophy, tragedy and epic poetry. Grades will be based on three papers, rough drafts, and oral presentations. Prerequisite: honors student (or permission). Cr. 3

Cultural Interpretation:

HON 102 Confrontation and Cross-Fertilization among Medieval Cultures - [Also meets Core Diversity requirement]
This interdisciplinary seminar will explore the intersections between Judaic, Christian, Muslim, and non-monotheistic religious-based cultures during the Middle Ages. Prerequisite: any EYE course (or concurrent) and honors student (or permission). Cr. 3

Socio-Cultural Analysis:

HON 103 Cultural and Historical Perspectives on Poverty -
In this course students will examine a wide range of texts from classical culture, early American legal and religious sources, as well as from contemporary economic and political theory about poverty--who is affected by it, what its causes are, and why it persists. Students will engage in analysis of the spiritual, political, ethical, and legal aspects of what it means to be poor. Seminars will prepare students to critically assess the historical and social attitudes towards poverty, and will include work with primary historical texts regarding the use of town farms in 19th century southern Maine as a response to chronic poverty. Required service learning at the Parkside Neighborhood Association will serve to familiarize students with contemporary controversies regarding work and poverty, public and private assistance, education and empowerment. Students will demonstrate effective communication skills through frequent writing, a researched essay, and a group presentation. Prerequisite: any EYE course (or concurrent) and honors student (or permission). Cr. 3

Quantitative Reasoning:

HON 105 An Interdisciplinary Introduction to Logic and Mathematics -
This course is an introduction to logic and mathematics. It is an unusual introduction, since it transforms history, philosophy, social thought, literature, and the arts into paths for understanding logical and mathematical concepts and systems. Therein lies the course's interdisciplinarity. These concepts and systems will be deployed to solve basic problems in everyday life and in academic research, from formally representing arguments found in scholarly texts to determining the odds of winning a hand in a game of chance to assessing scientific hypotheses. Special emphasis will be placed on developing the skill of detecting logical and statistical fallacies. Finally, the scope and limits of logical and mathematical systems will be studied. Prerequisite: any EYE course (or concurrent), successful completion of the University's mathematics proficiency requirement, and honors student (or permission). Cr. 3

Scientific Exploration:

HON 200 Honors Science Exploration: Interdisciplinary Inquiry in the Sciences - This seminar provides an interdisciplinary introduction to scientific discourses and practices; topics vary by semester (e.g., the human body or water). It combines concepts and methods of inquiry from multiple disciplines such as biology, chemistry, psychology, anthropology, ecology, history, or public policy. These explorations are synthesized by students in an independent project. HON 200 students must co-register for HON 201. [Students with credit for an approved college-level lab related to the topic should register for HON 210 to take the seminar without the lab.] Students without prior honors credits are encouraged to contact the Honors Office for permission to enroll. Corequisite: HON 201. Prerequisites: Any EYE course; any Quantitative Reasoning course; and Honors Student. Cr. 3

HON 201 Honors Science Exploration Lab - This laboratory section is required for students taking HON 200. The integrated sequence of weekly lab sessions enables students to apply methods of scientific inquiry from disciplines addressing that semester’s topic. The combination of HON 200 and HON 201 fulfills USM Core's Science Exploration requirement. Cr. 1.

HON 210 Honors Science Seminar: Interdisciplinary Inquiry in the Sciences - This seminar provides an interdisciplinary introduction to scientific discourses and practices; topics vary by semester. It combines concepts and methods of inquiry from multiple disciplines such as
biology, chemistry, psychology, anthropology, ecology, or history. These explorations are synthesized by students in an independent project. Students without prior honors credits are encouraged to contact the Honors Office for permission to enroll. Note: This seminar does NOT fulfill USM's Core Science requirement. Prerequisites: Any EYE course; any Quantitative Reasoning course; approved science laboratory credit; and honors student. Cr. 3

Creative Expression:

**HON 175 Oral Interpretation** - A course in the assimilation and analysis of literary material (poetry, prose, drama) with emphasis on the techniques used in reading written material aloud to an audience. Designed to stimulate an understanding and responsiveness to literature and to develop the ability to convey to others, through oral reading, an appreciation of that literature. Prerequisite: College Writing and EYE (either may be concurrent); honors student (or permission). Students may not receive credit for both HON 175 and THE 175.

**HON 207 Illuminated Autobiography** - An introduction to two creative processes – the visual and the literary – the course explores the means (shared, specialized, and complementary) by which they communicate thematic content, and the transformation through which subjective discovery becomes accessible form. Students will develop a control of structural elements within and between the two disciplines sufficient to write, illustrate, design, and publish a limited autobiographical narrative. Prerequisite: College Writing and EYE (either may be concurrent); honors student (or permission). Cr. 3

Ethical Inquiry, Social Responsibility, and Citizenship:

**HON 310 Honors Global Ethical Inquiry** [Also meets Core International requirement]
Each instructor selects a semester-long theme to foster world-mindedness and engage students in critical reflection on their responsibilities for informed decision making and action in their public and private roles. Prerequisite: sophomore standing (ideally second semester sophomore) and honors student (or permission). Cr. 3

(HON 310) **Nine Billion People, One Damp Rock** - Imagine nine billion consumers vying for the limited resources provided by one damp rock (Earth). As population and consumption expand, challenges such as climate change and water scarcity intensify. This course explores workable solutions for sustainable use of natural resources. We consider actions for individuals, corporations, and nations, including Swedish and Indian ideas that embrace the principles of sufficiency and equity. Prerequisite: sophomore standing (ideally 2nd semester sophomore) and honors student (or permission). Cr. 3

(HON 310) **Africa, Social Justice and Exile** - This course examines major ethical dilemmas which arise from the current world migration of peoples. This course addresses issues of social justice in the context of Africa and its Diaspora (the disbursement of its people outside of the continent). The immediate reason for our interest and concern is that the African refugees are people who live among us fellow citizens. But the stories of their exile allow us to connect with ethical, economic, and cultural issues around the world. Our examination of refugees and exiles concentrates on certain parts of West Africa, East Africa, and Southern Africa. Many recent immigrants to Portland are from East Africa and come here as refugees. Many issues of morality and social justice, which arise in the cases of refugees, come from the nature of the laws in the countries where they seek a sylum. For this reason, in addition to know why they leave, it is also important to know the mechanisms of judicial process in the lands in which they settle. Cr. 3

Diversity: See HON 102 in Cultural Interpretation section

International: See HON 310 in Ethical Inquiry, Social Responsibility, and Citizenship section

Thematic Cluster – Casco Bay Region: Where We Live (see honors website for non-honors courses in the cluster)

**HON 355 Casco Bay Area Topics**
Course topics – which vary by instructor – address culture, history, or the natural environment in the context of the Casco Bay area, Maine, or New England. For topic descriptions, contact the Honors Program (www.usm.maine/honors). Open to all students, although Honors Program permission required if a student earned a C+ or lower in a prior HON course. Course may be repeated for credit when topics differ. Prerequisite: sophomore standing (ideally second semester sophomore) and honors student status.

**HON 359 Honors Internship/Community Service** (students may petition to substitute a similar departmental experience)
Honors Program internship or community service project (provides credit toward the “Casco Bay Region” Thematic Cluster in the USM Core). Students, working individually or in a group, receive permission from the honors director, recruit a faculty sponsor, locate a placement in the
Casco Bay region, and develop a learning contract. 
Prerequisite: sophomore standing (ideally second semester sophomore) and honors student (or permission). Cr. 3

**HON 455 Topics in New England Studies**
Undergraduate seniors seek permission to sit in graduate courses offered by the American and New England Studies. Courses appropriate for the Core’s Casco Bay cluster examine New England’s identity and experience in the context of the broader American experience. Courses combine various disciplinary approaches, but all draw on contemporary scholarship and stress the historicity of the region’s culture and society. Prerequisite: honors student and permission of Instructor and Director (normally requires 3.5+ GPA and senior standing of 84 credits). Cr. 3

Capstone (six- to nine-credit thesis experience fulfills the three-credit Core capstone and provides general elective credit):

**HON 311 Honors Thesis I: Workshop** -
To graduate with General University Honors, a student completes a multiple-semester thesis project. In the first-semester workshop, each student develops research skills, shapes a preliminary idea into a formal thesis proposal, and organizes a faculty committee to advise the student in HON 411/412. Course may be taken for credit twice. Prerequisites: three credits of honors coursework, junior standing, and Honors student (or permission). Cr. 3

**HON 411 Honors Thesis II** -
In the second semester, students independently execute the plan developed in HON 311, under the guidance of the thesis committee. The emphasis is on in depth reading, field work as applicable, and completion of the introductory thesis chapter and literature review. Note: it is possible to complete the thesis in HON 411, without proceeding to HON 412. Prerequisites: HON 311 (B- or higher grade) and Honors student (or permission). Cr. 3

**HON 412 Honors Thesis III** -
In the third and final semester, still working with their thesis committee, students write their remaining chapters; submit a completed draft; substantially revise that work based on feedback; and present their work in an oral, public defense. Prerequisites: HON 411 and Honors student (or permission). Cr. 3

Miscellaneous Core Requirements or General Electives:

**HON 299 Honors Topics** (most sections meet a USM Core requirement) Honors program electives include departmental courses that embody the honors experience. Honors students typically share the course with students majoring in course-related disciplines. The course may be repeated for credit when topics differ. Prerequisites vary by course topic, but include honors student (or permission).

**HON 321 Honors Directed Research**
This optional course allows an Honors student with interests in a particular subject area to research that area under the direction of a faculty supervisor. The research may be carried out in any subject area. Prerequisites: honors student and permission. Cr. 1-3

**HON 331 Honors Directed Study**
This optional course allows an Honors student to design a reading course in collaboration with a faculty supervisor. It is of particular value to students with self-designed majors who may need to supplement existing courses with additional material. Prerequisites: honors student and permission. Cr. 1-3
The Russell Scholars Program (RSP) is a residential, undergraduate learning community of highly motivated students and faculty dedicated to the achievement of educational goals through collaborative learning, out-of-class activities, and community service. The Russell Scholars Program is designed for average-to-excellent students who wish to pursue their studies in a small learning community, and who wish to receive regular coaching in the mastery of critical thinking. Russell Scholars will develop a commitment to learning and community service, an ability to transfer competence, an intercultural knowledge, a personal and ethical integrity, and an ability to work as part of a team. Approximately 50 first- and second-year students from all majors are admitted to the Russell Scholars each year and work with their individual RSP faculty mentors.

Extensive co-curricular and social activities enrich the learning community experience. All Russell Scholars are encouraged to have optional out-of-state or out-of-country learning experiences for which they receive full academic credit. First-year Russell Scholars are required to reside at Woodward Hall, a remodeled residence hall located on the Gorham campus. Here students can study; socialize; meet with mentors; and attend seminars, concerts, and readings. There are frequent opportunities for Russell Scholars, their faculty members, and guests to discuss ideas and issues in a relaxed social setting. Special events in the arts, sciences, and humanities are produced by Russell Scholars and are made available to the entire community.

To graduate as a Russell Scholar, a student must successfully complete two writing courses or equivalents, three RSP seminars, and six credits of Learning Community Labs, the final lab to be taken during the senior's spring semester. Students who are not taking RSP Lab who wish to earn service-learning credit must register for RSP 400 Independent Study with the instructor's permission. Students planning to graduate as Russell Scholars are required to take RSP 110, RSP 111, RSP 210 or 211, RSP 310 or 311, and RSP 411.

### Credits

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<th>Course</th>
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<tr>
<td>RSP 100 College Writing</td>
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<tr>
<td>RSP 101 Russell Scholars Creative Writing</td>
<td>3</td>
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<tr>
<td>RSP 103 (EYE) Seminar: Culture, Comm. and Environment</td>
<td>3</td>
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<td>RSP 110 Learning Community Laboratory</td>
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<td>RSP 111 Learning Community Laboratory</td>
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<td>RSP 211 Learning Community Laboratory</td>
<td>1-2</td>
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<td>RSP 250 Seminar: Songs and Society</td>
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<tr>
<td>RSP 411 Learning Community Laboratory</td>
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### Core Curriculum Requirements

Many Russell Scholars courses will satisfy the USM Core/General Education requirements. Students should consult with their mentors concerning the use of additional Russell Scholars courses to satisfy additional Core curriculum requirements.

### Departmental Major

Russell Scholars courses are not intended to be counted toward the number of credits that departments require for graduation as a major. Students enrolled in the Russell Scholars Program should consult with their departmental advisors concerning the use of Russell Scholars courses to satisfy departmental major requirements.

### Admission to the Russell Scholars Program
Any full-time, residential student in good academic standing is eligible to apply to be a Russell Scholar. Criteria for admission include: completion of application to the program, and an interview with a member of the Russell Scholars faculty.

Students interested in the Russell Scholars Program must complete an application separate from the application to the University. Those with questions about the Russell Scholars Program may call or write The Russell Scholars Program, University of Southern Maine, Woodward Hall, 37 College Avenue, Gorham, ME 04038, (207) 780-5752 or 5751. Application materials will be forwarded upon request. Once the completed application is received, students will be contacted for an interview, which may take place in person or by telephone. Applications are acted upon as they are received; hence, they should be submitted as early as possible.

To remain in the Russell Scholars Program, a student must remain in good standing with the University and demonstrate a genuine desire to remain in the program.

For more information, see http://usm.maine.edu/rscholar/russell-scholars-application.

### Course Descriptions

**RSP 100 College Writing**
This course introduces students to the style and standard of writing expected of them in college. Students read expository writings grouped around a theme and use the ideas they encounter to develop and refine analytical essays in response. Emphasis is placed on building the skills of critical analysis and the writing process, specifically reading, drafting, rereading, revision, editing, and proofreading. Students are encouraged to integrate ideas from RSP Seminar into class discussions and individual essays, when appropriate. At the end of the semester, an RSP 100 student will be able to engage with complex readings and compose analytical essays that focus on a central theme using language that is relatively free of sentence-level error. Prerequisite: college readiness in writing. Fall semester. Cr 3.

**RSP 101 Russell Scholars Creative Writing**
This course is offered as a continuation of RSP 100 to help students define and meet their writing goals. Classes meet once a week, and include individual conferences. Creative Writing emphasizes style, organization, and development, with some emphasis on mechanics. Students must exercise the self-discipline necessary to work independently. Cr 3.

**RSP 103 (EYE) Russell Scholars Seminar: Culture, Community, and the Environment**
All first-year Russell Scholars and transfer students are required to take this course. This course will utilize scientific and humanistic anthropological theories and understandings to explore contemporary issues and dilemmas concerning the environment. It will consider values and approaches of different cultures in order to better understand the current problems of environmental damage and pollution, population growth, lifestyle impacts on ecology, ethnic conflict, and other threats to cultural survival and ecological balance. The seminar will attempt to analyze contemporary problems locally and globally, and to explore possible resolutions to these problems. An example of cultural types will be examined, including forager, agriculturalists, and industrial nation-states, in terms of their relationship with and values about the environment. Cr 3.

**RSP 110 Russell Scholars Learning Community Laboratory**
This forum for all Russell Scholars convenes bi-weekly in an informal environment to address topics such as campus issues, current events, and student interests. Russell Scholars Lab also takes students out of the classroom atmosphere by integrating field trips to enhance the learning experience. Cr 1.

**RSP 111 Russell Scholars Learning Community Laboratory**
RSP 111 is a continuation of RSP 110. Cr 1.

**RSP 210 Russell Scholars Learning Community Laboratory**
RSP 210 is a continuation of RSP 111. Cr 1.

**RSP 211 Russell Scholars Learning Community Laboratory**
RSP 211 is a continuation of RSP 210. Cr 1.

**RSP 250 Russell Scholars Seminar: Songs and Society**
This is an interdisciplinary, literature-based course focusing on the role of songs in world cultures. It is designed to introduce students to the influence that songs have upon societies, and likewise, the influence of societies upon the creation and use of songs. Like most art forms, songs are reflections of the prevailing values of a given society at any given time in history. The course examines songs as vehicles to motivate and mobilize people, to help them escape from drudgery, to worship, to express political sentiment, to approve or to protest, to celebrate, and to entertain. Students identify and analyze the range of song genres from martial songs and anthems to love songs, lullabies, and protest songs. The course traces the evolution of the traditional story-song from the epic ballads to its present incarnation as both high and pop culture. Students will
also explore songwriting as both an art form and as a business driven by societies' unquenchable appetite for songs, both old and new. Prerequisite: 24 credits or permission of instructor. Cr 3.

RSP 300 Russell Scholars Seminar: England and the Humanities
Specifically designed for Americans studying in England, this course is designed to explore the interrelationships between the arts and humanities of the British Isles. The humanities comprise those areas of study that are literally the creation of human beings, as distinguished from science and its systematic revelation of the patterns of nature. Subsequently, this course will include, but will not be limited to, the roles played by literature, history, ethics, social science, religion, the fine arts, and folk arts in shaping British culture. Cr 3.
For more information, see: http://usm.maine.edu/rscholar/study-abroad.

RSP 305 Britain: The Interactions of Politics and Culture
This course is specifically designed for Americans studying in England and introduces students to the economic, political, and psychological environment and cultural lifestyle of contemporary Britain. Common use of "English" language in both the United States and Britain often conceals essential differences that exist in culture and in attitudes. These differences will be identified and explored through the study of a variety of topics both in the classroom setting and outside. Students will be encouraged to focus their own observations in order to deepen and broaden their understanding of Britain, its inhabitants, its politics, and its culture, and to do so in a way that will enable them to reflect more fully upon their own country, politics, culture, and way of life. Cr 3.
For more information, see: http://usm.maine.edu/rscholar/study-abroad.

RSP 310 Russell Scholars Learning Community Laboratory
RSP 310 is a continuation of RSP 211. Cr 1.

RSP 311 Russell Scholars Learning Community Laboratory
RSP 311 is a continuation of RSP 310. Cr 1.

RSP 340 Cultural Landscape of Greece
Students will be introduced to the multifaceted nature of this intriguing country. Greece, the birthplace of our western civilization, is a modern, emerging European nation and is already a major tourist destination. Students will travel to the bustling capital of Athens for three days, but spend most of their time on the quieter island of Lesvos. Here they will live in the small city of Mytilene (now a Sister City with Portland, Maine); gather to share meals in a seaside or city café; take field trips to villages, ancient sites, museums, and beaches; learn about the physical and societal framework of the culture; and attend lectures on human geography, geology, cultural traditions, current forces of change, impact of tourism, environmental issues, and regional politics. Cr 3.
For more information, see: http://usm.maine.edu/rscholar/study-abroad.

RSP 345/GEY 110 Russell Scholars Global Campus
This course takes place at any one of several international sites. It offers Russell Scholars students an opportunity to travel while experiencing the rich cultural differences of our diverse world. An example of a course is one held at Wroxton College in England during Winter Session. It examines British culture, government, economy, and literature. Students attend a performance by the Royal Shakespeare Company in Stratford-on-Avon, spend a weekend in London, and take several other side trips. Another example of this course takes students to Greece. Students will be introduced to the multifaceted nature of this intriguing country. Although ancient Greece is the birthplace of our western civilization, Greece today is also a modern, emerging European nation. Students will travel to the bustling capital of Athens for a few days, but spend most of their time on the quieter island of Lesvos. Here they will live in the small city of Mytilene (now a sister city with Portland, Maine) where they will be near markets, shops, and cafes. Daily they will gather to share meals in their pensione, or in seaside or city cafés; and take field trips to villages, ancient sites, archeological and art museums, and beaches. Cr 6.
For more information, see: http://usm.maine.edu/rscholar/study-abroad.

RSP 400 Russell Scholars Independent Study
Cr. Var.

RSP 402 Russell Scholars Capstone Seminar: Community and Commitment
This capstone seminar will bring together the framework, principles, and experiences of four years in the Russell Scholars Program to prepare graduating seniors to become lifelong learners with a commitment to the common good. Drawing upon the lessons of identity and community, and other themes of the program, this classroom and field-based seminar will explore such questions as: What is the common good? How can we be at home in the world? How can we live within and beyond the tribe? What is our responsibility in the world? What does citizenship in the twenty-first century mean? How do we develop critical habits of mind? This seminar will include a significant service-learning field experience in a community setting. Cr 3.

RSP 410 Russell Scholars Learning Community Lab
RSP 410 is a continuation of RSP 311. Cr 1.

RSP 411 Russell Scholars Learning Community Lab
RSP 411 is a continuation of RSP 410. Cr 1.
WGS Studies Overview

Director: Lucinda Cole, 94 Bedford St., Portland
Women and Gender Studies Council: Professors: Carey, Chapkis, Deprez, Feiner, Fineran, Gish, Messerschmidt, Raimon, Rosenthal, Savage; Associate Professors: Carroll, Cole, Eagan, Kent, Kuenz, Laz, Lockridge, Marya, Thompson, Walker, Wininger; Assistant Professors: Brodie, Rogers.

The Women and Gender Studies Program offers students an opportunity to examine the lives, words, and ideas of women too often hidden from history, and to explore new ways of thinking about gender. Our interdisciplinary program focuses on such issues as the gendered construction of science, women's cultural creativity, histories of gender inequality and social transformation, visual representation and popular culture, queer and transgender politics, gendered inequities in work and pay, eco-feminism and the natural environment, and critical intersections of race, ethnicity, nationality, religion, class, sexuality, and gender.

As they develop skills in feminist analysis, critical thinking, and writing, Women and Gender Studies students investigate and challenge long-standing assumptions about gender and society. Our students often apply their theoretical knowledge through internships with local organizations and agencies. Women and Gender Studies majors are prepared for graduate and professional schools in a variety of disciplines, as well as for careers in business, in public service, and in nonprofit organizations.

Committed to an international/global perspective, the program has hosted visiting scholars from many countries, including Russia, Croatia, Zimbabwe, Nigeria, Scotland, Pakistan, Egypt, Israel, Iraq, and Sweden. In addition, Women and Gender Studies has received a federal grant that encourages cooperation between USM and women faculty in the United Arab Emirates.

Each semester, co-curricular presentations by nationally and internationally acclaimed scholars, activists, and performers enrich our classroom experiences. Recent programs include “Witches and Witch Hunts across the Ages” (lecture, Michele Tarter); “New Mainers” (stories of survival and arrival by Mainers from Africa, Europe, and Asia); “Labor Feminism and the Future of Women’s Rights” (lecture, Dorothy Sue Cobble); “Damned Dreams and Dangerous Desires” (performance, Kate Bornstein); “Globalization, Social Justice, and the Environment” (lecture, Nawal El Saadawi); “Is God Love” (lecture, bell hooks); and poetry readings by Sonia Sanchez and Jackie Kay.

Prerequisites and Grade Policy

There are prerequisites for many of the women and gender studies courses. See departmental course listings for specific information. A minimum grade of C or better is required in major/minor courses. Courses taken pass/fail are not acceptable. WGS majors/minors are only allowed to take six credits of 100-level classes toward completion of their major/minor.

Curriculum Summary and Guide

The women and gender studies curriculum is built upon a shared commitment to the principles of educational excellence and educational opportunity. It is structured to ensure that students are exposed to the sophisticated body of knowledge that now defines women and gender studies as a discipline, while allowing students the opportunity to develop skills in research, writing, and analysis. Consequently, there are prerequisites for upper-division courses. The first-year student is encouraged to complete Core curriculum requirements, including Introduction to Women and Gender Studies (WGS 101I or EYE 109) and College Writing (ENG 100C). In the second year, students should take Women, Knowledge, and Power (WGS 201W), followed by Contemporary Feminist Theories (WGS 390) and Politics of Difference (WGS 380). Students who minor in another discipline should also begin the suggested sequence in that year. Third-year schedules should include at least two women and gender studies-sponsored topics courses, drawn from two of our four subject areas. Thus a student might take WGS 335 Topics in Gender and Science, Technology, and Health I, in the fall, and WGS 465 Topics in Women, Gender, and Institutions III, in the spring. Fourth-year students are required to take the Capstone Experience in Women and Gender Studies (WGS 490) and select either the internship or thesis option. These courses offer advanced experience in feminist theories, research, and practice, while allowing students to pursue their own interests under careful guidance. Students should be aware that while any course offered under these “topics” will address the general goal outlined in the catalog, the specific content of the topics courses will change from semester to semester. Course descriptions will therefore be published and distributed during the preregistration period.

Declaration of Major

To declare a major in women and gender studies, the student must have:

- completed a minimum of 30 approved University credit hours of which at least 15 credit hours must be completed at USM;
- completed WGS 101I or EYE 109 and ENG 100C with a grade of C or better.
To graduate from this program, the student must have:

- completed 42 hours of required coursework, as described above;
- attained a cumulative GPA of B- (2.67) in all major courses.

Students who wish to graduate with honors in this major must:

- maintain a cumulative GPA in WGS course work of 3.50;
- maintain a cumulative institutional GPA of 3.00;
- have demonstrated superior work in the thesis or internship;
- be recommended by a faculty member who teaches courses within the program; and
- be approved by the Women and Gender Studies Council.

**BA in Women and Gender Studies**

**Description**

See Program Requirements

**Program Requirements**

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 42.

The women and gender studies major consists of 24 hours of required courses and 18 hours of women and gender studies related courses as follows:

**Required Courses (18 hours)**

Either of the following (3 hours)
- WGS 101 Introduction to Women and Gender Studies
- EYE 109 Gender, Representation, and Resistance

All of the following
- WGS 201 Women, Knowledge, and Power
- WGS 380 Politics of Difference
- WGS 390 Contemporary Feminist Theories
- WGS 490 Capstone Experience in Women and Gender Studies

One Topics Course from TWO of the following subject areas (6 hours)
- WGS 235/335/435 Topics in Science, Technology, and Health I/II/III
- WGS 245/345/445 Topics in Culture, and the Arts I/II/III
- WGS 255/355/455 Topics in History and Resistance I/II/III
- WGS 265/365/465 Topics in Gender and Institutions I/II/III

Either of the following (4-6 hours)
- WGS 485 Internship
- WGS 486 Thesis

**Women and Gender Studies Related Courses: (at least 18 hours)**

- Students must take one course focusing on periods before 1800 and one course dealing with cultures not in the Western mainstream. Students may take no more than three electives from one department or program. Any WGS course may be used for elective credit; courses eligible for elective credit are listed at the end of this section.

**Minor in Women and Gender Studies**

USM Undergraduate Academic Catalog 2014-15
Description

See Program Requirements

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 18.

The women and gender studies minor consists of a minimum of 9 hours of required courses and 9 hours of related courses as follows:

Required Courses

Either of the following (3 hours)
- WGS 101 Introduction to Women and Gender Studies
- EYE 109 Gender, Representation, and Resistance

And the following (3 hours)
- WGS 201 Women, Knowledge, and Power

Either of the following (3 hours)
- WGS 380 Politics of Difference
- WGS 390 Contemporary Feminist Theories

Women and Gender Studies Related Courses (at least 9 hours)

Two of the courses must be at the 300-level or above. Students may take no more than two electives from one department or program.

Course Descriptions

WGS 101 Introduction to Women and Gender Studies

From a variety of perspectives, this course explores the following inter-related themes and topics: the economic, political, and social status of women/men as a group and in discrete cultural contexts; the politics of representation, or how ideas about femininity/masculinity and feminism are promoted throughout the media and other vehicles of culture; the construction of "consciousness," both through the media and through feminist tactics; collective action in the past, present, and future. This course is writing-intensive. Students are expected to practice their writing skills through formal essays. Prerequisites: English 100 or concurrent. Offered every semester. Cr 3.

WGS 201 Women, Knowledge, and Power

This course examines the ways in which the politics of knowledge production shape culture and gender relations. It explores the ways women and men have historically resisted, subverted, appropriated and reformed traditional bodies of thought. Prerequisites: WGS 101I, EYE 109 or permission of instructor. Offered spring semester. Cr 3.

WGS 220 Topics in Women and Gender Studies

Topic areas not already covered by regular course offerings will be offered. The course may be repeated for credit when different topics are offered. Cr 3.

WGS 235, 335, 435 Topics in Science, Technology, and Health I, II, III

Courses in this category will include a critique of traditional science, technology, and medicine, as well as offering feminist perspectives on knowledge, health, and power. Each of these courses will ask similar questions about how scientific thinking and gendered technologies affect bodily experience; how science's view of the female/male, feminine/masculine and gender-queer is problematized by reading works of fiction; how science creates racialized and sexualized subjects; and how science can be used to "talk race and fight racism." (bell hooks) Prerequisite: WGS 435 requires permission of the instructor. Cr 3.

WGS 245, 345, 445 Topics in Culture and the Arts I, II, III

Courses in this category will examine vehicles of culture from the perspectives of gender including feminine, masculine, and trans. These perspectives will be used to interpret the plastic, literary, and performing arts. Course readings may focus on gender and the production of culture; on how gender has been represented in written, visual, or oral texts; or on gender and aesthetic theory. Possible subjects may include feminist philosophy, feminism and film theory, gender and the history of music, and gender in popular culture. Prerequisite: WGS 445 requires permission of the instructor. Cr 3.
These courses explore the history of forms of gender and women's activism located not only in governments, political parties, and unions but also in collaborative activities and grassroots organizations. Emphasis is on the relationship between gender activism and social, economic, and cultural change. Topics include the way struggles for national liberation have deployed concepts of gender; working class women in contemporary and historical movements; struggles for equal rights including gay rights and trans rights; the 19th-century women's movement; women in peasant revolts; everyday forms of gender resistance; union organizing; the politics of identity as practiced by women, men, gays and queers. Prerequisite: WGS 455 requires permission of the instructor. Cr 3.

WGS 265, 365, 465 Topics in Gender and Institutions I, II, III
Courses in this category will focus on gender relations and the social and institutional construction of the category "women." Social structures and institutions create and reinforce assumptions about sex and gender, women and men, and masculinity and femininity, thus ultimately shaping the gender experiences available in society. The emphasis may be on industrial or non-industrial societies and institutions, law and legal institutions, economic institutions, subsistence strategies in non-industrial societies, systems of stratification, conceptual systems, or education. Prerequisite: WGS 465 requires permission of the instructor. Cr 3.

WGS 320 Advanced Topics in Women and Gender Studies
Advanced topic areas not already covered by regular course offerings will be offered. The course may be repeated for credit when different topics are offered. Cr 3.

WGS 380 The Politics of Difference
Central to the course are the ways that "differences" are embedded and enacted in the context of power relations. While the specific content of this course is flexible, it will analyze the advantages and disadvantages of using race, ethnicity, nationality, class, age, and sexuality as categories of analysis. Prerequisites: WGS 101I or EYE 109, WGS 201 or permission of the instructor. Offered fall semester. Cr 3.

WGS 390 Contemporary Feminist Theories
This course will introduce students to such feminist theoretical approaches as post-structuralism, Marxism, psychoanalysis, critical race theory, and post-colonialism. The focus of the course is the intimate relationships between feminist theories and feminist practices, locally and globally. Prerequisites: WGS 101I or EYE 109, WGS 201 or permission of the instructor. Offered spring semester. Cr 3.

WGS 420 Advanced Topics in Women and Gender Studies
Advanced topic areas not already covered by regular course offerings will be offered. The course may be repeated for credit when different topics are offered. Cr 3.

WGS 470 Independent Study
This course provides junior and senior students with the opportunity to pursue a project independently, concentrate on a particular subject of concern, or conduct individually arranged reading or research studies under the advice and direction of a faculty member. Prerequisites: advanced standing and permission of the instructor. Cr 1-6.

WGS 485 Internship
The internship requires students to work closely with a group, business, or organization for one semester. Students will write a research paper on a topic related to their internship experience and will present that research at the annual undergraduate research conference, Thinking Matters, in the spring semester. Prerequisites: senior standing and women and gender studies major or minor. Offered spring semester. Cr 4-6.

WGS 486 Thesis
The thesis allows students to pursue guided research on a topic of their choosing. Thesis students should choose three readers, including an advisor whose interests and scholarship are in line with their own. The minimum length for a thesis is 30 pages, and should include a substantial bibliography. Students will present their research at the annual undergraduate research conference, Thinking Matters, in the spring semester. Prerequisites: senior standing and women and gender studies major or minor. Cr 4.

WGS 490 Capstone Experience in Women and Gender Studies
All majors are required to select a capstone experience, with the guidance of their advisor, from the following two options: WGS 485 or WGS 486. Students enrolled in either option are required to participate in a bi-weekly seminar. Students are expected to co-enroll in WGS 490 and WGS 485 or 486. Offered in the spring semester only. Cr 2.

Related Courses
ANT 232 Anthropology of Sex and Gender
ARH/CLA Art, Architecture and Archaeology of the Ancient World/Classical Art
ARH 311 Gender Identity and Modern Art
CMS 310 Cinema and Women
CMS 486 Women in Film
CMS 484 Activism and Film
CRM 317 Gender and Crime
ECO 322 Economics of Women and Work
SOC 393 Women, Welfare, and the State
SWO 374 Sexual Harassment in Education and Work
SWO 375/575 Gender and Aging
THE 360 Butches, Bitches & Buggers: An Exploration of Twentieth-Century Queer Drama
THE 451 Women and Theater
THE 451 20th Century U.S. Women Playwrights
ANES 599 American Contexts of Witchcraft
ANES 645 Women and Popular Culture
ANES 650 Shopping: The Gender and Politics of Consumption
ANES 650 Women Writing Across the Color Line
ANES 665 Sex in New England
CAHS Overview

The College of Arts, Humanities, and Social Sciences is dedicated to the ideal of a liberal arts education and serves as the intellectual core of the University by offering general education courses to all undergraduate students. The College houses three graduate programs and thirteen undergraduate academic units in the areas of fine and performing arts, humanities, and social sciences. The faculty of the College is committed to the preservation and dissemination of fundamental knowledge and dedicated to enhancing this knowledge through creative expression, scholarly interpretation, and research. By demanding teaching excellence, the College strives to instill in all students the attributes of creative critical thinking, effective oral and written communication skills, and social values that embrace diversity and multiculturalism. Through the various disciplines, the College contributes to the formation of responsible citizens by providing an educational foundation upon which students build their lives and professions.

The College of Arts, Humanities, and Social Sciences offers a wide variety of majors and programs leading to graduate and professional study, and directly to careers. The College offers courses and programs of study to students in all schools of the University for intellectual development and aesthetic enrichment.

Departmental Organization

The College of Arts, Humanities, and Social Sciences has the following undergraduate schools and departments:

- Art
- Communication and Media Studies
- Criminology
- Economics
- English
- History and Political Science
- Modern and Classical Languages and Literatures
- Music
- Philosophy
- Sociology
- Theatre

Baccalaureate Degree Programs

Programs of study leading to a bachelor of arts (BA) degree are available in the areas listed below. In addition, bachelor of fine arts (BFA) is offered by the Art Department, bachelor of science (BS) is offered by the Department of Economics, and bachelors of music (BM) in performance and bachelor in music education are offered by the School of Music.

Teacher education tracks are also available in English, French, History, Classics - Latin.
Self-Designed

- Group Contract:
  - Classical Languages
  - Latin for Teachers, k - 12
  - Social Science
- Individual Contract

Requirements for all Baccalaureate Degree Candidates

To be eligible for a baccalaureate degree from the University, a student must meet the following minimum requirements:

- Core curriculum requirements
- Departmental or program requirements
- Minimum of 120 credits of accepted courses
- Minimum of 2.0 cumulative grade point average

Core Curriculum Requirements

Every baccalaureate degree student who is admitted to the University is required to meet the Core curriculum requirements, including college readiness courses if necessary. These are listed in the section on Core curriculum.

Departmental or Program Requirements

The College requires that every baccalaureate degree student fulfill the requirements of a major program as noted in the catalog section devoted to each department's majors. These requirements may be greater than the college minimum requirements.

Declaration or Change of Major

Students normally declare a major program prior to completing 53 credits. Students who wish to declare or change their major within the College must obtain a Change of Major form from the Registrar's Office or the Form Bank in the Advising Network website. Students must have the permission of the new department/major prior to declaring or changing a major within the College of Arts, Humanities, and Social Sciences.

Fine arts students, especially in the Department of Art and the School of Music, usually must begin their program earlier, owing to portfolio and audition requirements.

Selecting a major is an important and often difficult decision. Students who are undecided about a major should take courses in programs that interest them before making a final decision. It is recommended that students meet with a faculty member in the Department to request admission to the major and/or to ask questions about the appropriateness of the new major to their long-term goals. Students may also benefit from consulting the Student Success Center for information.

Individual departmental or program requirements are described in the sections that follow. Students should note that not all courses listed and described in the following sections are offered each academic year. Consult the particular department or program for further information about the year and semester a specific course will be offered.

Other Educational Opportunities

Independent Study Term

Students who have an academic project that they feel would contribute significantly to their program may, with the approval of a faculty sponsor, the appropriate department, and the dean, apply for a semester of independent study. General guidelines for the independent study term may be obtained from departments.

Double Majors

Students interested in a double major should consult the appropriate departments and obtain a Declaration of Major form from the Registrar's Office.

College of Arts, Humanities, and Social Sciences Minors

- Art
- Communication
- Criminology
- Economics
- English
- History
School of Business Minor

The School of Business offers a 21-credit hour minor in business administration to any baccalaureate student. The minor is recommended to liberal arts majors with a strong interest in business theory and practice. For more information, see the School of Business section of this catalog.

College of Science, Technology, and Health Minors

The College of Science, Technology, and Health offers minors in natural and physical sciences, computer science, electrical engineering, computer applications, environmental safety and health, environmental science, industrial management, and manufacturing technology. For more information, see the College of Science, Technology, and Health section of this catalog.

Teacher Certification

The College of Arts and Sciences offers an undergraduate pathway to teacher education. Teacher education tracks are available through the College in English, French, History, Classics – Latin.

Students who wish to prepare for a career in teaching at the elementary, middle, and secondary levels work with both the College of Arts, Humanities, and Social Sciences and the School of Education and Human development in approved pathways that offer coursework and experiences at the undergraduate and post-baccalaureate levels.

Undergraduates who seek teacher certification follow these steps:

1. Undergraduate Level
   1. College of Arts, Humanities and Social Sciences students complete a major in approved pathway departments (English, History/Political Science, Classics - Latin for Teachers).
   2. In addition to a major in one of the above departments, students complete course work through the core requirements (including an educational themed cluster) and complete a professional year experience which includes methods courses, seminar, and internship.

2. Post-Baccalaureate Level
   School of Education and Human Development students must
   1. Complete the one-year certification program (approximately 33 graduate credits), and
   2. Complete the master of science in education degree (optional–an additional 18 credits taken over two years during the summer and on weekends).

Teacher education tracks are available through the College in English, French, History, Classics – Latin. Additional information on the Extended Teacher Education Program can be found in the School of Education and Human Development section of this catalog.

Graduate Programs in the College of Arts, Humanities, and Social Sciences

The College of Arts, Humanities, and Social Sciences offers three graduate programs leading to the master's degree and two graduate certificate programs. These are the master of arts (MA) in American and New England studies, the master of fine arts (MFA) in creative writing, the master of music (MM), and certificates of graduate study in Composing Together and the Michael Chekhov Theatre Institute. Consult the University's graduate catalog for further information.

Minor in Labor Studies

Description

Co-Directors: Ed Collom (Sociology), Michael Hillard (Economics); 120 Bedford Street, Portland

Committee: Eagan (History), Savage (Geography-Anthropology)
The minor in labor studies examines many aspects of work and workers but focuses especially on the relationships among individual lives, work, class processes and dynamics, and capitalist development. The minor in labor studies addresses the practical problems of work, workers, and their organizations as well as broad conceptual and theoretical issues including, but not limited to, the relationships among labor, work, and class; a critical examination of class processes and dynamics; a critical examination of capitalist development; the intersections of class with race, ethnicity, gender, and generation; and historical perspectives on all of these topics.

The minor is an interdisciplinary program drawing on faculty and courses from economics, geography, history, arts and humanities, and sociology. Courses provide substantive knowledge of these disciplines and will help to develop critical thinking and analysis skills, writing and oral communication skills, and social science and historical research methods.

Because nearly every individual and organization deal with employees and work, there is constant demand for graduates with understanding and abilities in this area. Students will be prepared for careers in the private sector, labor unions, social services, and all levels of government.

**Program Requirements**

The minor in labor studies is available to students in any major within the University. Students wishing to pursue the minor must be in good standing with the University and submit a Declaration of Minor form to the USM Registrar. This form is available online at [http://usm.maine.edu/success/formbank](http://usm.maine.edu/success/formbank).

Select five of the following courses (15 credits):
- ECO 220 U.S. Economic and Labor History
- ECO 321 Understanding Contemporary Capitalism
- ECO 322 Economics of Women and Work
- ECO 323 U.S. Labor and Employment Relations
- GEO 302 Gender, Work, and Space
- GEO 303 Economic Geography
- HTY 123 United States History Since 1900
- HTY 357 The Gilded Age in America, 1869-1898
- HTY 358 Early Twentieth-Century United States, 1898-1938
- HTY 359 The United States Since 1939
- HTY 381 Latin America and the United States
- HUM 310 French Settlement in the Northeast
- HUM 330 Labor, Literature, and the Arts
- SOC 327 Social Movements
- SOC 348 Sociology of Work
- SOC 358 Sociology of Women's Work

Of the five courses, one must be "history-centered" (chosen from among the following: ECO 220, ECO 323, HTY 132, HTY 341, HTY 357, HTY 358, HTY 359, HTY 381); one must be "contemporary" (chosen from among the following: ECO 321, ECO 322, GEO 302, GEO 303, SOC 327, SOC 348, SOC 358); and one must be "international" (chosen from among the following: GEO 302, GEO 303, HTY 381, SOC 327, SOC 348).

Finally, students can apply no more than 6 credits from their major toward the minor in labor studies.
Art Overview

Professors: Cassidy, Hewitt, Piribeck, Shaughnessy; Associate Professors: DiLazio, Grant; Assistant Professor: Hrenko; Professor Emeritus: Ubans; Lecturer: Porobic

Director of Exhibitions and Programs: Eyler; Coordinator of Internships: Volland; Environmental Safety and Technology Technician: Walsh

Adjunct Faculty: Allen, Benson, Colburn-Motta, Flahaven, Goodale, Goodlett, Kagan, Ledue-Bell, Lisberger, Lutterman, McDermott, Nutty, Sax, Schneider, Wilson

The Department of Art offers four-year degree programs in studio art, art history, and art education. Students may select a Bachelor of Fine Arts (BFA.) with concentrations in ceramics, digital art, drawing, painting, photography, printmaking, and sculpture. A concentration in art education is available to BFA candidates who wish to teach art. The Bachelor of Arts (BA) in studio art combines a liberal arts education with emphasis on the visual arts. A BA in studio art with a concentration in art and entrepreneurial studies, combining study in studio art with courses in business development, and a BA in art with a concentration in art history are also offered.

The Department prides itself on giving students a rigorous studio experience, historical understanding of the complexity of art practices, and the critical skills needed to become informed visual artists, art educators, and art historians. Our goal is to graduate artists and art professionals who possess a thorough grounding in their field (both practical and theoretical), who honor the creative process, and who can write about, criticize, and bring context to works of art. The Department is not tied to a specific style or approach to art making, but instead emphasizes students' ability to think creatively, to include their own point of view, and to defend their choices with an informed voice.

Admission Requirements

Applicants to the Department of Art should observe the following procedure. Formal application should be made to the director of undergraduate admission, Office of Undergraduate Admission. Current degree candidates enrolled at the University who transfer into the Department of Art from another discipline must obtain a change of major form and submit this form with a current transcript to the Chair of the Department of Art.

All art majors must submit a portfolio of original works to the Art Department for evaluation after completing the foundation requirements (ART 141, ART 142, ART 151, ARH 111 and ARH 112) and before enrolling in 300-level studio courses. Portfolios are not required for the art history concentration. Transfer students who have completed the art foundation at another institution must submit a portfolio at the next scheduled opportunity and no later than the second semester at USM. The portfolio should consist of no more than twelve works within specific categories. Each student will choose two works to mat with white, off-white or ivory mat board and firm backing. The materials do not have to be archival. The unmatted works on paper will be presented in individual clear sleeves with a firm backing inserted behind the work. Two works will be selected by the Department to exhibit for a two or three-week exhibition. The categories and numbers of work for each category are as follows:

- Two-dimensional works (three pieces) should be taken from and/or exhibit skills in the visual design of the flat page;
- Three-dimensional works (two pieces) should exhibit (in photographs) capabilities in the physical development and articulation of form and space;
- Drawing category (three pieces) should contain works of any medium exhibiting skills and concepts of drawing;
- Self-portrait (one piece) should be executed from life and may be in any medium but should be a representational depiction rendered by hand; and
- Open submissions (three pieces) may be work in any medium as long as it conforms to the overall guidelines of this review.

Portfolios that do not adhere to the established procedures will not be accepted for review.

Art candidates whose portfolios are not accepted are required to meet with their advisor and one additional full-time faculty member to review and discuss their plans for re-submission. Portfolios that are not accepted may be re-submitted two additional times. Failure at the conclusion of these three times will result in denial of acceptance as an art major.

Students are required to submit a portfolio for acceptance to the Department prior to enrolling in any 300-level or above studio courses. Studio art minors may enroll in required studio courses with permission of the instructor.

Portfolio deadlines and application forms may be obtained from the Department of Art. Portfolios are reviewed once each semester. Final notification of a decision will come from the Department of Art approximately two weeks after the portfolios have been evaluated.

Students already enrolled in the University who wish to change their major to art must follow the Departmental admission procedures concerning
submission of portfolio, as described above. Art presentation workshops are offered annually.

Only students who have completed the art foundation and who have earned 60 credits or more may enroll for Independent Study courses. Grades of C– or better must be earned to satisfy a major or minor requirement.

Academic credit for summer workshops is available with Haystack Mountain School of Crafts in Deer Isle, Maine. Contact the Department of Art or Summer Session for more information.

Course Fees

A course fee is assessed in all lecture courses, as well as ceramics, digital art, design, drawing, painting, photography, printmaking, and sculpture courses.

Transfer Students

To receive a BFA degree in art from USM, a student transferring to USM must complete at least two 3-credit studio courses in their area of concentration and one 3-credit art history course at USM. To receive a BA degree in studio art from USM, a transfer student must complete at USM at least two 3-credit studio courses within one discipline and one 3-credit art history course.

BA in Art

Description

The BA in studio art is a four-year liberal arts degree in studio art. The program provides an in-depth studio experience while allowing for a substantial number of non-art electives. It is designed for students who want to focus in art, but also have strong interest in disciplines outside the visual arts. Students may take up to 60 credits of studio courses (designated ART) toward the degree.

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum and electives) required for the major: 45.

Art Foundation (15 credits)

- ARH 111 Art History: Prehistoric through Medieval
- ARH 112 Art History: Renaissance to the Present
- ART 141 Surface, Space, Time (2D)
- ART 142 Surface, Space, Time (3D)
- ART 151 Fundamentals of Perceptual Drawing

Art History Requirements (9 credits)

- Three ARH 300 or 400-level art history courses

Studio Art Requirement (21 credits)

Three 200-level ART courses in three different studio disciplines chosen from:

- ART 221 Digital Art and Design I
  or ART 222 Digital Art and Design II
- ART 231 Introduction to Ceramics I
  or ART 232 Introduction to Ceramics II
- ART 251 Drawing: Media and Strategies
  or ART 252 Drawing: The Figure
- ART 261 Painting: Water-based Media or ART 262 Painting: Mixed Media
- ART 271 Introduction to Photography I
- ART 281 Introduction to Printmaking: Intaglio and Relief
  or ART 282 Introduction to Printmaking: Lithography and Screen printing
- ART 291 Sculpture: Additive and Subtractive Processes
One 300-level studio course and one advanced (400-level) course in one of the above disciplines in which you have completed the introductory (200–level) course.

One additional ART 300-level course

Any ART 200-, 300-, or 400-level course.

No more than 60 credit hours with ART designation may be used to fulfill the 120 credit-hours degree requirement.

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BA in Art History

**Description**

This degree program is designed for students wishing to concentrate more on the historical analysis of art than on art making. Students focus on historical analysis, research, critical thinking and writing. Their studies give them a foundation for a variety of post-graduate options such as museum and gallery work, art criticism, graduate school and teaching.

**Program Requirements**

To become a matriculated art major with a concentration in art history, the student must apply for admission to the program during the semester the foundation courses are being completed or the semester after their completion. No portfolio is required. The student may obtain the appropriate form in the Art Department office.

To receive credit toward the major, the student must maintain at least a 2.5 average in art history courses. Students are encouraged to acquire a reading knowledge of a foreign language, preferably French or German.

The minimum number of credits required for the major: 42.

**Art Foundation (12 credits)**

- ARH 111 Art History: Prehistoric through Medieval
- ARH 112 Art History: Renaissance to the Present
- ART 141 Surface, Space, Time (2D) or ART 142 Surface, Space, Time (3D)
- ART 151 Fundamentals of Perceptual Drawing

**Upper Level Requirements (30 credits)**

- ARH 321, 322, or 323 Classical, Medieval, or Renaissance Art
- ARH 325, 326, 327, or 328 Modern Art
- ARH 310 or 329 Non-Western Art
- ARH 410 Seminar in Art History or ARH 412 Topics in Art History (with permission of the Art Department Chair)
- ART 400 Internship in the Visual Arts

- Two Art History elective courses (any upper-level ARH course)

- Three approved upper-level electives from one or more of the following areas: Art History, History, Anthropology, Literature, or Classics. Students should consult with their art history advisors to select appropriate courses. (9 credits)

Pre-approved upper-level electives from other departments: COM 284 Film Appreciation; ANT 220I North American Indians; ANT 224I Ancient Mesoamerica; ANT 250I Archaeology of South America; ANT 254 Archaeology of East Asia; RUS 293G Survey of Russian Cinema; PHI 221 Philosophy of Film.

**Recommended Course Sequence**
BA in Art and Entrepreneurial Studies

Description

The BA in Studio Art and Entrepreneurial Studies is an in-depth studio experience with courses in small business and entrepreneurship. It involves a combination of art and art history courses with a required studio concentration, a cluster of business courses, a digital-based course, and an internship experience with creative professionals. Within the general electives, students may choose to incorporate a minor or select additional studio (ART) or art history (ARH) courses. This degree is for students who wish to pursue a career in the creative arts in the commercial or nonprofit sectors. It is intended to offer students a greater ability to engage in creative arts sector employment and/or independent small business development.

Program Requirements

The minimum number of credits required for the major: 69

Art Foundation (15 credits)

- ARH 111 Art History: Prehistoric through Medieval
- ARH 112 Art History: Renaissance to the Present
- ART 141 Surface, Space, Time (2D)
- ART 142 Surface, Space, Time (3D)
- ART 151 Fundamentals of Perceptual Drawing

Art History Requirements (9 credits)

- Three ARH 300 or 400-level art history courses

Studio Art Requirement (30 credits)

Four 200-level ART courses in four different studio disciplines chosen from:

- ART 221 Digital Art and Design I
  or ART 222 Digital Art and Design II
- ART 231 Introduction to Ceramics I
  or ART 232 Introduction to Ceramics II
- ART 251 Drawing: Media and Strategies
  or ART 252 Drawing: The Figure
- ART 261 Painting: Water-based Media
  or ART 262 Painting: Mixed Media
- ART 271 Introduction to Photography I
- ART 281 Introduction to Printmaking: Intaglio and Relief
  or ART 282 Introduction to Printmaking: Lithography and Screen printing
- ART 291 Sculpture: Additive and Subtractive Processes
  or ART 292 Sculpture: Altered and Constructed Processes

One 300-level and one 400-level ART course within one studio discipline

One additional 300-level ART course

- ART 400 Internship in the Visual Arts
- ART 408 Independent Study in the Visual Arts

Elective studio courses as needed to complete 30 credits
Business Requirement (12 credits)

- BUS 101 or BUS 200
- ACC 110
- BUS 260 or BUS 165,
- BUS 385

Technology Requirement (3 credits)

- ITT 181, ITT 231, ITT 241, or ITT 343

No more than 60 credit hours with ART designation may be used to fulfill the 120 credit-hours degree requirement.

BFA in Studio Arts

Description

The BFA degree is offered for students who seek focused, undergraduate professional education in studio practice. There are degree concentrations in ceramics, digital art, drawing, painting, photography, printmaking, and sculpture. The program prepares students to become open, resourceful, critical, and independent thinkers, capable of successfully conceiving, articulating, and resolving their own visual problems, and equally capable of successfully viewing, appreciating, and contemplating the work of others. They will be engaged and active artists producing work that encompasses theoretical and practical knowledge.

Students who intend to pursue professional careers in art and design or who plan to pursue graduate study culminating in the MFA degree are encouraged to seek admission to the BFA program.

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 75.

Art Foundation (15 credits)

- ARH 111 Art History: Prehistory through Medieval
- ARH 112 Art History: Renaissance to the Present
- ART 141 Surface, Space, Time (2D)
- ART 142 Surface, Space, Time (3D)
- ART 151 Fundamentals of Perceptual Drawing

Upper Level Art History Requirements (9 credits)

- Three ARH 300- or 400-level Art History courses

Introductory Level Studio Requirements (9 credits)

Three 200-level ART courses in three different studio disciplines other than your concentration chosen from:

- ART 221 Digital Art and Design I
  or ART 222 Digital Art and Design II
- ART 231 Introduction to Ceramics I
  or ART 232 Introduction to Ceramics II
- ART 251 Drawing: Media and Strategies
  or ART 252 Drawing: The Figure
- ART 261 Painting: Water-based Media
  or ART 262 Painting: Mixed Media
- ART 271 Introduction to Photography I
- ART 281 Introduction to Printmaking: Intaglio and Relief
  or ART 282 Introduction to Printmaking: Lithography and Screen printing
- ART 291 Sculpture: Additive and Subtractive Processes
Concentration Requirements (21 credits)

- ART 2X1 Introductory Studio I
- ART 2X2 Introductory Studio II
- ART 3XX Intermediate Studio
- ART 4X1 Advanced Studio I
- ART 4X2 Advanced Studio II (may be repeated for up to 9 credits)
- ART 400 Internship in the Visual Arts
- ART 401 Senior Seminar

Elective Studio Courses (21 credits)

- One 300-level studio
- Any 200-, 300-, or 400-level ART courses

Completion of the senior exhibition is required for the BFA. The BFA senior exhibition requirement must be completed while enrolled in ART 401 Senior Seminar.

BFA in Studio Arts with a Concentration in Art Education

Description

The bachelor of fine arts with a concentration in art education offers an in-depth studio experience as well as a professional course of study in art education leading to teacher certification in Maine. The program is guided by a conceptual framework that proposes that individuals need to be prepared for work in an increasingly complex and culturally diverse world, and that such work is best done through collaboration and reflective inquiry.

For those who want certification to teach art in Maine and who already have a BA, BFA, or MFA in studio art, we offer our BFA with a concentration in art education. For most people this means taking the 30-credit professional education sequence to fulfill all state requirements. This can usually be completed in two years. Field experiences and student teaching placement schools are located in southern Maine.

For those who want a BFA in art education, without a Maine k-12 state teaching license, we offer alternative student teaching experiences based within community arts, non-profit arts, and regional art organizations. Students choosing this option will complete all other coursework that is required to graduate with a BFA in art education, but will not earn a k-12 teaching license.

For more information, contact the Department.

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for this degree is 81.

Art Foundation (15 credits)

- ARH 111 Art History: Prehistoric through Medieval
- ARH 112 Art History: Renaissance to the Present
- ART 141 Surface, Space, Time (2D)
- ART 142 Surface, Space, Time (3D)
- ART 151 Fundamentals of Perceptual Drawing

Upper Level Art History Requirements (9 credits)

- Three ARH 300 or 400-level Art History Electives

Art Studio Requirements (21 credits)
ART 221 Digital Art and Design I or ART 222 Digital Art and Design II
ART 231 Introduction to Ceramics I or ART 232 Introduction to Ceramics II
ART 251 Drawing: Media and Strategies or ART 252 Drawing: The Figure
ART 261 Painting: Water-based Media or ART 262 Painting: Mixed Media
ART 271 Introduction to Photography I
ART 281 Introduction to Printmaking: Intaglio and Relief or ART 282 Introduction to Printmaking: Lithography and Screen printing
ART 291 Sculpture: Additive and Subtractive Processes or ART 292 Sculpture: Altered and Constructed Processes

Art Studio Concentration Requirements Art Electives (9 credits).

This may be taken in either digital art, drawing, ceramics, painting, photography, printmaking, or sculpture.

• ART 2X2 Introductory Studio II
• ART 3XX Intermediate Studio
• ART 4X1 Advanced Studio I

Completion of the senior exhibition is required for the BFA with a Concentration in Art Education.

Professional Education Requirements (27 credits excluding HRD/SBS 200)

• EDU 310 What is the Purpose of Schooling in a Democracy?
• HRD/SBS 200 Multicultural Human Development*
• AED 221 Practicum in Art Education
• AED 321 Principles and Procedures in Art Education**
• SED 335 Students with Exceptionalities in General Education
• AED 421 Seminar in Art Education*
• EDU 324 Student Teaching I***
• EDU 324 Student Teaching II***

*HRD/SBS 200 counts as a University Core requirement and a Professional Education requirement.

**A 3.0 minimum grade point average (GPA) in art studio, art history, and art education sequence courses must be maintained to register for AED 321, EDU 324, SED 335, AED 421, and to graduate from the program.

**Permission of the instructor and passing scores (determined by the Maine Department of Education each year) on the PRAXIS I test are required prior to student teaching and continuation in the program. A passing score on PRAXIS II (a state requirement for teacher certification) is required before graduation and recommendation for certification. Students must maintain a 3.0 minimum grade point average (GPA) in art studio, art history, and the art education sequence courses as well as a 2.5 minimum GPA overall.

The Professional Education Council, comprising deans, department chairs, faculty, and school representatives from all programs offering initial teacher preparation, is the governing body for program review and evaluation for all initial level teacher education programs at USM.

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: http://www.maine.gov/doe/cert/fingerprinting/

All students must formally declare their entry into a teacher certification concentration by completing the declaration procedures found on the Office of Educator Preparation web site at http://usm.maine.edu/educatorpreparation. Passing Praxis I scores, subscription to Tk20, and two recommendation forms are necessary to complete the declaration process.

Tk20 Subscription:

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: http://usm.maine.edu/educatorpreparation

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed with in the context of the Unit’s data management system (i.e., Tk20).
Recommended Course Sequence

Click here to download program sheet (PDF)

Minor in Art History

Description

The minor in art history is designed for students who would like to augment their major with the study of visual culture and traditions that art history courses offer. Students who minor in art history gain knowledge and skills relevant to museum and gallery work, art criticism, graduate school and teaching.

Program Requirements

The minimum number of art history credits (exclusive of the University's Core curriculum) required for the minor: 21.

- ARH 111 Art History: Prehistoric through Medieval
- ARH 112 Art History: Renaissance to the Present

15 credits of art history (ARH) courses, above 100-level including:

- One of ARH 321, 322, or 323
- One of ARH 318, 325, 326, 327, or 328

Minor in Book Arts

Description

See Program Requirements.

Program Requirements

The minimum number of art and art history credits (exclusive of the University’s Core curriculum) required for the minor: 21

The minor consists of the following:

Studio Art Foundation select two courses (6 credits)

- ART 141 Surface, Space, Time (2D)
- ART 142 Surface, Space, Time (3D)
- ART 151 Fundamentals of Perceptual Drawing

Art History Course (3 credits)

- ARH 112 Art History: Renaissance to the Present

Upper Level Courses (12 credits)

- ART 241 The Visual Book: Form and Content

Select two courses from:
ART 341 The Visual Book: Historical Influences on Contemporary Artist's Books
ART 342 Book Arts at Stone House (may be taken numerous times)
ART 344 New Media Artist's Books

Required Advanced Studio:

- ART 441 The Visual Book 3: Advanced Studio in Book Arts

**Minor in Studio Art**

**Description**

The minor in studio art is designed for non-majors who wish to gain substantial knowledge in one of seven studio disciplines offered at USM: ceramics, drawing, digital arts and design, painting, photography, printmaking and sculpture. Students who minor in studio art take an abbreviated version of the foundation program, and then take a sequence of course within a specific discipline.

**Program Requirements**

The minimum number of art and art history credits (exclusive of the University's Core curriculum) required for the minor: 21.

**Studio Art Foundation Requirements (6 credits)**

Select two courses from the following:

- ART 141 Surface, Space, Time (2D)
- ART 142 Surface, Space, Time (3D)
- ART 151 Fundamentals of Perceptual Drawing

*Each studio discipline has specific prerequisites for its 200-level courses: Ceramics and Sculpture: ART 142, ART 151; Digital Art: two from ART 141, ART 142 and ART 151; Drawing and Painting: ART 151; Photography and Printmaking: ART 141 and ART 151.

**Art History Requirement (3 credits)**

- ARH 112 Art History: Renaissance to the Present

**Introduction to Studio Discipline Course (6 credits)**

Two courses from one studio discipline selected from the following:

- ART 221 Introduction to Digital Art and Design I and ART 222 Introduction to Digital Art and Design II
- ART 231 Introduction to Ceramics I and ART 232 Introduction to Ceramics II
- ART 251 Drawing: Media and Strategies and ART 252 Drawing: The Figure
- ART 261 Painting: Water-based Media and ART 262 Painting: Mixed-Media
- ART 271 Introduction to Photography and ART 272 Introduction to Photography II
- ART 281 Introduction to Printmaking: Intaglio and Relief and ART 282 Introduction to Printmaking: Lithography and Screen Printing
- ART 291 Sculpture: Additive and Subtractive Processes and ART 292 Sculpture: Altered and Constructed Processes

**Upper-Level Studio Courses (6 credits)**

One 300-level studio course from the selected studio discipline.

One 400-level studio course from the selected studio discipline.
Course Descriptions

Art History

ARH prefix designates an art history course. 100-level art history courses begin to develop skills that students will need to pursue study in the discipline. Students will learn strategies for interpreting visual art and for understanding and writing formal academic prose.

ARH 110 Visual Environment
This course focuses on understanding, designing, and interpreting the visual environment through analysis of visual forms, hands-on exercises, and in-depth investigation of works in their cultural context. The course covers the power of images, the role of illusion, and the interpretation of visual forms in daily life. Students will learn how to analyze effective uses of color, shapes, and spatial relationships in examples such as street signs, fine art, meeting spaces, city planning, bar graphs, and photographs. Cr 3.

ARH 111 Art History: Prehistoric through Medieval
Examination and discussion of the painting, sculpture, and architecture from prehistoric cultures to the late Middle Ages. The course emphasizes the relationship of the visual arts to social, political, religious, and cultural trends, and introduces students to various methods of art-historical interpretation. Prerequisite: ENG 100 or equivalent. Preference given candidates for matriculation in the Department of Art, or those with permission of the instructor. Cr 3.

ARH 112 Art History: Renaissance to the Present
Examination and discussion of the painting, sculpture, and architecture from the Renaissance to the present. The course emphasizes the relationship of the visual arts to social, political, religious, and cultural trends and introduces students to various methods of art-historical interpretation. Prerequisite: ENG 100 or equivalent. Preference given to candidates for matriculation in the Department of Art, or those with permission of the instructor. Cr 3.

Upper-level art history courses further develop students' skills of art historical analysis. Students will continue to work on formal academic prose and complete at least 15 total pages of written work during the semester. Students will also learn research sources and methods; become familiar with varied art historical writings from period documents, articles, and scholarly books; tackle the issue of interpretation; and learn about recent approaches to the field. Whenever possible, students will study original art works.

ARH 310 Art History: Cross-Cultural Perspectives
The course covers global issues in art history. Major topic areas include a) how art conveys cultural values and biases, b) why foreign styles are adopted, c) why different values produce different forms. Prerequisite: ENG 100 or equivalent. Cr 3.

ARH 311 Gender Identity and Modern Art
This course examines the construction of gender and sexuality in Western visual arts from the late eighteenth century to the present. Students will analyze both the art and art criticism of the period, focusing on the work of female, feminist, and gay artists. Cr 3.

ARH 312 Art as Social Action
This course will study art as social action and the artist's social roles and responsibilities. The primary focus will be on modern and contemporary art and related theoretical issues that address the role of art in society. Prerequisites: Successful completion of an upper-level art history course with a grade of C or better. Cr 3. (Satisfies the EISRC Core requirement. Core Prerequisites: any three of Creative Expression, Cultural Interpretation, Science Exploration, Social-cultural Analysis.)

ARH 318 History of Photography
This course studies photography from its invention in the 19th century to the present day. It considers photography from historical, theoretical, social, and artistic perspectives. Prerequisite: ARH 112 or permission of the instructor. Cr 3.

ARH 321 Classical Art
A survey of ancient art and architecture with special emphasis on the key monuments of Greek and Roman art and their influence on later artistic periods. This course is equivalent to CLA 321. Prerequisite: ARH 111. Cr 3.

ARH 322 Medieval Art
A survey of the various medieval styles from the Early Christian through the Gothic period with a special section on Islamic art. The relationship of culture to art will be examined for architecture, painting, and sculpture. Prerequisite: ARH 111. Cr 3.

ARH 323 Renaissance Art
An examination of the art and architecture of the fifteenth and sixteenth centuries both north and south of the Alps. Emphasis will be given to the cultural traditions, historical events and theoretical foundations that contributed to the development of Renaissance art. Prerequisite: ARH 112. Cr 3.

ARH 325 American Art
Survey of North American painting, sculpture, and architecture from the sixteenth century to 1940. The art will be examined in the context of
aesthetic and cultural ideals, historical events, and multiculturalism. Field trips to local museums and architectural sites. No prerequisite. Cr 3.

**ARH 326 Nineteenth-Century European Art**
Examination and discussion of European painting, sculpture, and architecture from neoclassicism through post-impressionism (1790-1900). The course will focus on the relationship between the visual arts and the political, social, and aesthetic revolutions of the century. Prerequisite: ARH 112 or permission of the instructor. Cr 3.

**ARH 327 Modern Art**
Examination of modern art and artistic movements from the end of the nineteenth century to World War II. Emphasis will be placed on understanding the history and theories of modern art in social and cultural context. Prerequisite: ARH 112. Cr 3.

**ARH 328 Contemporary Art**
Examination of developments in the visual arts from World War II to the present. Prerequisite: ARH 112. Cr 3.

**ARH 329 Asian Art**
A survey of some major styles in Asian art (India, China, Japan). The course emphasizes the cultural and religious factors that influenced the art. Cr 3.

**ARH 410 Seminar in Art History**
This course is a requirement for students concentrating in art history. Designed for the advanced student, the course probes different methodological and theoretical approaches to the study and interpretation of the visual arts. Students will examine the writings of pioneers in the field, long-standing art historical methods, and the "new" art history. This course is also a research seminar. Prerequisite: permission of the instructor. Cr 3. (Satisfies Capstone requirement.)

**ARH 411 Philosophy of Art**
Examination of the aesthetic theories of philosophers, artists, writers, and critics that form the basis for understanding the fine arts. Readings and discussion of texts from ancient to modern times. Prerequisite: senior art majors and permission of the instructor. Cr 3.

**ARH 412 Topics in Art History**
A seminar on a selected topic in art history that will be the focus of in-depth research and discussion. Prerequisite: permission of the instructor. Cr 3.

**ARH 418 Independent Study in Art History**
An opportunity for the student who has demonstrated competence in a specific area of study to work independently with scheduled tutoring from a faculty member of the student's choice. Prerequisites: permission of instructor and Art Department chair. Cr 1-6.

**Studio Art**

**ART 141 Surface, Space, Time (2D)**
Provides an introduction to the fundamentals of 2-D design and color theory through a series of exercises and applied problems in visual organization. Cr 3. Prerequisite or concurrent registration: EYE course

**ART 142 Surface, Space, Time (3D)**
Provides an introduction to the fundamentals of 3-D design through a series of projects, demonstrations and discussions. Cr 3.

**ART 151 Fundamentals of Perceptual Drawing**
Introduction to basic skills and approaches to perceptual drawing. This course develops students' visual awareness and understanding of the range of drawing materials and techniques. Students will develop responses to the visual environment employing varied stylistic and technical approaches. Exercises include still life, figure study, portrait, and landscape. Cr 3. Prerequisite or concurrent registration: EYE course

**ART 221 Digital Art and Design I**
An introduction to the computer as a medium for creative expression and communication. Students will create and process (fixed-frame) digital images and will become familiar with fundamental animation processes. The course will provide an overview of elements, principles and theories of art and visual design as related to digital media. Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of the instructor. Cr 3.

**ART 222 Digital Art and Design II**
An introduction to time-based art in a working studio environment. The class moves from basic principles of 2-D design to animation, interactivity and other principles of time-based art. The course will provide an overview of elements, principles and theories of art and visual design as related to digital media. Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of the instructor. Cr 3.

**ART 231 Introduction to Ceramics I**
An introduction to methods and processes of clay forming, including historical context, modeling, press molding, hand-building, and the potter's wheel. Emphasis on form and texture, with aspects of glaze composition and firing procedures. Prerequisite: ART 141; ART 142; ART 151; ARH
ART 232 Introduction to Ceramics II
This course focuses on the exploration of materials and ceramic processes. The emphasis is on creating sculptural forms with aspects of glaze composition and firing procedures. Students will engage in glaze and clay formulation and loading and firing kilns. Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of the instructor. Cr 3.

ART 241 Introduction to The Visual Book
This course will use the visual artist's book as a medium for personal expression. Students will incorporate 2D and 3D skills to create a collection of unique books. A variety of traditional and nontraditional books, arts, and techniques will be used to develop both form and content. Prerequisite: art foundation or permission of instructor. Cr 3.

ART 249 2-D and 3-D Figure Study
A studio course in the study of the human figure, including drawing, modeling, and readings in artistic anatomy, supplemented by historical study of figurative art. (Offered summer only.) Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of the instructor. Cr 3.

ART 251 Drawing: Media and Strategies
Course explores various drawing processes combining media, color and colored grounds and supports, to expand students' conceptual image-making skills. Emphasis will be placed on the role of subject matter and imagery through projects and through examination of historical and contemporary art. Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of the instructor. Cr 3.

ART 252 Drawing The Figure
Course focuses on the study and depiction of the human figure. Students will be encouraged to understand and develop their own personal abilities. Extensive use models will place emphasis on observation. Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of the instructor. Cr 3.

ART 259 Landscape Drawing
Course concentrates on drawing the landscape at various Maine locations. Assigned problems will focus on aspects of the following: pictorial composition and design, analysis of landscape forms and structures, and methods for creating the illusion of outdoor light and space. A variety of both wet and dry media will be used. The course will include frequent critiques, illustrated talks using original works as well as reproductions of historical artists, and museum visits. (Offered summer only.) Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of instructor. Cr 3.

ART 261 Painting: Water-based Media
An introduction to the basics of water-based media. Students will gain a working knowledge of the materials and techniques of painting, its various supports, grounds and pigments. Work is primarily from observation and will include still life, figure and landscape. Studies will focus on physical properties of color and color mixing, principles and concepts of spatial organization, and pictorial form. Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of instructor. Cr 3.

ART 262 Painting: Introduction to Mixed Media
Course will provide an introduction to multi-media in two and three dimensions. Projects will consist of collage, painted constructions, shaped canvases, assemblages and installations. Emphasis will be placed on imagination and experimentation with these non-traditional formats. ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of instructor. Cr 3.

ART 269 Landscape Painting
This course focuses on the natural world through painting en plein air in southern Maine locales. Each day will include an illustrated lecture and critique in addition to intensive work from nature. (Offered summer only.) Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of instructor. Cr 3.

ART 271 Introduction to Photography I
An introduction to traditional analog black-and-white photography. Students will learn camera operation, the principles of film exposure, developing and printing in the darkroom. These technical skills will be taught in conjunction with an introduction to the historical, stylistic, and visual communication characteristics of photography. Through specific assignments and creative experimental projects students will be encouraged to develop and expand their understanding of technical and aesthetic possibilities of photography. A 35mm manual camera is required. Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of instructor. Cr 3.

ART 272 Introduction to Photography II
This course will broaden and refine students' practice in black and white analog photography, aesthetic decision making language, contemporary strategies, and critical analysis of fine art photography. Students will work with medium and large format cameras and learn studio lighting, advanced exposure techniques, advanced black and white printing controls, film scanning, experimental and non-silver photographic processes, including cyanotype. Students will create an online presence of their images. Prerequisite: ART 271. Cr 3.

ART 281 Introduction to Printmaking: Intaglio and Relief
This course introduces intaglio and relief printmaking techniques. The class includes traditional dry and wet processes for intaglio such as drypoint, engraving, etching, and aquatint. It also addresses color printing methods for linoleum and woodcut. Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of instructor. Cr 3.

**ART 282 Introduction to Printmaking: Lithography and Screen Printing**
This course introduces planographic methods of printing. Students will explore traditional lithography on stone as well as direct hand methods and photomechanical methods for screen printing. Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of instructor. Cr 3.

**ART 291 Sculpture: Additive and Subtractive Processes**
An introduction to fundamental processes of sculptural expression employing additive and subtractive processes. These will include observational modeling, aggregate forming and casting, basic mold-making and carving and studio safety. Students will become acquainted with contemporary and historical approaches through ongoing studio work, process centered projects, demonstrations, critiques, individual and group discussions, and readings. ART 141; ART 142; ART 151; ARH 111; ARH 112 or permission of instructor. Cr 3.

**ART 292 Sculpture: Altered and Constructed Processes**
An introduction to fundamental processes of sculptural expression employing altered object and construction forms. Topics and processes will include basic wood and metal fabrication techniques, acquired objects and site based works, and studio safety. Students will become acquainted with contemporary and historical approaches through ongoing studio work, process centered projects, demonstrations, critiques, individual and group discussions, and readings. Prerequisite: ART 141; ART 142; ART 151; ARH 111; ARH 112 or by permission. Cr. 3.

**ART 312 Topics in Studio Art**
A course on selected topics in studio arts. May be repeated for credit when topics vary. Prerequisite: Two ART 200 level courses or permission of instructor. Cr. 3

**ART 321 Exploring Time-Based Art and Design**
This course uses digital media to explore creative concepts, tools and processes in time-based art and design. The focus will be on broadening the concept of digital media through experimentation with interactivity and installation. Prerequisite: ART 221 and 222 or permission of instructor. Cr 3.

**ART 332 Intermediate Ceramics**
Students combine several methods of forming clay in one work and explore the complex use of nature and design. Students engage in historical research and presentation, develop continuity in personal practice and explore alternative firing methods. Prerequisite: ART 231 and 232 or permission of instructor. Cr 3.

**ART 341 The Visual Book II: Historical Influences on Contemporary Artists' Books**
With attention to content and design, students will create a group of Artist's Books with specific historical references inspired by research into particular cultures and contemporary art movements. The Special Collections of USM Libraries and other local university and college libraries will be important course resources. ART 241 or permission of the instructor. Cr 3.

**ART 342 Book Arts at Stone House**
This course begins with a series of workshops during a seven-day session at Stone House. Students will study skills and techniques that give them insights into design, history and aesthetics specific to Book Arts. Each student creates an artist's book for a September exhibition at the USM Glickman Family Library. ART 241 or permission of the instructor. This course may be taken multiple times as the workshop changes each summer. Cr. 3.

**ART 343 New Media Book Arts**
This is a digital imaging and book arts course. Students will design and self-publish limited edition artist's books using digital technologies. The focus of the course will be content driven book design using the computer to create and process images. Note: This course counts as an intermediate digital art requirement. ART 221 or ART 241, or permission of the instructor. Cr. 3.

**ART 352 Experimental Drawing**
Course explores an expanded notion of drawing that engages issues of time, space, process and emerging media. Students will study contemporary developments and applications of drawing in areas outside of traditional drawing. Prerequisite ART 251 and 252 or permission of instructor. Cr 3.

**ART 361 Intermediate Painting: The Figure**
Course focuses on figure study in oil and water-based media. Students are encouraged to develop personal interpretations. Emphasis is on exploring paint and techniques in the western tradition. Frequent sessions working from the model. Prerequisite: ART 261 and ART 262 or permission of instructor. Cr 3.

**ART 372 Digital Photography**
This class will give students a thorough understanding of the digital workflow, from capture to process to print. Students will be introduced to the
principles of color photography, color theory and color management. Students will work extensively in image processing techniques and methods while working on their own original projects. Prerequisites: ART 271 and ART 272 or permission of instructor. Cr 3.

**ART 382 Experimental Printmaking**  
This course introduces methods of printmaking that are experimental, photographic, and digital in nature. Students will learn contemporary approaches to topics such as photogravure and duotones, non-toxic photomechanical methods, and experimental traditional and non-traditional means of generating prints and multiples. Prerequisites: ART 281 and ART 282, or ART 221, or permission of instructor. Cr 3.

**ART 391 Topics in Sculpture**  
Students will develop a deepening sculptural capacity through projects/readings/discussions and presentation around specific sculptural approaches to issues in contemporary art and society. These will be semester long projects that engage subject matter, content, design and technique. Prerequisite: ART 291 and ART 292 or permission of instructor. Cr 3.

**ART 400 Internship in the Visual Arts**  
The purpose of the internship is to allow students to work in an area that pertains to the visual arts and is related to their own activities and career intentions. Possibilities for internships include, but are not limited to, galleries, arts-related businesses, museums, practicing artists, scholars, nonprofit organizations, and cultural institutions. Pass-fail only. Prerequisite: Junior status or above and permission of the Art Department Chair. Cr 1-6.

**ART 401 Senior Seminar in Studio Art**  
Designed for BFA graduating senior students, this course will provide a cross-disciplinary critique of the student's project and will culminate in a senior exhibition. Questions regarding current theoretical practices and strategies will be examined through readings, slides, and visiting artist lectures in order to provide a basis for understanding the student's artistic choices. Prerequisite: senior status/BFA degree students. Cr 3. (Satisfies Capstone requirement.)

**ART 407 Advanced Problems in Art**  
An opportunity for the student to do advanced work in the discipline of his/her choice, culminating in a related project. Prerequisites: permission of instructor and Art Department Chair. Cr 1 to 6.

**ART 408 Independent Study in Art**  
An opportunity for the student who has demonstrated competence in a specific area of study to work independently with scheduled tutoring from a faculty member of the student's choice. Prerequisites: permission of instructor and Art Department Chair. Cr 1 to 6.

**ART 412 Topics in Studio Art**  
A course on a selected topic in the studio arts. To be offered at least once each year. Prerequisite: permission of the instructor. Cr 3.

**ART 420 Advanced Studio in Digital Art I**  
Students will work with the instructor to develop a digital art project based upon their interests and goals as a digital artist. Aesthetic, theoretical, and historical issues related to digital art and electronic media will be discussed. Prerequisites: ART 221 and at least one 300-level digital art course. Cr 3.

**ART 421 Advanced Studio in Digital Art II**  
Students will further refine the skills acquired in Advanced Studio in Digital Art I. A semester-long capstone experience will be designed and completed by each student. Course may be repeated twice for credit. Prerequisite: ART 420. Cr 3.

**ART 431 Advanced Ceramics I**  
Students work in series, research and present information on a ceramic artist, and perform tests and experiments in forming clay, firing kilns, and glazing. Students are expected to fire all kilns, mix glazes, and keep accurate records of their development. Prerequisite: ART 331. Cr 3.

**ART 432 Advanced Ceramics II**  
Students focus on the evolution of earlier studies into a series of work that may be used for the senior exhibition. Students research and present information about a ceramic artist, load and fire all kilns, mix glazes, and are encouraged to enter competitions and arrange a portfolio. Course may be repeated twice for credit. Prerequisite: ART 432. Cr 3.

**ART 441 Advanced Studio in Book Arts**  
This course creates an opportunity for in depth study and personal exploration with the Artist's Book. Every student will create a collection of Artist's Books while simultaneously gaining a confidence with and a strong aesthetic for the medium. ART 341, 342, 343 or permission of the instructor. Cr. 3.

**ART 451 Advanced Drawing I**  
Course focuses on drawing in series and developing a conceptual approach to a long-term drawing project. Students will expand their technical skills and individual creative vision in relation to historical and contemporary artistic examples. Prerequisite: ART 352. Cr 3.
ART 452 Advanced Drawing II
Advanced students will develop and refine a final drawing project either in series or a process-oriented approach culminating in an integrated body of work either for senior exhibition or publication. Course may be repeated twice for credit. Prerequisites: ART 451. Cr 3.

ART 461 Advanced Painting I
This course for advanced painting students will stimulate individual vision through series and thematic projects devoted to expanding expressive, conceptual and technical abilities. Students will study historical and contemporary artists as an adjunct to enlarging their own creative interests and awareness. Prerequisite: ART 361. Cr 3.

ART 462 Advanced Painting II
Continued investigation of the painting process to express personal themes in the context of a senior thesis exhibition. Emphasis is on individual concepts and personal expression. The thesis project will be developed within a dedicated workspace with individual critiques by joint faculty and visiting critics. A writing component will accompany the final preparation of the thesis. Course may be repeated twice for credit. Prerequisite: ART 461. Cr 3.

ART 471 Advanced Photography I
Students will develop a photographic project that emphasizes their interests and goals as visual artists. Individual and group critiques will explore and evaluate students' strategies and choices in respect to intention, investigation, discovery, judgment, and final production of imagery. Readings, lectures, and presentations will further inform student decisions and directions. Prerequisite: ART 372 or permission of instructor. Cr 3.

ART 472 Advanced Photography II
Students will further refine the skills acquired in the first semester of advanced photography. A semester-long project will be designed and completed by each student. Course may be repeated twice for credit. Prerequisite: ART 471. Cr 3.

ART 481 Advanced Printmaking I
This class is intended for students who are proficient in two or more methods of printmaking (relief, intaglio, lithography, screenprinting, or experimental methods). Students will refine their technical skills while pursuing in-depth investigation of subject matter and imagery. Knowledge and practice of image-making as both an aesthetic and conceptual activity will be addressed. Prerequisite: permission of the instructor, or two courses from ART 281, ART 282 and ART 382. Cr 3.

ART 482 Advanced Printmaking II
This class is for the student who can work proficiently in two or more methods of printmaking. Students are expected to develop their imagery based on well-conceived ideas, which can be successfully expressed in one or more printing techniques. Experimentation with new techniques is encouraged, as is an exploration of combining several methods of printmaking effectively in one print. Students develop and pursue independent portfolio projects. Course may be repeated twice for credit. Prerequisite: ART 481. Cr 3.

ART 491/492 Advanced Sculpture
Continuation of Intermediate Sculpture with emphasis on the pursuit of personal imagery. Course may be repeated twice for credit. Prerequisites: ART 391. Cr 3/3.

ART Independent Study Term
An opportunity for the student who has demonstrated competence and exceptional independence in a specific area of study to work with scheduled supervision from a faculty member of the student's choice. Prerequisites: permission of the Department of Art and the dean of the College. Cr 12-15.

Art Education

AED 221 Practicum in Art Education
An introduction to art education theories and processes through readings, writings, discussion, observation. The examination of the relationship between art-making and learning is relevant to prospective art and classroom teachers. All AED students (1-12 certification and community arts) are recommended to successfully complete a minimum of 2 semesters of art lab prior to their capstone. Art lab should be taken concurrently with AED 221. Prerequisites: sophomore standing or above and art foundation. Cr 3.

AED 321 Principles and Procedures in Art Education
History and philosophy of art education, theories of child art, relationship of goals to art education strategies, development of a workable set of beliefs about art education through readings, writings, discussion, observation. All AED students are recommended to successfully complete a minimum of 2 semesters of art lab prior to their capstone. Art lab should be taken concurrently with AED 321. Intended for the art education major. Prerequisites: AED 221, ART 141; ART 142; ART 151; ARH 111; ARH 112. Recommended: 1 credit of Art lab Cr 3.

AED 407 Advanced Problems in Art Education
An opportunity for the student to do advanced work in art education related problems. A total of 6 credits may be taken. Prerequisites: completion of the sequence of courses in the related discipline and permission of the instructor and Art Department Chair. Cr 1 to 6.

AED 421 Seminar in Art Education
This seminar examines art curriculum design and evaluation. Critical issues in art education for the emerging art education professional today are explored through discussion, writings, and readings. This course is to be taken while student-teaching. Prerequisite: AED 321. Recommended: 2 semesters of Art lab. Cr 3. (Satisfies Capstone requirement)

AED 428 Independent Study in Art Education
An opportunity for the student who has demonstrated competence in a specific area of study to work independently, with scheduled tutoring from a faculty member of the student's choice. Prerequisites: permission of the instructor and Art Department Chair. Cr 1 to 6.

EDU 324 Student Teaching
The student teaching year consists of two semesters. During the fall semester, students are in an elementary school half-time for eight weeks and in a secondary school half-time for the remaining eight weeks. During the spring semester, experiences are in the same schools, full-time, for eight weeks each. Students are under direct supervision of supervising teachers and a University supervisor. Cr 12.
CMS Overview

Professors: Shedletsky; Associate Professors: Killmeier, Lockridge, Panici, Pierson; Assistant Professor: Kivatisky; Lecturers: Ebben, Gilbert; CMS Production Center Manager and Lab Instructor: Ives, Administrative Specialist: Towns

The Department of Communication and Media Studies offers two bachelor of arts degrees, one in communication and the other in media studies. These two degree programs are distinct in several ways. In terms of focus, the communication degree program takes a broad view of communication, including the examination of face-to-face contexts and mediated ones. The media studies degree program more specifically focuses on media writing, criticism, and production. Another difference in these degree programs occurs at the senior level. Media studies majors prepare a senior project (intended to serve as a portfolio of their writing and/or production work) and participate in a service learning practicum (working for a community organization in a media capacity). Communication majors take two senior seminars. One seminar is chosen from a list of topics and the other is a capstone seminar designed to be a culmination of their undergraduate work and as a transition to graduate studies. Aside from the differences that make each program unique, the programs share a common core of courses that serve as a foundation for both. The two programs also embrace a liberal arts philosophy. This means that the emphasis is on critical thinking rather than vocational training.

The Department of Communication and Media Studies offers courses on both the Portland and Gorham campuses. Additionally, several CMS courses are offered online.

All students must complete CMS 102: Introduction to Communication, CMS 103: Introduction to Media Studies, and CMS 200: Research Methods in Communication. These are the core courses that serve as the foundation for both degree programs. Introduction to Communication and Introduction to Media Studies provide students with an overview of the field. Research Methods in Communication prepares students to decipher and critically analyze various types of research.

Students must receive a grade of C or higher in all required courses in their respective degree programs in order to graduate. The Department of Communication and Media Studies is pleased to accept transfer credit from other accredited institutions of higher learning. Students wishing to receive credit for courses taken outside of USM will need to meet with the chair of the Department in order to discuss specific courses. Students may transfer a maximum of 12 credits in the major. The transfer of credits is at the discretion of the Department. Students are encouraged to contact us with any questions about the Department or our programs.

For students interested in pursuing a double major in Communication and Media Studies, please check the double major requirements posted on the department's website. The Department also offers minors in Communication and Media Studies and Cinema Studies. The Department of Communication and Media Studies website is available through the directory on the University's web homepage.

BA in Communication

Description

The communication bachelor of arts degree program takes a broad view of communication including the examination of face-to-face contexts and mediated ones. The program examines communication theories and their practices including intrapersonal, interpersonal, group, organization, intercultural, gender and family, and mass media. Communication majors take two senior seminars. One seminar is chosen from a list of topics and the other is a capstone seminar designed to be a culmination of their undergraduate work and as a transition to graduate studies. This program embraces a liberal arts philosophy and the emphasis is on critical thinking rather than vocational training.

This degree program can also be taken in a fully online format. For more information, please visit Professional and Continuing Education at www.usm.maine.edu/pce.

Program Requirements

Major Requirements (36 credit hours)
A grade of "C" or higher is required in all courses for the major.

I. Common Core (9 credit hours)
II. Communication Theory (9 credit hours - select three)
CMS 255 Business and Professional Communication
CMS 265 Intrapersonal Communication
CMS 272 Persuasion
CMS 275 Theories of Language
CMS 298 Topics in Communication I
CMS 330 Theories of Interpersonal Communication
CMS 332 Communication in the Family
CMS 345 Small Group Communication
CMS 360 Ethical Dilemmas in the Digital Age
CMS 375 Meaning and Communication
CMS 385 Intergenerational Communication and the Internet
CMS 390 Theories of Organizational Communication
CMS 398 Topics in Communication II

III. Media Theory (6 credit hours – select two)
CMS 210 Topics in Media Criticism I
CMS 284 Cinema Studies
CMS 286 History of International Cinema to 1945
CMS 288 History of International Cinema since 1945
CMS 294 Visual Communication
CMS 303 Media Effects
CMS 310 Topics in Media Criticism II
CMS 323 Understanding Technology
CMS 350 The Internet in Society
CMS 355 Consumer Culture
CMS 370 Media and Social Change
CMS 374 Media Criticism and Aesthetics
CMS 380 Film Genres
CMS 384 Topics in Cinema Studies
CMS 394 Theories of Cinema
CMS 423 The First Amendment

IV. Senior Experience (6 credit hours)
Senior Seminar (3 Credit hours – select one)
CMS 420 Communication and Cognition
CMS 423 First Amendment
CMS 432 Topics in Interpersonal Communication
CMS 455 Computer-Mediated Communication
CMS 475 Discursive Practices
CMS 484 Advanced Topics in Cinema Studies
CMS 485 Sex-Related Differences in Communication
CMS 486 Women in Film
CMS 490 Theories of Mass Communication
CMS 498 Topics in Communication III

Capstone Senior Seminar (3 credits)
CMS 495 Theories of Communication

V. Electives (6 credit hours)

- Communication majors may select any two courses offered by the Department as electives as long as they have met the prerequisites. The exceptions are internships and independent studies. These count toward the total number of credits needed for a bachelor of arts degree, but not as electives in the major.
BA in Media Studies

Description

Set in a liberal arts context, the media studies bachelor of arts degree program allows students to study modern media through the application of various theoretical frameworks and skills. Students with an interest in media studies will find the greater Portland area an excellent location for media-related activities and service learning projects. By emphasizing theory and practice, the media studies major challenges the student to analyze and practice the creation, dissemination, utilization, and evaluation of mediated messages.

Program Requirements

Major Requirements (45 credit hours)
A grade of "C" or higher is required for all courses for the major.

I. Common Core (9 credit hours)
   CMS 102 Introduction to Communication
   CMS 103 Introduction to Media Studies
   CMS 200 Research Methods in Communication

II. Media Writing (9 credit hours)

Select One:
   CMS 150 The Writing Process
   CMS 274 Writing for the Media

Select Two:
   CMS 205 Topics in Media Writing I
   CMS 202 Writing for Popular Print Media
   CMS 215 Journalism Reporting and Writing
   CMS 225 Screenwriting
   CMS 300 Topics in Media Writing II
   CMS 302 Writing the Feature Story
   CMS 305 Writing Opinion: Editorials and Columns
   CMS 315 Broadcast News Writing

III. Media Theory (9 credit hours)

Select One:
   CMS 284 Intro to Cinema Studies
   CMS 374 Media Criticism and Aesthetics
   CMS 423 The First Amendment

Select two:
   CMS 210 Topics in Media Criticism I
   CMS 286 History of International Cinema to 1945
   CMS 288 History of International Cinema Since 1945
   CMS 294 Visual Communication
   CMS 303 Media Effects
   CMS 310 Topics in Media Criticism II
   CMS 323 Understanding Technology
   CMS 350 The Internet and Society
   CMS 355 Consumer Culture
   CMS 370 Media and Social Change
   CMS 380 Film Genres
   CMS 384 Topics in Cinema Studies
   CMS 394 Theories of Cinema
   CMS 486 Women in Film
   CMS 484 Advanced Topics in Cinema Studies
   CMS 490 Theories of Mass Communication
   ENG 244 Introduction to Cultural Studies
   PHI 211 Media Ethics
IV. Media Production (6 credit hours)

Select One:
   CMS 203 Introduction to Video Production/CMS 204 Lab
   ITT 281 Internet Web Site Development

Select One:
   CMS 220 Topics in Media Production I
   CMS 294 Visual Communication
   CMS 320 Topics in Media Production II
   CMS 340/1 Field Video Production & Lab
   CMS 440/1 Advanced Video Production & Lab
   ITT 241 Information and Communication Technologies
   ITT 343 Graphic Communications Technologies
   ITT 344 Digital Video and Animation Technologies

V. Senior Experience (6 credit hours)
   CMS 400 Senior Project (3 credits)
   CMS 450 Service Learning Practicum (3 credits)

VI. Electives (6 credit hours)

Media studies majors may select any two courses offered by the Department as long as they have met the prerequisites. The exceptions are internships and independent studies. These count toward the total number of credits need for a bachelor of arts degree, but not as electives in the major.

Minor in Cinema Studies

Description

The Cinema Studies minor offers students a multidimensional understanding of movies as forms of art, products of industry, and modes of communication. The program can serve as a base of knowledge for students intending to enter careers in the media, as a foundation for further study, and/or as the opportunity to gain deeper insight into one of the most culturally significant media of the twentieth and twenty-first centuries.

Program Requirements

The minor consists of 18 credit hours of film or cinema studies CMS courses. In order to declare the minor students must have a minimum 2.0 G.P.A. and have completed the core competency in College Writing.

A grade of "C" or higher is required on all coursework for the minor.

Core (9 credits):
   CMS 284 Intro to Cinema Studies
   CMS 286 or 288 (History of International Cinema to 1945 or Since 1945)
   CMS 394 Theories of Cinema

Electives (9 credits):
   CMS 210 Topics in Media Criticism I (only film or cinema topics)
   CMS 286 or 288 (History of International Cinema to 1945 or Since 1945, whichever was not taken for the core)
   CMS 310 Topics in Media Criticism II (only film or cinema courses)
   CMS 384 Topics in Cinema Studies
   CMS 380 Film Genres
   CMS 486 Women in Film
   CMS 484 Advanced Topics in Cinema Studies
Minor in Communication and Media Studies

Description

The minor consists of 21 credit hours of courses in both the communication and media studies majors.

Program Requirements

In order to declare the minor students must have a minimum 2.0 G.P.A. and have completed the core competencies in Quantitative Reasoning and College Writing.

The minor consists of 21 credit hours of courses in both the communication and media studies majors. Students must receive a grade of C or higher in all required courses in the minor.

CMS Core Courses (9 credit hours):
CMS 102 Introduction to Communication
CMS 103 Introduction to Media Studies
CMS 200 Research Methods in Communication

CMS Areas of Study (12 credit hours)

Communication Theory (select one course):
CMS 255, 265, 272, 298, 330, 332, 345, 375, 385, 390, or 398

Media Theory (select one course):
CMS 210, 284, 286, 288, 294, 303, 310, 323, 350, 355, 370, 374, 380, 384, or 394

Media Writing (select one course):
CMS 150, 202, 274, 205, 225, 300, 302, 305, 315, or 325

CMS Elective (select one course that you qualify to take based on prerequisites).

Course Descriptions

CMS 102 Introduction to Communication
This course provides students with an overview and brief history of the field of communication, introduces them to theory development and the research process, and illustrates how communication theories can be applied to everyday life. Students will explore communication in a variety of contexts, including intrapersonal, organizational, intercultural, and mass communication. This course satisfies the Socio-Cultural Analysis requirement in the core curriculum. Cr. 3.

CMS 103 Introduction to Media Studies
This course examines the historical, philosophical, technological, economic, political, and social aspects of print (book, magazine, and newspapers) and electronic media (radio, television, film, sound recordings, and the Internet). In addition, the effects of mass media will be explored. Cr. 3.

CMS 150 The Writing Process
This course provides students with professional writing skills through practice in techniques and strategies used in a variety of media writing applications. There is a strong emphasis on the utility of writing as a tool of communicating information, interpreting media content, and constructing meaning. Prerequisites: College Writing. Cr. 3.

CMS 200 Research Methods in Communication
This course introduces students to methods of inquiry found in the communication and media studies research literature. These methods include experimental design, survey research, textual analysis, and ethnography. The course examines the underlying philosophical assumptions associated with these methodologies as well as their unique strengths and limitations. Students' conceptual understanding of these methodologies and their ability to become critical consumers of research findings are the major objectives of the course. CMS 102 and CMS 103. Cr. 3.
CMS 202 Writing for Popular Print Media
This introduction to magazine writing provides students an opportunity to conceive, craft, and publish original work in different genres for different markets. There is a strong emphasis on the utility of writing as a means of organizing and communicating information, as in reporting, and also as a medium for more expressive and entertaining content. Prerequisite: College Writing. Cr. 3.

CMS 203 Introduction to Video Production
This course will examine the phases of video production associated with field and studio productions. Course content will also explore media aesthetics. Prerequisites: None. Cr. 3.

CMS 204 Introduction to Video Production Lab
Various production exercises and assignments to illustrate the principles and theories presented in CMS 203. Prerequisite: Concurrent enrollment in CMS 203. Cr. 1.

CMS 205 Topics in Media Writing I
A selection of courses varying in content from term to term. May be repeated for credit when topics vary. Students should consult their media studies advisor for detailed descriptions. Prerequisites: College Writing. Cr. 3.

CMS 210 Topics in Media Criticism I
A selection of courses varying in content from term to term. May be repeated for credit when topics vary. Students should consult their media studies advisor for detailed descriptions. Prerequisites: College Writing. Cr. 3.

CMS 215 Journalism Reporting and Writing
This course cultivates journalistic/public affairs research and writing. Students learn how to find and develop human and textual primary sources. Likewise, they learn and practice journalistic form and concise, accessible written expression. And students learn to appreciate and model the liberal ideals of public dialogue, debate, and democratic engagement. Prerequisites: College Writing. Cr. 3.

CMS 220 Topics in Media Production I
A selection of courses varying in content from term to term. May be repeated for credit when topics vary. Students should consult their media studies advisor for detailed descriptions. Prerequisites: None. Cr. 3.

CMS 225 Screenwriting
In this course, students will learn the process of writing scripts for films. A variety of concept development strategies, writing exercises, script examples, and screenings will be used to encourage students to develop their creative writing skills. Emphasis will be placed throughout the class on the process of screenwriting, from idea formation through writing and revision. Each student will produce a detailed outline/beat sheet for a feature-length film. Prerequisites: College Writing. Cr. 3.

CMS 255 Business and Professional Communication
Designed to provide students with essential communication skills for business and other professional settings, the course covers interpersonal, group, and public communication. These skills include listening actively, giving and receiving constructive feedback, interviewing others, leading groups, negotiating, and making effective public presentations. The course also includes discussions of gender, cultural diversity, and ethics in the workplace. Cr. 3.

CMS 265 Intrapersonal Communication
This course examines our ability to use what we know and feel in order to send, receive, and store information. Whether stimuli come from an external source or from within the self, the focus of intrapersonal communication is on the ways in which we process those stimuli, our ability to make sense out of our experiences, to remember, to retrieve information from memory, and to create messages at whatever level of consciousness, and no matter how many people are involved, in face-to-face or mediated communication. Prerequisites: CMS 102 and CMS 103. Cr. 3.

CMS 272 Persuasion
A course designed to help students understand the basic principles of persuasion. The course deals with persuasion as a social phenomenon. The perspective from which the course is offered is the analysis of persuasion as a behavioral process. As such, the course will investigate the social science research that relates to persuasion. Students will examine the attempts made by others to persuade them, as well as the attempts they make to persuade others. Further, the course will deal with the issue of ethics in persuasion. Prerequisites: CMS 102. Cr. 3.

CMS 274 Writing for the Media
This writing-intensive course is designed to provide students with an overview of media writing. Students will be introduced to radio and television commercial writing, broadcast journalism, and fiction and non-fiction scriptwriting. Prerequisites: College Writing. Cr. 3.

CMS 275 Theories of Language
The purpose of this course is to instigate thinking about the nature of language. The course is premised upon the conviction that, because language is such a central concern of so many disciplines and because various disciplines have made important contributions to our understanding of it, language can only be studied adequately via an interdisciplinary approach. The student will be introduced to some of the foremost efforts to
comprehend language in the fields of psycholinguistics, philosophy, and linguistics. Through these disciplines, we intend to raise and pursue questions concerning the nature of language, its structure and function, its relation to people's perception of reality, and its relation to the mind. Prerequisites: CMS 102 and CMS 103. Cr. 3.

**CMS 284 Introduction to Cinema Studies**
This course offers an introduction to the analysis of film. It examines movies from diverse historical periods, nations, and cinematic traditions, including narrative, documentary, and the avant-garde. In addition to providing a foundation in close analysis, the course also introduces students to fundamental issues in film history and film theory. Prerequisites: College Writing. Cr. 3.

**CMS 286 History of International Cinema to 1945**
This course surveys the history of cinema from its emergence through World War II. It considers the development of Hollywood cinema in conversation with alternative approaches to filmmaking both within and outside the U.S. Paying close attention to film style, it also explores cinema’s economic, social, and technological history. Prerequisites: College Writing. Cr. 3.

**CMS 288 History of International Cinema Since 1945**
This course surveys the history of cinema since World War II. Examining cinema’s metamorphoses in the face of social, economic, technological, and geopolitical changes, the course addresses the emergence of international art cinema, developments in politically critical filmmaking, cinema’s role in globalization, and its confrontation with new media. Prerequisites: College Writing. Cr. 3.

**CMS 294 Visual Communication**
The purpose of this course is to enhance understanding of TV processes by introducing students to several basic visual aspects of reality as mediated through a camera lens. Topics covered will include techniques of lighting, camera angles, perspective, shot distance, cutting to continuity, and montage. Students will use 35 mm cameras to produce assignments on color slides. These will be used in class discussion in conjunction with illustrations taken from magazines that demonstrate the same techniques. In addition to learning some rudiments of visual language, students will examine visual persuasive strategies. The course is open to all communication majors who have access to a 35 mm camera with manual controls. Automatic camera controls are optional. Prior experience with photographic procedures is helpful but not necessary since all students will receive instruction leading to a working knowledge of photographic techniques. Prerequisites: CMS 102 and CMS 103. Cr. 3.

**CMS 298 Topics in Communication I**
A selection of courses varying in content from term to term. May be repeated for credit when topics vary. Students should consult MaineStreet for a listing of current topics courses and the CMS homepage for detailed course descriptions. Prerequisites: None. Cr. 3.

**CMS 300 Topics in Media Writing II**
A selection of courses varying in content from term to term. May be repeated for credit when topics vary. Students should consult their media studies advisor for detailed descriptions. Prerequisites: College Writing. Cr. 3.

**CMS 302 Writing the Feature Story**
Students generate story ideas according to their own interests and target them for publication in specific markets. Class time focuses on perfecting writing and editorial skills, developing style and a field of interest, building an accomplished portfolio, and examining the practical and philosophical challenges of writing professionally. There is a strong emphasis on taking the initiative and working independently. Prerequisites: College Writing. Cr. 3.

**CMS 303 Media Effects**
This course will examine the effects of mass media upon individuals and societies. It will explore such questions as who is affected, what effects occur and how much, which media content is involved, and what situations make effects more or less likely to take place. Prerequisites: CMS 102, CMS 103, CMS 200. Cr. 3.

**CMS 305 Writing Opinion: Editorials and Columns**
This is a writing intensive course that provides students with the basic skills for writing editorials, columns, and journalistic essays. The emphasis is on economical, persuasive, and strongly argumentative styles of writing. Students will read, analyze, and discuss throughout the semester the work of a leading U.S. essayist/columnist. Prerequisites: CMS 102 and CMS 103. Cr. 3.

**CMS 310 Topics in Media Criticism II**
A selection of courses varying in content from term to term. May be repeated for credit when topics vary. Students should consult their media studies advisor for detailed descriptions. Prerequisites: College Writing. Cr. 3.

**CMS 315 Broadcast Newswriting**
This course introduces the basics of newswriting for television. It stresses brevity and conversational style of writing. Students will learn how to write TV news story scripts, beginning with simple news scripts (readers) and closing with complex scripts (packages). By providing the basics, the course prepares students for an internship with a broadcast news organization. It also offers practical advice on obtaining a job in broadcasting. Prerequisites: CMS 102 and CMS 103. Cr. 3.

**CMS 320 Topics in Media Production II**
A selection of courses varying in content from term to term. May be repeated for credit when topics vary. Students should consult their media studies advisor for detailed descriptions. Prerequisites: None. Cr. 3.

**CMS 323 Understanding Technology**
This course will examine the relationship between media, technology, and society from a variety of perspectives and disciplines. Through readings and discussions students will develop an understanding of a variety of frameworks and theories that explain technological change and the fundamental relationship between humankind and technology. Prerequisites: CMS 103 or Instructor's permission. Cr. 3.

**CMS 330 Theories of Interpersonal Communication**
A study of the current thinking in interpersonal communication which emphasizes specific theories of human interaction. Students will be exposed to research in the interpersonal setting and will apply findings to their personal relationships. The course will help students foster effective traditional and nontraditional relationships with a variety of people. Prerequisites: CMS 102. Cr. 3.

**CMS 332 Communication in the Family**
This course examines the role of communication in various family types. Students will be introduced to research and theory on the family and will apply findings to their own lives. Topics covered will include family satisfaction, communication rules, decision making, values, structures, autonomy, and conflict. Students will be asked to draw upon their family backgrounds for analysis and discussion. Prerequisites: CMS 102. Cr. 3.

**CMS 340 Field Video Production**
This course is primarily concerned with the development of critical evaluation skills needed in assessing and analyzing the video medium as a communication vehicle. Students will engage in actual video production projects. Prerequisite: CMS 203 and CMS 204 or Instructor's permission. Cr. 3.

**CMS 341 Field Video Production Lab**
This lab will provide students with hands-on experience with digital video cameras, production equipment, and digital, non-linear editing software. Students must concurrently be enrolled in CMS 340. Prerequisites: CMS 203 and CMS 204 or Instructor's permission. Cr. 1.

**CMS 345 Small Group Communication**
This course is designed to familiarize students with the theories and techniques associated with group behavior. The course explores the topics of leadership, conflict resolution, group climate, and decision making. Through simulations and exercises students learn methods for analyzing group process and their own behavior. Students' findings are reported in preliminary and final papers. Prerequisites: CMS 102. Cr. 3.

**CMS 350 The Internet and Society**
This course explores the worldwide network of computers linked to form a new medium of communication—the Internet. Course content will include the computer as a tool of communication, and how the Internet influences communication in such ordinary areas of life as work, interpersonal relations, and education. Students must have access to the Internet to participate in this course. Prerequisites: CMS 102 or instructor permission. Cr. 3.

**CMS 355 Consumer Culture**
This course explores U.S. commercial culture from historical and theoretical perspectives that privilege media and advertising/marketing. It engages critical perspectives that question consumer culture. The course focuses on the historical development of consumer culture, and how identity, the environment, and economy, are impacted and shaped by it. Prerequisites: CMS 102 and CMS 103. Cr. 3.

**CMS 360 Ethical Dilemmas in the Digital Age**
This course is about understanding ethical and value choices we make as we communicate in the digital age. We will examine the underlying reasons given for choices we make. Your graded assignments focus upon writing papers and leading and participating in discussion. Prerequisites: Sophomore standing or permission of the instructor. Cr. 3.

**CMS 370 Media and Social Change**
This course analyzes how news media coverage affects social change. Students explore how and why the media cover social movements the way they do, and look closely at news coverage of the civil rights, black power, antiwar, women's and men's movements. Both print and TV news are examined through readings, discussion, and original research. Prerequisites: CMS 102 and CMS 103. Cr. 3.

**CMS 374 Media Criticism and Aesthetics**
This course introduces students to the variety of critical approaches applied to the analysis of media. The content of this course will focus on traditional and contemporary analysis of media. The aim of this course is to provide a critical context for the consumption of media content. Prerequisites: CMS 103. Cr. 3.

**CMS 375 Meaning and Communication**
This course examines the assignment of meaning to verbal behavior, especially conversational exchange. Researchers have paid special attention to the ways in which words and actions take on meaning in context. We will focus on the full communicative event involving talk, i.e., context, pragmatics, grammatical structures, conversational structures, and types of meaning. A central question of the course is: How do people interpret what other people say? The course makes use of close reading and discussion of theory as well as the collection and analysis of naturally
occurring spontaneous spoken and written discourse. Prerequisites: CMS 102. Cr. 3.

CMS 380 Film Genres
This course will explore a genre found in film history. The genre selected for any given semester could be taken from such established ones as science fiction, horror, screwball comedies, musicals, or film noir. May be repeated for credit when topics vary. Prerequisites: College Writing. Cr. 3.

CMS 384 Topics in Cinema Studies
This course explores a key topic in the field of Cinema Studies. The focus for a given semester could be on a particular national cinema, directorial oeuvre, genre, technology, aspect of film style, or issue in film theory. May be repeated for credit when topics vary. Prerequisites: College Writing. Cr. 3.

CMS 385 Intergenerational Communication and the Internet
There are three major components to this course: 1) mentoring a senior citizen who is learning to use the Internet; 2) learning about mentoring through hands-on experience, reading, writing, and discussion of the process; and 3) writing a research paper on a topic relevant to intergenerational communication. Students in this course will mentor students enrolled in the Osher Lifelong Learning Institute course, Internet for Seniors (or other similar course). In addition, each student will read research on intergenerational communication and write a research paper. Prerequisites: CMS 102 and CMS 103. Cr. 3.

CMS 388 Intergenerational Communication and the Internet
There are three major components to this course: 1) mentoring a senior citizen who is learning to use the Internet; 2) learning about mentoring through hands-on experience, reading, writing, and discussion of the process; and 3) writing a research paper on a topic relevant to intergenerational communication. Students in this course will mentor students enrolled in the Osher Lifelong Learning Institute course, Internet for Seniors (or other similar course). In addition, each student will read research on intergenerational communication and write a research paper. Prerequisites: CMS 102 and CMS 103. Cr. 3.

CMS 385 Intergenerational Communication and the Internet
There are three major components to this course: 1) mentoring a senior citizen who is learning to use the Internet; 2) learning about mentoring through hands-on experience, reading, writing, and discussion of the process; and 3) writing a research paper on a topic relevant to intergenerational communication. Students in this course will mentor students enrolled in the Osher Lifelong Learning Institute course, Internet for Seniors (or other similar course). In addition, each student will read research on intergenerational communication and write a research paper. Prerequisites: CMS 102 and CMS 103. Cr. 3.

CMS 390 Theories of Organizational Communication
This course is designed to introduce students to organization theory and behavior through the medium of metaphor. Using different metaphors, the course draws attention to significant aspects of the process of organizing, and provides a means for understanding and managing organizational situations. Students are responsible for conducting on-site field studies and preparing written and oral presentations of their findings. Prerequisites: CMS 102 and CMS 103. Cr. 3.

CMS 394 Theories of Cinema
This course examines major approaches to conceptualizing the function and effects of cinema within classical and contemporary film theory. It explores topics including medium specificity, realism, and spectatorship, considering cinema's relation to language, the world, and other media as well as political implications, psychic appeal, and bodily address. Prerequisites: CMS 284. Cr. 3.

CMS 398 Topics in Communication II
A selection of courses varying in content from term to term. May be repeated for credit when topics vary. Students should consult MaineStreet for a listing of current topics courses and the CMS homepage for detailed course descriptions. Prerequisites: CMS 102, CMS 103, and CMS 200. Cr. 3.

CMS 400 Senior Project
This course offers graduating seniors in media studies an opportunity to complete a media portfolio (resume, sample media-related work, and reflective writing). Students are also required to complete a group media application project. Students will present their work to an audience of faculty and peers. Students will further develop career strategies by participating in workshops. Prerequisites: CMS 102, CMS 103, CMS 200, media studies major, and senior standing. Cr. 3.

CMS 420 Communication and Cognition
A seminar designed to explore the relationship between communication and thought processes. The nature of consciousness is explored through a consideration of the acquisition, retention, and retrieval of information. Special attention is given to experimental analysis of thought processes. Prerequisites: CMS 102, CMS 103, and junior or senior standing. Cr. 3.

CMS 423 The First Amendment
This course examines the philosophy, court cases, and issues relevant to the First Amendment right to free expression. In this class, students will learn functions of speech in society, the development of communication policy, and current communication laws and rules. Prerequisites: junior or senior standing. Cr. 3.

CMS 430 Communication Internship
An in-depth experience in specific areas of communication acquired in the field. Students will focus their efforts in an area related to their choice of communication expertise (i.e., organizational communication, mass communication, interpersonal communication). Prerequisites: communication or media studies major, CMS 102, CMS 103, and a precise definition of the project and director's consent. Pass/fail only. Communication major, junior or senior standing. Credit variable (1-15).

CMS 432 Topics in Interpersonal Communication
This seminar is designed to investigate significant issues in interpersonal communication. The course will be theoretical in nature, exploring a particular topic in depth each semester. Topics vary from semester to semester. Such topics as conversational analysis, friendship, deception, relationship termination, and conflict may be selected for the course. A research project is required. Prerequisites: CMS 102, CMS 103, CMS 200, and CMS 330. Cr. 3.
CMS 440 Advanced Field Video Production
This course continues to explore the concepts introduced in MES 340 and MES 240. Students will investigate pre-production planning, production techniques, and post-production execution in order to communicate clearly in the video medium. More complex assignments will be given to hone skills in writing, directing, and producing. Prerequisites: CMS 203 and CMS 204 or Instructor's permission. Cr. 3.

CMS 441 Advanced Field Production Lab
This lab will focus on advancing the skills and concepts taught in MES 340/341. This lab will consist of workshops and exercises in image and sound acquisition using digital video cameras and production equipment, as well as advanced video editing principles and techniques using editing software. Students must be concurrently enrolled in CMS 440. Prerequisites: CMS 203, CMS 204, CMS 340, and CMS 341 or Instructor's permission. Cr. 1.

CMS 450 Service Learning Practicum
This course gives students the opportunity to work with organizations outside the University in a professional context. Students will be divided into groups and will work with nonprofit organizations to develop projects, such as a multimedia presentation, a video, or a research report. Prerequisites: Communication or media studies major and senior standing. Cr. 3.

CMS 455 Computer-Mediated Communication Research
This senior seminar makes use of the Internet for two main purposes: (1) to gather research findings, and (2) to present research findings as a home page. Students will learn how to use the Internet for its scholarly resources and how to express their research report as a home page. In essence, students will use a new medium to do an old job: to read and critically evaluate research, and to present a summary or final research report. Research found online and offline will be critiqued. Prerequisite: CMS 102, CMS 103, and junior/senior standing. Cr. 3.

CMS 475 Discursive Practices
This is a senior seminar in which each student designs and carries out an empirical research project to study "talk activities that people do," such as person-referencing practices, or narratives; it may focus on single features that may be named and pointed to (e.g., speech acts) or it may reference sets of features (dialect, perspective). Students will examine how identities are associated with talk activities. Discursive practices may focus on something done by an individual or they may refer to actions that require more than one party. Prerequisites: CMS 102, CMS 103, and junior/senior standing. Cr. 3.

CMS 484 Advanced Topics in Cinema Studies
This course is a senior seminar designed to explore a particular topic in cinema studies. The focus for a given semester could be on a particular national cinema, directorial oeuvre, genre, technology, aspect of film style, or issue in film theory. Class sizes are limited in order for students to participate in discussion and contribute to the group's synergy. Prerequisites: CMS 284 and junior or senior standing. Cr. 3.

CMS 485 Sex-Related Differences in Communication
This seminar on sex-related differences in communication is designed primarily to evaluate critically the research literature. It is concerned with whether males and females differ in their actions of sending, receiving, and interpreting messages. The course examines gender-role stereotyping, empirical findings on sex-related differences in communication behavior (e.g., talking, interpersonal style, touching, eye contact, etc.), and explanations for sex differences. Critiques of some major theoretical positions are discussed (e.g., sex differences in dominance, aggression, cognition, and brain organization). Prerequisites: CMS 102, CMS 103, and junior or senior standing. Cr. 3.

CMS 486 Women in Film
This course will explore the depiction of women in film. Films will be analyzed in the context of the political and ideological subtexts they contain. The purpose of the analysis is to understand a film and to be able to relate it to the society that it reflects and sometimes affects. Prerequisites: CMS 102, CMS 103, and junior or senior standing. Cr. 3.

CMS 487 Mass Communication Research
This course introduces students to the research methods used in the communication field. Emphasis is placed on understanding how research is conducted in the field, with a focus on both qualitative and quantitative research methods. Prerequisites: CMS 102 and CMS 103. Cr. 3.

CMS 488 Advanced Topics in Communication Theory
An advanced course in communication theory, this course explores various theoretical frameworks that have shaped the field of communication studies. Prerequisites: CMS 102 and CMS 103. Cr. 3.

CMS 489 Independent Study
A concentrated program of research or study on a particular topic approved and guided by a Department faculty member. The student and faculty member will have periodic conferences throughout the semester to discuss the progress and outcomes of the student's work. Prerequisites: Junior or senior standing and faculty approval. Cr. 3-6.

CMS 490 Internships in Media Studies
This course offers students the opportunity to develop media expertise by working with professionals in the field. Typically, the intern will work closely with a mentor in a sponsoring organization to gain practical skills and to develop strategies for transitioning from college to professional placement. An application process is required. Prerequisites: media studies major, junior or senior standing. Cr. Variable (1-6 per internship; 15 total).
CMS 495 Theories of Communication
This course is designed for upper class students majoring or minoring in communication studies. Based on a seminar format, students in this course will explore in depth several advanced theories of communication, mechanistic through interactive, with examples and application for each. Prerequisites: CMS 102, CMS 200, junior or senior standing. Cr. 3.

CMS 498 Topics in Communication III
A selection of courses varying in content from term to term. May be repeated for credit when topics vary. Students should consult MaineStreet for a listing of current topics courses and the CMS homepage for detailed course descriptions. Prerequisites: CMS 102, CMS 103, CMS 200, and junior or senior standing. Cr. 3.

Criminology Department

Criminology Overview

Professors: Beirne, Bjelic, Messerschmidt, Powell; Associate Professor: Wachholz

The Department is well-known for its critical perspectives and published research on criminological theory, gender, multi-cultural, and comparative analyses. The faculty have won regional, national, and international awards for scholarship, teaching innovations, and community service. In addition, all faculty members have had significant professional training outside the United States, including in Australia, Britain, Sweden, and the former Yugoslavia.

While some students enroll in the major expecting to learn law enforcement skills and strategies, psychological profiling, forensic investigation, and approaches to prosecution, this is not the program's focus. Criminology courses examine social structural foundations of crime, deviance, and social harm, including the social control institutions, as well as the power dynamics involved in defining crime, prosecuting crime, and official sanctions for deviance and those "at risk." The dynamics of racism, sexism, class inequality, and heterosexism as they impact perceived realities of "crime" are also systematically explored in the program's courses. The notion that "crime" is simply about breaking the law is not accepted at face value; the concept and the broader discipline of criminology as it relates to faculty research, teaching, and community service are examined.

Internships

The Department of Criminology offers a strong and established internship program. Credit internships actively seek to bring together student academic work and community involvement. Students interested in an internship placement are encouraged to meet with the internship coordinator.

Major Credit and Minimum Grade Policy

Courses to be taken for major credit at other colleges and universities must be approved in advance. Grades of C or better must be achieved in all courses for major credit. Courses taken pass/fail are not acceptable in the major. Before taking upper-level criminology courses, students must have completed CRM 100 with a grade of C or better. To complete the major successfully, students must have achieved a grade of "C" or better in all courses taken for the major.

Transfer Students

Transfer students and students contemplating transfer into the Criminology Department are urged to meet with the Department chair as early as possible for an evaluation of their progress and their requirements in the major.

Supplementary information is published each semester by the Criminology Department to assist students in planning their course schedules. The information includes a summary of major courses, listings, and descriptions of special courses, and general information for majors.

For more information, write to: Administrative Specialist, Criminology Department, University of Southern Maine, P.O. Box 9300, Portland, Maine 04104-9300 or telephone (207) 780-4105.

BA in Criminology
Description

The Department of Criminology offers a four-year program leading to a bachelor of arts (BA) degree in criminology. The program provides students with a liberal arts education whose focus is the complex relations among crime, law, and society, and which emphasizes the social sciences. The curriculum is a rigorous series of courses which provides students with a comprehensive knowledge of crime and crime control in contemporary, historical, and comparative perspective. The core of the curriculum is an integrated set of required courses. These courses are designed as a cumulative set of experiences and should be taken in sequence if possible. Elective courses enable students to place their criminological interests in a broader perspective.

Many students in the program are interested in social and human service occupations related to criminal, juvenile, and social justice. The program also prepares students for a wide variety of other career options and provides an excellent basis for graduate study in criminology, other social sciences, and law.

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 36.

Required Courses (24 credits)
- CRM 100 Introduction to Criminology
- CRM 216 White-Collar Crime
- CRM 220 Research Methods in Criminology
- CRM 301 Criminological Theory
- CRM 317 Gender and Crime
- CRM 330 Crime and Social Control
- CRM 334 Law and State
- CRM 401 Comparative Criminology

Elective Courses (12 credits)

Students are also required to choose four elective courses (12 hours) from the following courses:
- CRM 217 Crime in Maine
- CRM 222 Field Studies in Informal Social Order
- CRM 225 Crimes against the Environment
- CRM 230 Introduction to the Criminal Justice System
- CRM 310 Classical Theories of Social Order
- CRM 320 Film and Social Order
- CRM 325 Domestic Violence
- CRM 327 Animal Abuse
- CRM 337 Youth Crime
- CRM 340 Criminal Law
- CRM 345 Criminology in Sweden
- CRM 350 Topics in Criminology
- CRM 360 The Death Penalty
- CRM 370 Reflexive Criminology
- CRM 375 Media, Crime, and Criminalization
- CRM 380 Restorative Justice
- CRM 390 Independent Projects
- CRM 395 Internship
- CRM 402 Senior Seminar

Recommended Course Sequence

Recommended Course Sequence

Curriculum Summary and Guide

The criminology curriculum is a series of structured and integrated courses that should be taken in sequence if possible.

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<tr>
<th>Year</th>
<th>Required Courses</th>
<th>Elective Courses</th>
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<tr>
<td>1</td>
<td>Introduction to Criminology</td>
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<tr>
<td>2</td>
<td>White-Collar Crime</td>
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Minor in Criminology

Description

See Program Requirements

Program Requirements

The number of credit hours required for the minor is 18. A grade of "C" or better is required in any course used for criminology minor credit.

Required Courses

- CRM 100 Introduction to Criminology
- CRM 216 White-Collar Crime
- CRM 220 Research Methods in Criminology

Choose one of the following:

- CRM 301 Criminological Theory
- CRM 317 Gender and Crime
- CRM 330 Crime and Social Control

- CRM 334 Law and State
- CRM 401 Comparative Criminology

Elective Courses

- Choose any TWO CRM courses

Course Descriptions

CRM 100 Introduction to Criminology
This course focuses on the nature of crime and on problems concerning its measurement and distribution. The course examines some of the popular images of crime in the media and elsewhere, the creation and utility of official and unofficial crime statistics, and theories about the causes of crime. No prerequisites. A grade of C or better is required in this course in order to continue in the major. Cr 3.

CRM 216 White-Collar Crime
This course provides an analysis of different criminological perspectives on white-collar crime, and focuses on some specific types of white-collar crime: occupational crime, corporate crime, and political crime. Prerequisite: CRM 100 or permission. Cr 3.

CRM 217 Crime in Maine
An introduction to crime and penal policies in Maine, including official and unofficial crime statistics; common crimes; white-collar crimes; and selected aspects in crime control. The course presents interstate comparative analysis, and several guest lectures by Maine speakers. Prerequisite: CRM 100 or permission. Cr 3.

CRM 220 Research Methods in Criminology
This course is an introduction to methodological issues in criminology. The emphasis is on critical evaluation and application of the basic instruments of inquiry. Students will learn how to “do” criminology, as well as how to assess existing criminological literature. Prerequisite: CRM 100 or permission. Cr 3.
CRM 222 Field Studies in Informal Social Order
This course will study informal social order as the tacit framework for the formal legal order. This will be an empirical test of criminological theories introduced in CRM 215. Through different methods of field research, students will be asked to observe and analyze the informal order of legal institutions such as courtrooms, prisons, and police stations. Prerequisite: CRM 100 or permission. Cr 3.

CRM 225 Crimes Against the Environment
This course is designed to expose students to many of the prominent controversies and challenges associated with defining, measuring, and responding to crimes against the environment. Central to the course is an examination of the relationship between socioeconomic power and its effect on responses to environmental change. Prerequisite: CRM 100 or permission. Cr 3.

CRM 230 Introduction to the Criminal Justice System
This course is designed to provide students with an understanding of the criminal justice system in the United States from a sociological perspective. Students will become familiar with criminal justice functions such as policing, trials, defense and prosecution of cases, and corrections. Also, students are required to prepare a mock trial of a criminal case. Prerequisite: CRM 100 or permission. Cr 3.

CRM 301 Criminological Theory
This course focuses on the development of criminological theory from 1930 to present. The course is historical in nature and addresses such fundamental problems as why certain behavior is defined as criminal, the causes of crime, and the consequences for the individual of being labeled as a criminal. Prerequisite: CRM 100 or permission. Cr 3.

CRM 310 Classical Theories of Social Order
This course will examine how the concept of social order and the invention of criminology arose simultaneously. Classical social theories of the Enlightenment and Modernity will be used to study the origin of the modern state and the criminalization of various social groups. Prerequisite: CRM 100 or permission. Cr 3.

CRM 317 Gender and Crime
This course concentrates on gender and its relation to crime. It explores such issues as histories of gender inequality, the gendered character of criminological theory, and how gender is related to a variety of crimes such as rape, violence in the family, crimes by women, property crimes, and corporate crime. Prerequisite: CRM 100 or permission. Cr 3.

CRM 320 Film and Social Order
The intent of this course is to engage in a cross-cultural study of the relationship of film to social order and crime. Films construct images about social reality. The ways in which these images present and interpret this relationship will be examined from various analytical standpoints, including ethno-methodology, semiology, and post-modernism. Prerequisite: CRM 100 or permission. Cr 3.

CRM 325 Domestic Violence
This course explores contemporary theoretical and policy debates on domestic violence as a social problem and crime. Topics include partner abuse, child abuse, and elder abuse. The definition and measurement of domestic violence are analyzed. Comparison of legal and community responses to domestic violence is emphasized. Special attention is given to economic and ethnic diversity as they relate to domestic violence. Prerequisite: CRM 100 or permission. Cr 3.

CRM 327 Animal Abuse
Key questions about the nature and forms of animal abuse are subjected to interdisciplinary inquiry spanning sociology, criminology, moral philosophy, and law. The course begins with individualized forms of animal abuse, such as cruelty, neglect, and sexual assault. It then examines institutionalized forms of abuse in research, zoos, hunting, sport/entertainment, and food production. Attention is also given to the link(s) between animal abuse and interhuman violence. Prerequisite: CRM 100 or permission. Cr 3.

CRM 330 Crime and Social Control
This course explores theoretical and practical issues of modern systems of social control, including punishment, policing, prisons, parole, probation, and the role of the state in social control. The history of Western social control systems is stressed, with emphasis on race, gender, and class effects. Students are required to engage in experiential learning. Prerequisites: CRM 100 or permission. Cr 3.

CRM 334 Law and State
This course explores the relationship between the United States's social welfare policies and contemporary crime control problems and practices. It includes an examination of the United States's residual welfare state, theories on social welfare development, and the Nordic model of crime prevention, which is based on the premise that crime can be reduced through social policies designed to lessen structural inequalities. Prerequisite: CRM 100 or permission. Cr 3.

CRM 337 Youth Crime
This course provides an overview of justice issues as they affect juveniles. Theoretical explanations for youth crime as well as the emergence of both "adolescence" and "delinquency" as socially constructed concepts will be examined. In general, the course adopts an historical approach to youth crime. Prerequisite: CRM 100 or permission. Cr 3.
CRM 340 Criminal Law
This course offers students an intensive study and review of statutory law, case law, and criminal procedure. Substantive topics covered include responsibility; insanity; grand jury; 4th, 5th, 8th and 14th Amendment issues; pre-trial; trial; sentencing and appeals. Materials are drawn from U.S. Supreme Court and Maine Judicial Court opinions. Prerequisites: CRM 100 or permission. Cr 3.

CRM 345 Criminology in Sweden
This special summer course in Sweden provides students with the opportunity to live in, study, and experience another culture and to gain an understanding of crime, criminology, and social control in another country. Visits will be made to the police department and court system in Stockholm and to several prisons in other cities. Lectures will be provided by sociologists at the Criminology Institute at the University of Stockholm, as well as by a variety of lawyers, judges, and political party leaders. Offered Summer Session only. Prerequisite: CRM 100 or permission. Cr 6.

CRM 350 Topics in Criminology
Specially developed courses exploring areas of interest and concern in depth. Topics which may be considered include war crimes, race and crime, ethno-methodology, homicide, visual criminology, film and crime, self and crime, sexuality and crime, and social theories of non-violence. May be repeated for credit. Prerequisite: CRM 100 or permission. Cr 3.

CRM 360 The Death Penalty
This course is designed to provide students with historical and current information on the death penalty in the United States. The following topics are covered: historical applications, deterrence, racial and gender bias, execution of innocent people, and the legal, political, economic, and moral perspectives of the death penalty. Prerequisite: CRM 100 or permission. Cr 3.

CRM 370 Reflexive Criminology
A reflexive approach to criminology examining criminological theories and perspectives as cultural and ideological products. Using cross-cultural and historical comparisons, the course analyzes the conditions under which "criminology" is produced. We also explore the connections between the product of the "criminology industry" and the reproduction of broader cultural and ideological patterns. Prerequisites: CRM 100 or permission. Cr 3.

CRM 375 Media, Crime, and Criminality
It is important to examine how the media assemble, select, and disseminate "crime knowledge" to audiences and thus influence their understanding of crime. The course uses a social constructionist approach to explore structural, institutional, and interactional contexts of media production. Prerequisite: CRM 100 or permission. Cr 3.

CRM 380 Restorative Justice
This course explores theory and research on restorative justice, which is an international movement of "progressive" reform that claims to reduce social inequalities generating crime. Students explore theoretical and empirical developments in restorative justice and examine programs claiming restorative components, such as victim-offender mediation and diversionary conferences. Prerequisites: CRM 100 or permission. Cr 3.

CRM 390 Independent Projects
Individually or collectively arranged reading and/or research for juniors and seniors under the direction of a faculty member. May be repeated for credit. Prerequisites: CRM 100 and permission of instructor. Cr var.

CRM 395 Internship
The course is designed as a field experience/reflection opportunity for upper-level criminology majors with substantive background or coursework in the area of internship placement. It also provides a work/action experience and insight into professional roles in a variety of community agencies and organizations. The emphasis is on the application of social science perspectives, substantive knowledge, and methodologies to understand a particular organizational situation. In addition to field placement, students are expected to meet for a series of internship seminars, for which readings and reports will be required. Also, students must have completed 53 or more credit hours by the end of the semester in which they register for the course. Contact Department internship coordinator for details. Prerequisites: CRM 100 or permission. Cr 3-6.

CRM 401 Comparative Criminology
This course focuses on the application of U.S. criminological theory in cross-cultural contexts. Specific emphasis is given to the problems of cultural relativism and intellectual imperialism while providing an integrative senior experience for majors. Prerequisites: CRM 100, CRM 220, and senior class standing. Cr 3.

CRM 402 Senior Seminar
This course is intended to furnish senior criminology majors with an opportunity to reflect on and integrate the material in their other major courses. Its focus is a major research project. The course combines individualized instruction, small group meetings, and seminars. Prerequisites: CRM 100, CRM 220 and junior or senior class standing. Cr 3.
Economics Overview

Professors: Feiner, Hillard, Roberts; Associate Professors: Bouvier, Mamgain, Medley

The undergraduate program in economics provides practical preparation for a variety of careers as well as for graduate study in economics, business administration, public policy, and law. Economics is a social science and as such is best studied in the context of broader exposure to the liberal arts and sciences.

To be eligible for a degree, a student must complete 120 credit hours fulfilling the University's Core curriculum requirements and all requirements for the major. Note that only one course carrying the prefix ECO can be used to satisfy both Core curriculum and economics major requirements. ECO 120 satisfies the Quantitative Reasoning Core curriculum requirement; all other 100-level Economics courses satisfy a second-tier Core curriculum requirement.

The Department offers two different undergraduate degree programs (bachelor of arts, bachelor of science), which allow students to choose the combination of courses most appropriate for their future plans.

Note also the interdisciplinary minor in labor studies, which is described in the College of Arts, Humanities, and Social Sciences section of this catalog.

Specific, current academic year catalog edition USM Economics major and minor degree requirements can be viewed via Degrees & Certificates.

Note to incoming and current USM students—The specific USM Economics major and minor degree requirements identified above are valid only if:

1. You are presently considering applying to USM for admission to pursue a baccalaureate degree
   OR
2. You are/were a newly matriculated USM Economics major or minor during the current academic year catalog edition period identified above
   OR
3. You are currently a matriculated USM student, you have declared the Economics major or minor, and you have formally elected the current academic year catalog edition identified above (or intend to) by officially notifying the USM Registrar of your intention.

Otherwise, please refer to the USM undergraduate catalog edition that corresponds with your USM "Requirement Term." You may access previous USM catalog editions online at the following URL address:

http://usm.maine.edu/catalogs

and you may also access USM Department of Economics BA, BS and Minor in Economics curriculum "Worksheets" that correspond to your USM "Requirement Term" for use in tracking your academic progress in the Economics major or minor at the following URL address:

http://www.usm.maine.edu/eco/academic-advisement-worksheets

What Skills Does an Economics Education Provide?

Economics is a marketable liberal arts degree. Liberal arts majors (social sciences and humanities) develop excellent writing and research skills, and increase a student's knowledge of the world. These majors also help students build a stronger and more informed sense of identity and values. Economics at USM also provides students critical thinking and analytical (including statistical) skills.

What Can I Do with a Degree in Economics?

One of the biggest concerns students have is life after graduation. An economics degree is a solid foundation for many careers and for graduate school. Our graduates have, for example, found jobs at Bath Iron Works (finance department), the Maine State Legislature (Senate Majority Leader's staff), and the Maine Department of Labor (data analysts).

Our graduates have also pursued Master's and Doctoral programs at Cornell University, University of California-Riverside, University of California-Santa Cruz, University of Notre Dame, University of Denver, and USM Muskie School of Public Service. Several have completed a Ph.D. in Economics. Undergraduate students considering graduate school must maintain a high grade-point average (GPA). A high GPA is essential to having broad choice in choosing particular graduate schools and programs.
Baccalaureate Degree Requirements

To be eligible for a baccalaureate degree, a student must complete 120 credit hours, including fulfilling the University's Core curriculum requirements and all Department of Economics degree requirements, either through courses taken at USM or through the transfer of courses from other institutions of higher education.

(View the Department of Economics student Core curriculum worksheet that is used to track Economics student progress in meeting USM Core curriculum requirements.)

BA in Economics

Description

The undergraduate program in economics provides practical preparation for a variety of careers as well as for graduate study in economics, business administration, public policy, and law. Economics is a social science and as such is best studied in the context of broader exposure to the liberal arts and sciences.

Economics is a marketable liberal arts degree. Liberal arts majors (social sciences and humanities) develop excellent writing and research skills, and increase a student's knowledge of the world. These majors also help students build a stronger and more informed sense of identity and values. Economics at USM also provides students critical thinking and analytical (including statistical) skills.

Program Requirements

Choose either Track A (48 or more credits) or Track B (55 or more credits); both tracks have the same major prerequisites and major requirements.

Track A is recommended for students interested in a traditional liberal arts economics education.

Track B is recommended for students interested in graduate study in economics or related policy fields.

ECO 120 satisfies the Quantitative Reasoning Core curriculum requirement; all other 100-level Economics courses satisfy a second-tier Core curriculum requirement.

Note that only one course carrying the prefix ECO can be used to satisfy both Core curriculum and economics major requirements.

Major Prerequisites (6 credits)

ECO 101 Introduction to Macroeconomics
ECO 102 Introduction to Microeconomics

Major Requirements (9 credits)

ECO 301 Intermediate Macroeconomics
ECO 302 Intermediate Microeconomics
ECO 303 Political Economy

Track A:

Other Requirements (9 or more credits)

ECO 103 Critical Thinking About Economic Issues

Select one of the following courses:

MAT 120 Introduction to Statistics
MAT 380 Probability and Statistics
Select one of the following courses:
- ECO 305 Research Methods in Economics
- MAT 105 Mathematics for Quantitative Decision Making
- MAT 108 College Algebra
- MAT 140 Pre-Calculus Mathematics
- MAT 152 Calculus A
- MAT 153 Calculus B

**Major Electives** (24 or more credits)

Select any five economics major elective courses numbered 200 or above, from the following list of economics elective courses:
- ECO 220 U.S. Economic and Labor History
- ECO 305 Research Methods in Economics
- ECO 310 Money and Banking
- ECO 312 U.S. Economic Policy
- ECO 315 Economic Development
- ECO 316 Case Studies in International Development
- ECO 319 Macroeconomics: Debt and Finance
- ECO 321 Understanding Contemporary Capitalism
- ECO 322 Economics of Women and Work
- ECO 323 U.S. Labor and Employment Relations
- ECO 325 Industrial Organization
- ECO 326 Environmental Economics
- ECO 327 Natural Resource Economics
- ECO 328 Rural and Regional Economic Development
- ECO 330 Urban Economics
- ECO 333 Economics and Happiness
- ECO 335 The Political Economy of Food
- ECO 340 History of Economic Thought
- ECO 350 Comparative Economic Systems
- ECO 370 International Economics
- ECO 380 Public Finance and Fiscal Policy
- ECO 381 State and Local Public Finance
- ECO 399 Special Topics in Economics
- ECO 450 Readings in Economics
- ECO 490 Independent Readings and Research in Economics

Students who select ECO 305 under Other Requirements above cannot also use that course to satisfy this major elective requirement.

Select three additional economics electives from the above list of economics electives, or up to three courses from the following list of acceptable courses offered by other departments:
- BUS 260 Marketing
- BUS 335 International Business
- CRM 216 White-Collar Crime
- FIN 330 International Financial Management
- GEO 303 Economic Geography
- MAT 252 Calculus C
- MAT 290 Foundations of Mathematics
- MAT 295 Linear Algebra
- POS 340 The Politics of Developing Nations
- SWO 350 Social Welfare Policy
- WST 365 Topics in Women, Gender, and Institutions II
- WST 465 Topics in Women, Gender, and Institutions III

**Track B:**

**Other Requirements** (16 or more credits)
- ECO 305 Research Methods in Economics
- MAT 152 Calculus A
- MAT 153 Calculus B

Select either:
- MAT 281 Introduction to Probability
  and MAT 282 Statistical Inference
OR
MAT 264 Statistical Software Packages
and MAT 380 Probability and Statistics

Major Electives (24 or more credits)

Select any five economics elective courses numbered 200 or above (excluding those ECO courses taken to fulfill requirements listed above), from the list of economics elective courses under Track A above.

Select three additional economics elective courses from the above list of economics electives, or up to three courses from the following list of acceptable courses offered by other departments. Students may also propose other upper-level courses for Economics Department approval if adequate justification is presented.

MAT 252 Calculus C
MAT 290 Foundations of Mathematics
MAT 295 Linear Algebra
MAT 350 Differential Equations
MAT 366 Deterministic Models in Operations Research
MAT 383 System Modeling and Simulation
MAT 460 Mathematical Modeling
MAT 485 Introduction to Applied Regression
FIN 320 Basic Financial Management
FIN 326 Financial Modeling
FIN 327 Investment Management
FIN 330 International Financial Management
GEO 303 Economic Geography
GEO 305 Remote Sensing
GEO 308 GIS Applications I
GEO 408 GIS Applications II
ESP 200 Environmental Planning
ESP 305 Community Planning Workshop

Admission Information

To be eligible for a degree, a student must complete 120 credit hours fulfilling the University's Core curriculum requirements and all requirements for the major.

BS in Economics

Description

The undergraduate program in economics provides practical preparation for a variety of careers as well as for graduate study in economics, business administration, public policy, and law. Economics is a social science and as such is best studied in the context of broader exposure to the liberal arts and sciences.

Economics is a marketable liberal arts degree. Liberal arts majors (social sciences and humanities) develop excellent writing and research skills, and increase a student's knowledge of the world. These majors also help students build a stronger and more informed sense of identity and values. Economics at USM also provides students critical thinking and analytical (including statistical) skills.

The B.S. curriculum is recommended for students interested in a liberal arts economics education with greater stress on business and quantitative skills.

Program Requirements

Under Other Requirements, choose either Track A (49 or more credits) or Track B (53 or more credits); both tracks share the same major prerequisites, major requirements and some of the other requirements.

Track A is recommended for students interested in an economics education with a quantitative business emphasis.
Track B is recommended for students interested in graduate study in economics or related policy fields.

ECO 120 satisfies the Quantitative Reasoning Core curriculum requirement; all other 100-level Economics courses satisfy a second-tier Core curriculum requirement.

Note that only one course carrying the prefix ECO can be used to satisfy both Core curriculum and economics major requirements.

Major Prerequisites (6 credits)

- ECO 101 Introduction to Macroeconomics
- ECO 102 Introduction to Microeconomics

Major Requirements (9 credits)

- ECO 301 Intermediate Macroeconomics
- ECO 302 Intermediate Microeconomics
- ECO 303 Political Economy

Other Requirements (16 or more credits)

Select two of the following courses (both Track A and Track B):

- BUS 260 Marketing
- BUS 335 International Business
- BUS 340 Managing Organizational Behavior
- BUS 361 International Marketing
- BUS 365 Consumer Behavior
- BUS 385 Entrepreneurship and Venture Formation
- FIN 320 Basic Financial Management
- FIN 326 Financial Modeling
- FIN 327 Investment Management
- FIN 330 International Financial Management

Track A:

- ACC 110 Financial Accounting Information for Decision Making
- MAT 210 Business Statistics
- BUS 275 Applied Business Analysis

Track B:

- ACC 110 Financial Accounting Information for Decision Making
- MAT 152 Calculus A
- MAT 153 Calculus B
- MAT 380 Probability and Statistics

Major Electives, for both Track A and Track B (18 or more credits)

Select any five economics elective courses numbered 200 or above, from the following list of economics elective courses:

- ECO 220 U.S. Economic and Labor History
- ECO 305 Research Methods in Economics
- ECO 310 Money and Banking
- ECO 312 U.S. Economic Policy
- ECO 315 Economic Development
- ECO 316 Case Studies in International Development
- ECO 319 Macroeconomics: Debt and Finance
- ECO 321 Understanding Contemporary Capitalism
- ECO 322 Economics of Women and Work
- ECO 323 U.S. Labor and Employment Relations
- ECO 325 Industrial Organization
- ECO 326 Environmental Economics
- ECO 327 Natural Resource Economics
- ECO 328 Rural and Regional Economic Development
- ECO 330 Urban Economics
ECO 333 Economics and Happiness  
ECO 335 The Political Economy of Food  
ECO 340 History of Economic Thought  
ECO 350 Comparative Economic Systems  
ECO 370 International Economics  
ECO 380 Public Finance and Fiscal Policy  
ECO 381 State and Local Public Finance  
ECO 399 Special Topics in Economics  
ECO 450 Readings in Economics  
ECO 490 Independent Readings and Research in Economics  

Select one additional economics elective from the above list of economics electives, or one additional elective from the following list of acceptable courses offered by other departments:  
BUS 370 Management Science  
FIN 320 Basic Financial Management  
FIN 326 Financial Modeling  
FIN 327 Investment Management  
FIN 330 International Financial Management  
GEO 303 Economic Geography  
MAT 252 Calculus C  
MAT 290 Foundations of Mathematics  
MAT 295 Linear Algebra  

Students who select one or two FIN courses under Other Requirements above cannot use the same course(s) to satisfy the major elective requirement here.  

Admission Information  
To be eligible for a degree, a student must complete 120 credit hours fulfilling the University's Core curriculum requirements and all requirements for the major.  

Minor in Economics  

Description  
A Minor in Economics is available to students in any major within the University.  

Program Requirements  
Students wishing to pursue the minor must be in good standing with the University and submit a Declaration of Minor form to the USM Registrar.  

Requirements for a Minor in Economics (18 credits)  

Required Courses:  
ECO 101 Introduction to Macroeconomics  
ECO 102 Introduction to Microeconomics  

Select one of the following courses:  
ECO 103 Critical Thinking About Economic Issues  
ECO 105 A Novel Approach to Economics  
ECO 106 Economics of Social Change  

Select three of the following courses numbered 200 or above:  
ECO 220 U.S. Economic and Labor History  
ECO 305 Research Methods in Economics  
ECO 310 Money and Banking  
ECO 312 U.S. Economic Policy  

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ECO 315 Economic Development
ECO 316 Case Studies in International Development
ECO 319 Macroeconomics: Debt and Finance
ECO 321 Understanding Contemporary Capitalism
ECO 322 Economics of Women and Work
ECO 323 U.S. Labor and Employment Relations
ECO 325 Industrial Organization
ECO 326 Environmental Economics
ECO 327 Natural Resource Economics
ECO 328 Rural and Regional Economic Development
ECO 330 Urban Economics
ECO 333 Economics and Happiness
ECO 335 The Political Economy of Food
ECO 340 History of Economic Thought
ECO 350 Comparative Economic Systems
ECO 370 International Economics
ECO 380 Public Finance and Fiscal Policy
ECO 381 State and Local Public Finance
ECO 399 Special Topics in Economics
ECO 450 Readings in Economics
ECO 490 Independent Readings and Research in Economics

Admission Information

Students wishing to pursue the minor must be in good standing with the University and submit a Declaration of Minor form to the USM Registrar.

Course Descriptions

USM Department of Economics—COURSE LIST

Courses taught on regular rotation are so noted in each description; other courses not so noted are taught at least biannually unless faculty resources are unavailable.

To view actual semester course offerings, please access the Economics Quick Link: Schedules / Calendars

ECO 120 satisfies the Quantitative Reasoning Core curriculum requirement; all other 100-level Economics courses satisfy a second-tier Core curriculum requirement.

Note that only one course carrying the prefix ECO can be used to satisfy both Core curriculum and economics major requirements.

ECO 100 Introduction to Economics: Ideas and Issues
An introduction to basic economic ideas, issues, and theories for non-majors. The course surveys microeconomic and macroeconomic theories and analyzes current topics and problems of the economy.
Prerequisite: none. Every semester. Cr 3.

ECO 101 Introduction to Macroeconomics
An analysis of the basic characteristics, institutions, and activities of modern market economies. Topics discussed include inflation, unemployment, government monetary and fiscal policy, full employment and economic growth.
Prerequisite: none. Every semester. Cr 3.

ECO 102 Introduction to Microeconomics
Introduction to the analysis of individual markets: the functioning of prices in a market economy, economic decision making by producers and consumers, and market structure. Topics discussed include consumer preferences and consumer behavior, production theory and production costs, the monopoly firm, and resource pricing. Additional topics are determined by individual instructors.
Prerequisite: none. Every semester. Cr 3.

ECO 103 Critical Thinking About Economic Issues
This course aims to develop critical thinking skills through the study of competing interpretations and analyses put forward by economists. Students will use a variety of texts, media, and activities to better understand controversial topics in economics. The specific thematic focus of
ECO 103 may vary from section to section. Examples of topics which may be examined include the economics of health care, economic inequality, the global economy, and the economics of the environment.

**Prerequisite:** ENG 100 or equivalent. Every semester. **Cr 3.**

ECO 104 The U.S. in the World Economy
Students will examine national and global economic issues through consideration and application of economic theories. They will analyze and discuss basic economic principles and viewpoints, traditional policy approaches, post-World War II transformation in the U.S. economy, the impacts of the changing global economy on various aspects of life in the United States and will develop policy responses to these issues.

**Prerequisite:** none. Yearly, spring. **Cr 3.**

ECO 105 A Novel Approach to Economics
This course will use fiction and non-fiction to explore key issues in economic analysis and policy formation. The impact of institutional change on production, distribution, and consumption will be the principal focus of the course. Students will discuss and write about the texts; some graphical analysis will be employed.

**Prerequisite:** none. Yearly, fall. **Cr 3.**

ECO 106 Economics of Social Change
Students will explore connections among major socioeconomic transformations (e.g., the spread of market relations, industrialization, and new technologies), massive movements of people (from countryside to city, from one nation to another), the resulting clash of cultures, and the social construction of human worth. Students will analyze debates over social policy, economic performance and the relative standards of living.

**Prerequisite:** none. **Cr 3.**

ECO 108 Economic Journalism
This course introduces students to current economic and public policy events in the United States. Guided research resulting in reporting of economic trends as well as advocacy pieces will be communicated to a broader public via social media, emphasizing the impact of national trends in Maine.

**Prerequisites:** College Writing, EYE. Yearly, spring. **Cr 3.**

ECO 120 Lying with Graphs: Reading, Writing and Interpreting Graphs in the Social Sciences
If a picture's worth a thousand words, a graph's worth a thousand numbers. Graphs can be used to explain, present, and—not just distort information. During this course, you will learn how to correctly interpret, critique, and construct graphs, as well as avoid the pitfalls often encountered in using graphs to communicate.

**Prerequisite:** Students must meet college readiness in mathematics prior to enrollment. **Cr 3.**

ECO 220 U.S. Economic and Labor History
This course examines labor issues in the U.S. economy, combining analytical and historical perspectives. The course surveys the evolution of labor in the U.S. economy from the industrial revolution to the present, considers the history of the American worker and of the U.S. labor movement, and analyzes labor markets and their relationship to the competitiveness of the U.S. economy.

**Prerequisite:** English competency requirement. **Cr 3.**

ECO 301 Intermediate Macroeconomics
A theoretical analysis of the basic forces that cause inflation, growth, and fluctuations in economic activity. The effects on employment and other factors are thoroughly treated. Stabilization policies are examined and evaluated.

**Prerequisites:** ECO 101 and ECO 102, or ECO 100 and permission of instructor. Yearly, fall. **Cr 3.**

ECO 302 Intermediate Microeconomics
Analysis of individual markets, choice, and exchange theory: the functioning of prices in a market economy, rational decision making by consumers and producers, cost and production analysis, market structure, and theory of public goods and market failures.

**Prerequisites:** ECO 101 and ECO 102, or ECO 100 and permission of instructor. Yearly, spring. **Cr 3.**

ECO 303 Political Economy
This course provides an overview of various perspectives on the U.S. economic system, its dynamics, problems, and its relation to the political sphere. Topics may include: inequality and discrimination; growth and the environment; military spending, productivity and growth; and policies for the future.

**Prerequisites:** ECO 101, ECO 102, and either ECO 301 (or concurrent) or ECO 302 (or concurrent) or permission of instructor. Yearly, fall. **Cr 3.**

ECO 305 Research Methods in Economics
Measures of central tendency, basic probability theory, and hypothesis testing will be discussed. With a focus on economic data, the relationship between random variables will be examined using linear regression models and computer software.

**Prerequisites:** MAT 120 and proficiency in Microsoft Excel™ or permission of instructor. **Cr 3.**

ECO 310 Money and Banking

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This course examines the structure and operation of the financial system with major emphasis on commercial banking; reviews the structure of the Federal Reserve System and analyzes the tools of policy; develops alternative monetary theories; and discusses major issues in monetary policy.

**Prerequisites:** ECO 101, ECO 102. Cr 3.

**ECO 312 U.S. Economic Policy**
This course examines currently perceived problems of the U.S. economy. A range of views of these problems and associated policy proposals are considered including: free market, traditional monetary and fiscal, as well as new policy approaches.

**Prerequisite:** any 100-level ECO course. Cr 3.

**ECO 315 Economic Development**
The theories and practices of interregional and international economic development. Special attention is given to developmental problems of emerging nations.

**Prerequisite:** any 100-level ECO course. Cr 3.

**ECO 316 Case Studies in International Development**
This course provides case studies of the issues, problems, and policies of economic development. The development experience of various countries is examined in a comparative context.

**Prerequisite:** any 100-level ECO course. Cr 3.

**ECO 319 Macroeconomics: Debt and Finance**
Focuses on alternative and conflicting approaches to the role(s) of debt, private and public, in modern macroeconomies—debt in relation to aggregate demand growth, cyclic instability ("bubbles"), counter-cyclical policy, and as a long-term constraint on policy possibilities. Attention is given to the “Modern Monetary Theory” approach and its critics.

**Prerequisite:** ECO 301 or permission of instructor. Cr 3.

**ECO 321 Understanding Contemporary Capitalism**
This course analyzes the character and dynamics of leading contemporary capitalist economies, emphasizing historical, comparative, and institutional perspectives. These perspectives are used to address a wide range of contemporary economic issues, including national R and D policy, financial regulation, public and private human resource investments, and organizational strategies.

**Prerequisite:** any 100-level ECO course or permission of instructor. Cr 3.

**ECO 322 Economics of Women and Work**
This course examines women's post-WWII experiences in paid work settings in the U.S. The class will assess a range of theories designed to explain women's access to well-paying jobs and career ladders while maintaining family responsibilities. In addition, students will consider the effectiveness of a variety of public policies for greater labor market equity.

**Prerequisite:** none. Cr 3.

**ECO 323 U.S. Labor and Employment Relations**
This course considers the evolution of 20th-century U.S. labor relations, particularly the competing fortunes of union and non-union labor relations models, as well as the impact of changing institutions on labor markets. It also surveys the evolving perspectives of industrial relations theorists and practitioners.

**Prerequisite:** English competency requirement. Cr 3.

**ECO 325 Industrial Organization**
This course investigates theories relating industrial structure to company conduct and performance. Case studies from the U.S. economy will be used to illustrate important developments in the 1970s and 1980s—internationalization, technological change, and competitiveness problems.

**Prerequisites:** ECO 101, ECO 102. Cr 3.

**ECO 326 Environmental Economics**
This course considers the economic aspects of environmental issues, such as pollution and environmental degradation, environmental justice, and global climate change. In addressing each of these issues we will investigate the implications of various public policy responses such as regulation, marketable permits, and tax incentives.

**Prerequisite:** ECO 102 or permission of instructor. Cr 3.

**ECO 327 Natural Resource Economics**
In this course, we will consider the economic aspects of natural resource management and use, including the economically sustainable management of fisheries, forests, water resources, and biodiversity, with applications to Maine and beyond. We will investigate the implications of public policy responses such as regulations, marketable permits, and tax incentives.

**Prerequisite:** ECO 102 or permission of instructor. Cr 3.

**ECO 328 Rural and Regional Economic Development**
This course focuses on rural areas and the unique characteristics that influence their economic development. Students will investigate the roles of
government, demographics, location of industries, natural resources, technology, amenities and institutions within the context of rural and regional areas. Special attention will be given to rural areas in Maine, Appalachia, and the Mississippi River Delta. A section of the course will be devoted to the rural areas of less developed countries.

**Prerequisite:** ECO 102 or permission of instructor. **Cr 3.**

**ECO 330 Urban Economics**
This computer-intensive course studies the growth and decline of urban regions. Census data are used to examine the dynamics of urban population change, with special reference to the northeastern United States.

**Prerequisite:** ECO 102 or permission of instructor. **Cr 3.**

**ECO 333 Economics and Happiness**
Presents the limited relationship between economic well-being and happiness. Students will learn differing assessments and determinants of happiness as presented by economists, psychologists, and neuroscientists. In addition, they will examine the influence of ethics, altruism, and cooperation on well-being and will conclude by examining policy implications.

**Prerequisite:** ECO 101 or ECO 102 or permission of instructor. **Cr 3.**

**ECO 335 The Political Economy of Food**
This course examines the inter-relatedness of production, distribution, and consumption of food in a global economy. Topics include the role of government policies in the U.S. and India, the impact of multinational agro-corporations on traditional methods of food production, and the subsequent impact on income and entitlements to food.

**Prerequisites:** any 100-level ECO course and ENG 100 or permission of instructor. **Cr 3.**

**ECO 340 History of Economic Thought**
A survey of the development of modern economic theories, focusing in particular on Smith, Ricardo and Malthus, Marx, the marginalists, and Keynes. Consideration is also given to contemporary debates which exemplify historical controversies among theories.

**Prerequisites:** ECO 101, ECO 102. **Cr 3.**

**ECO 350 Comparative Economic Systems**
The structures and operating principles of the major contemporary economic systems are examined and compared.

**Prerequisite:** ECO 101 or ECO 100. **Cr 3.**

**ECO 370 International Economics**
Analysis of international markets and exchange theory, functioning of prices in the international economy, international finance, tariffs, quotas, and other instruments of international economic policy.

**Prerequisites:** ECO 101, ECO 102. **Cr 3.**

**ECO 380 Public Finance and Fiscal Policy**
Public expenditure theory; principles of taxation; the federal budget and alternative budget policies; federal tax policy; fiscal policy for stabilization; federal debt.

**Prerequisites:** ECO 101, ECO 102. **Cr 3.**

**ECO 381 State and Local Public Finance**
Development of the federal system; fiscal performance; intergovernmental fiscal relations; state and local revenue systems; budgetary practices; state and local debt.

**Prerequisites:** ECO 101, ECO 102. **Cr 3.**

**ECO 399 Special Topics in Economics**
**Prerequisite:** Depends on topic. **Cr 3.**

**ECO 450 Readings in Economics**
A series of readings and discussions of important books and articles of a socio-economic and politico-economic nature.

**Prerequisite:** none. **Cr 3.**

**ECO 490 Independent Readings and Research in Economics**
Independent study and research of various student-selected areas of economics.

**Prerequisites:** ECO 101 or ECO 102 or permission of faculty sponsor, junior or senior-level standing, a completed independent study form and sponsorship by an economics faculty member. May be taken more than once. **Cr 1–12.**
English Overview

Professors: Ashley, Gish, McGrath, Muthyala, Raimon, Waldrep; Associate Professors: Abrams, Benedict, Bertram, Carroll, Cole, Dean, Kuenz, Marya, Peters, Swartz, Tussing, Walker

The USM English major is devoted to the study of language, literature, and culture. Focusing upon the British and American literary traditions, the major exposes students to a range of literature in different historical eras. It also offers students the opportunity to explore other traditions such as Irish or Canadian literature, women's writing, and African-American writing. In addition to literatures written in English, course offerings include world literatures in translation from the classical to contemporary eras.

The major encourages both the analysis of literary form and the study of literature in its historical and cultural contexts. Students learn how to read in the light of contemporary critical theories and in relation to the tools, texts, and theories of other academic disciplines. Many classes provide opportunities for the study of non-literary cultural texts and practices such as film, television, fashion, and ritual. Approved courses from other departments and programs—for example, Women's Studies and Modern and Classical Languages and Literatures—may also be counted toward the English major.

The most distinctive skill the major develops is critical expository writing. Virtually every course requires substantial writing from students, ranging from a weekly short paper to longer research papers. Moreover, students have the opportunity to develop their talents in writing through workshops in fiction, poetry, autobiography, and journalism. English majors have traditionally enjoyed participating in the creative communities of Stonycoast Writers’ Conference and Celebrate Writers! The Department also offers a minor in writing. An internship in professional writing provides a means for some students to work locally as writers, editors, and reporters, and an internship in the teaching of writing for students who are planning a teaching career is offered.

Because of the Department's desire to explore relationships among language, literature and culture, English majors are encouraged to study a second language. Opportunities for study abroad are offered through the Department's exchange program with several schools, including Radboud University in the Netherlands, University College Winchester (formerly King Alfred's College) and the University of Central Lancashire in England, and University College, Galway, in the Republic of Ireland.

English majors are continually engaged in articulating their ideas and in developing persuasive arguments; therefore, graduates are well-prepared for careers in many areas. Medical, law, and business schools, in particular, regard English majors as desirable applicants. USM graduates also enter professional and graduate schools, including programs in English, writing, and cultural studies.

Prerequisites and Course Waivers

College Writing or a waiver is a prerequisite for any English language or literature course, including ENG 140. ESL 100 satisfies this requirement for non-native speakers of English. ENG 140 or permission of the instructor is a prerequisite for ENG 245. For English majors, ENG 245 is prerequisite for all 300- and 400-level literature courses. ENG 201 or instructor permission is a prerequisite for all 300- and 400-level creative writing courses. Certain advanced courses, as indicated in the course listings, and all independent studies require the permission of the instructor.

Non-majors and students with special interests are encouraged to seek the instructor's permission to take any course for which they feel qualified. ENG 140 may be waived for transfer students with certain literature course credits.

Semester Course Guides

Every semester the Department publishes a course guide that gives more detailed information, including texts and writing requirements, than the undergraduate catalog can accommodate. Students are urged to obtain a copy of the guide in the English Office.

The Honors Degree in English

For a B.A. degree in English with honors, a student must achieve a B+ or better average in courses taken for the major.

BA in English
**Program Requirements**

The minimum number of credits (exclusive of the University’s Core curriculum) required for the major: 48.

After satisfying the prerequisites, a course in writing (College Writing or equivalent), the English major begins with ENG 140 and ENG 245. The student then selects more advanced English courses (and up to 6 credits in approved courses from other departments) to satisfy the 48-credit major requirement. No more than 15 credits in 200-level courses may count toward the major.

English majors must meet the following English Department requirements. All courses must be passed with a grade of C- or better and six hours with a grade of B or better. Majors should have completed ENG 100 or 101, ENG 140, ENG 245, and at least one other 200-level English course before concentrating on more advanced work.

**Prerequisite**

College Writing (no credit toward major)

- **Introduction for Majors (3 credits)**
  - ENG 140 Reading Literature (3 credits). This course is a prerequisite for ENG 245 Introduction to Literary Studies (3 credits).
  - ENG 245 Introduction to Literary Studies (3 credits). This course is a prerequisite for 300- and 400-level literature courses.
- **At least one 300- or 400-level Criticism and Theory course (3 credits)**
- **At least one 200-, 300-, or 400-level course from 3 of the following 4 categories (9 credits)**
  - Language (In addition to ENG courses in the Language category, the following courses from the Linguistics Department satisfy this requirement: LIN 305, LIN 311, LIN 312, LIN 313, LIN 314, LIN 331. Courses in foreign and classical languages beyond third-semester college level also satisfy this requirement.)
  - Genre and Form
  - Writing (ENG 201 does not satisfy this requirement)
  - Interdisciplinary and Cultural Studies
- **At least one 300- or 400-level course from 4 of 6 historical periods of literature (12 credits)**
  - Ancient and Biblical (In addition to ENG courses in the Ancient and Biblical category, the following courses from Modern and Classical Languages and Literatures satisfy this requirement: CLA 283, CLA 284.)
  - Medieval
  - Renaissance
  - Eighteenth Century
  - Nineteenth Century
  - Literatures Since 1900
- **Capstone Seminar (3 credits)**
  - A seminar is a small class (limited to approximately 15 students) designed to encourage independent thinking, intensive student participation, and in-depth research on topics of the student's choice related to the seminar topic. Typically seminars allow a professor to teach a focused subject of special interest, one on which the professor has done recent research or scholarly writing. Each semester, detailed descriptions of seminars will be published in the English Department's Course Guide. Seminars satisfy the general education capstone requirement. Though they may also fulfill requirements under other categories, seminars still count as only 3 credits toward the major requirements.
- **Electives (as needed to complete 48 credit hours in the major)**
  - All electives must be 200-level or above. Students may petition to use up to six hours of courses from other departments toward their electives.

**Description**

See Program Requirements

### BA in English Teacher Education 7-12 Certification Track

**Description**

This track of the English degree provides prospective 7-12 teachers a strong academic foundation in English. The curriculum combines English courses in writing, literature, and literary theory with a sequence of pre-internship education courses and field experiences focusing on the theory and practice of teaching.
Students completing the 120-hour degree will have satisfied the USM Core Curriculum and the English Major. Graduates are eligible for recommendation for 7-12 teacher certification in Maine.

**Program Requirements**

**USM Core Curriculum (including pre-internship education courses):**

- EYE 108-Culture, Identity and Education (recommended) (3 cr)
- EDU 100 Exploring Teaching (recommended) (3 cr)
- College Writing-ENG 100 or ENG 101 (3 cr)
- Cultural Interpretation-ENG 145 (3 cr)
- Quantitative-MAT 120 (4 cr)
- Creative Expression (3 cr)
- Socio-Cultural Analysis- HRD/SBS 200: Multicultural Human Development (3 cr)
- Science Exploration- (4 cr)
- Ethical Inquiry and Social Responsibility- EDU 310: Purpose of Schooling in a Democracy (recommended) (3 cr)
- Cluster:
  - EDU 305: Foundations of Cultural and Linguistic Diversity
  - SED 335: Students with Exceptionalities in General Education
  - SED 420: Multi-Tiered Systems of Educational Support (9 cr)
- Capstone–English major senior seminar (3 cr)

**English Major Course Requirements:**

- Introduction for Majors (6 credits):
  - ENG 140 Reading Literature (3 credits) This course is a prerequisite for ENG 245.
  - ENG 245 Introduction to Literary Studies (3 credits) This course is a prerequisite for 300- and 400-level literature courses.
- At least one 300- or 400-level Criticism and Theory course (3 credits)
- At least one 200-, 300-, or 400-level course from three of the four following categories (9 credits)
  - Language (In addition to ENG courses in the Language category, the following courses from the Linguistics Department satisfy this requirement: LIN 305, LIN 311, LIN 312, LIN 313, LIN 314, LIN 331. Courses in foreign and classical languages beyond third-semester college level also satisfy this requirement.)
  - Genre and Form
  - Writing (ENG 201 does not satisfy this requirement)
  - Interdisciplinary and Cultural Studies
- At least one 300- or 400-level course from 4 of 6 historical periods of literature (12 credits): Ancient and Biblical (In addition to ENG courses in the Ancient and Biblical category, the following courses from Modern and Classical Languages and Literatures satisfy this requirement: CLA 283, CLA 284.)
  - Medieval
  - Renaissance
  - Eighteenth Century
  - Nineteenth Century
  - Literatures Since 1900
- Capstone Seminar (3 credits)
- Electives (as needed to complete 48 credit hours in the major). All electives must be 200-level or above. Students may petition to use up to six hours of courses from other departments toward their electives.

**Professional Education Internship Year Requirements (30 cr)**

- EDU 441 Seminar in Teaching and Learning I (3 cr)
- EDU 442 Seminar in Teaching and Learning II (3 cr)
- EDU 402 Methods of Teaching Secondary English (3 cr)
- EDU 413 Professional Internship in Secondary Education (9 cr)

**Electives:**

Students must complete elective credit to complete the 120 credit hour degree. For those students interested in teaching at the middle level (grades 6-8), it is recommended that they complete coursework in a second content area (e.g., English, mathematics, life or physical science) to become highly qualified to teach an additional content area. Finally, students should consider taking education courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

**Other Requirements:**

Acceptance into the Bachelor of Arts in English Education (7-12) is contingent upon admission to USM and successful completion of the
University's writing and mathematics proficiency requirements. Other acceptance criteria include a minimum 3.0 GPA and experience working with children. No more than 60 earned credits can be transferred into the program.

Students must maintain a high level of academic achievement. Minimum academic requirements to remain in the program are as follows:

- A grade of C or better in all University Core and major coursework.
- A grade of B or better in all professional education coursework.
- An overall GPA of 3.00 or better.

Prior to admission to the professional internship year, students must pass the Praxis I and II exams and demonstrate satisfactory progress toward the State of Maine Core Teaching Standards.

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: [http://www.maine.gov/doe/cert/fingerprinting/](http://www.maine.gov/doe/cert/fingerprinting/)

All students must formally declare their entry into a teacher certification concentration by completing the declaration procedures found on the Office of Educator Preparation web site at [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation). Passing Praxis I scores, subscription to Tk20, and two recommendation forms are necessary to complete the declaration process.

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation)

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed with in the context of the Unit’s data management system (i.e., Tk20).

Students who fail to meet any of the academic or professional requirements of this track of the major must withdraw from this track, though they may still complete all requirements for the B.A. in English without certification.

## BA in English Teacher Education K-8 Certification Track

### Description

This track of the English degree provides prospective K-8 teachers a strong academic foundation in English and a thorough interdisciplinary education in math, science, and history/social studies. The curriculum combines English courses in writing, literature, and literary theory with a sequence of pre-internship education courses and field experiences focusing on the theory and practice of teaching.

Students completing the 120-hour degree will have satisfied the USM Core Curriculum and the English Major as well as liberal arts courses required for initial K-8 teacher certification. Graduates are eligible for recommendation for K-8 teacher certification in Maine.

### Program Requirements

**USM Core Curriculum (including pre-internship education courses):**

- EYE 108-Culture, Identity and Education (recommended) (3 cr)
- EDU 100 Exploring Teaching (recommended) (3 cr)
- College Writing-ENG 100 or ENG 101 (3 cr)
- Cultural Interpretation-ENG 145 (3 cr)
- Quantitative-MAT 120 (4 cr)
- Creative Expression (3 cr)
- Socio-Cultural Analysis- HRD/SBS 200: Multicultural Human Development (3 cr)
- Science Exploration (4 cr)
Ethical Inquiry and Social Responsibility- EDU 310: Purpose of Schooling in a Democracy (recommended) (3 cr)

Cluster:
- EDU 305: Foundations of Cultural and Linguistic Diversity
- SED 335: Students with Exceptionalities in General Education
- SED 420: Multi-Tiered Systems of Educational Support (9 cr)

Capstone–English major senior seminar

Liberal Arts Courses

(Note: Through the Core Curriculum, liberal arts requirements, and the major, students meet at least the minimum credits in English, social studies, math, and science required for State certification at the elementary level.)

- English- Through the major the students become highly qualified to teach middle level
- Mathematics-MAT 131: Number Systems for Elementary Teachers and MAT 231: Algebra for Elementary Teachers or MAT 232: Geometry for Elementary Teachers (6 credits)
- Science-Students must take one lab science in addition to Science Exploration in the core. (7 credits)
- Social Studies- Students must take HTY 101 Western Civilization I & HTY 123, United States History Since 1900 (6 credits)

English Major Course Requirements:

- Introduction for Majors (6 credits):
  - ENG 140 Reading Literature (3 credits) This course is a prerequisite for ENG 245.
  - ENG 245 Introduction to Literary Studies (3 credits) This course is a prerequisite for 300- and 400-level literature courses.
- At least one 300- or 400-level Criticism and Theory course (3 credits)
- At least one 200-, 300-, or 400-level course from three of the four following categories (9 credits)
  - Language (In addition to ENG courses in the Language category, the following courses from the Linguistics Department satisfy this requirement: LIN 305, LIN 311, LIN 312, LIN 313, LIN 314, LIN 331. Courses in foreign and classical languages beyond third-semester college level also satisfy this requirement.)
  - Genre and Form
  - Writing (ENG 201 does not satisfy this requirement)
  - Interdisciplinary and Cultural Studies
- At least one 300- or 400-level course from 4 of 6 historical periods of literature (12 credits): Ancient and Biblical (In addition to ENG courses in the Ancient and Biblical category, the following courses from Modern and Classical Languages and Literatures satisfy this requirement: CLA 283, CLA 284.)
  - Medieval
  - Renaissance
  - Eighteenth Century
  - Nineteenth Century
  - Literatures Since 1900
- Capstone Seminar (3 credits)
- Electives (as needed to complete 48 credit hours in the major). All electives must be 200-level or above. Students in the K-8 Teacher Certification Track may use EDU 565 Teaching Reading and EDU 466 Introduction to the Writing Process toward their electives.

Professional Education Internship Year Requirements (30 cr)

- EDU 452 Teaching Science K-8 (3 cr)
- MME 405 Teaching Mathematics K-8 (3 cr)
- EDU 451 Teaching Social Studies K-8 (3 cr)
- EDU 565 Teaching Reading (3 cr)
- EDU 566 Introduction to the Writing Process (3 cr)
- EDU 441 Seminar in Teaching and Learning I (3 cr)
- EDU 442 Seminar in Teaching and Learning II (3 cr)
- EDU 324 Student Teaching (9 cr)

Electives:

Students must complete elective credit to complete the 120 credit hour degree. For those students interested in teaching at the middle level (grades 6-8), it is recommended that they complete coursework in a second content area (e.g., English, mathematics, life or physical science) to become highly qualified to teach an additional content area. Finally, students should consider taking education courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

Other Requirements:

Acceptance into the Bachelor of Arts in English Education (K-8) is contingent upon admission to USM and successful completion of the University's writing and mathematics proficiency requirements. Other acceptance criteria include a minimum 3.0 GPA and experience working
with children. No more than 60 credits can be transferred into the program.

Students must maintain a high level of academic achievement. Minimum academic requirements to remain in the program are as follows:

- A grade of C or better in all University Core and major coursework.
- A grade of B or better in all professional education coursework.
- An overall GPA of 3.00 or better.

Prior to admission to the professional internship year, students must pass the Praxis I and II exams and demonstrate satisfactory progress toward the State of Maine Core Teaching Standards.

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: [http://www.maine.gov/doe/cert/fingerprint/](http://www.maine.gov/doe/cert/fingerprint/)

All students must formally declare their entry into a teacher certification concentration by completing the declaration procedures found on the Office of Educator Preparation web site at [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation). Passing Praxis I scores, subscription to Tk20, and two recommendation forms are necessary to complete the declaration process.

**Tk20 Subscription:**

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation)

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed with in the context of the Unit’s data management system (i.e., Tk20).

Students who fail to meet any of the academic or professional requirements of this track of the major must withdraw from this track, though they may still complete all requirements for the B.A. in English without certification.

**Minor in English**

**Description**

The Department offers a minor in English that requires 18 credits of upper-level courses in a program planned with an English faculty advisor and approved by the English Department director of Advising. The goal of the minor is to give students not simply a collection of courses, but a coherent experience with English courses chosen to suit their needs and interests.

**Program Requirements**

The minimum number of credits (exclusive of the University's Core curriculum) required for the English minor: 18. No more than a total of 6 credit hours can be earned at the 200-level.

Each English minor program must meet the following specific requirements beyond College Writing or waivers:

- ENG 245 (3 credits)
- Three 300-level literature courses (one must focus on a period before 1800 and one on a period after 1800) (9 credits)
- Electives to complete the 18 credits required for the minor

Further information about the English minor is available from the English Department.
Minor in Writing

Description

The English Department offers a minor in writing for both English majors and non-majors. The minor consists of tracks in poetry, fiction, non-fiction, and journalism. The goal of the writing minor is to direct student attention to writing offerings while recommending a productive sequence of writing courses and collateral craft-oriented textual studies courses.

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the writing minor: 19.

Students enter the writing minor by meeting with the Department's coordinator of advising. Candidates must be eligible for pre-registration and/or admission to upper-level workshops and should have completed six hours of 200- or 300-level writing classes. Approximately 45 students will be writing minors during any given year. Students who are writing minors or English majors will have priority for registration in writing classes.

Each writing minor program must meet the following specific requirements beyond College Writing and ENG 140 or waivers:

- ENG 201 Creative Writing (3 credit hours)
- One of the following: ENG 245 or one 200-level course from one of the following categories: Genre and Form or Interdisciplinary and Cultural Studies (3 credit hours)
- One of the following courses (3 credit hours)
  - Memoir and Autobiography (ENG 202)
  - Fiction Writing (ENG 300)
  - Poetry Writing (ENG 301)
  - Rhetoric, Syntax, and Style (ENG 305)
  - Newswriting (ENG 309)
- Workshops (6 credit hours)*
  - Fiction Workshop (ENG 302)
  - Poetry Workshop (ENG 303)
  - Advanced Memoir (ENG 304)
  - Writing the Novel (ENG 306)
  - *Workshops may be repeated for credit.
- Elective courses (3 credit hours)
  - Selected from English Department offerings. Courses selected must be 300- or 400-level.
- Thesis (1 credit hour)
  - The minor requires a thesis comparable to an M.F.A. application portfolio. Before enrolling in Thesis for the Writing Minor (ENG 401), students must get permission from a thesis advisor with whom they wish to work. During the course, students will produce ten to fifteen poems or twenty-five to fifty pages of fiction or nonfiction. The thesis may be completed in the second upper-level workshop.
- Optional Internship (3 credit hours)
  - Internships provide students the opportunity to earn course credit through professional experience in writing or editing for an organization, primarily in journalism or the arts. The English Department currently offers the Internship in Professional Writing (ENG 409).

Further information about the writing minor is available from the English Department.

English Course Descriptions

ENG 100 College Writing

With an emphasis on the connections between reading and writing, English 100 introduces students to practices and conventions of expository academic writing. Students read expository writing and use the ideas they encounter to develop and refine their own arguments and perspectives. Students learn how thinking and writing change through processes of reading, drafting, rereading, revision, editing, and proofreading. At the end of the semester, ENG 100 students can demonstrate an understanding of sentence structure and syntax as central to meaning. Using standard written English, students can compose essays that reflect a point of view, engage with readings, and focus on a central thesis or project.
Prerequisite: college readiness in writing. Every semester. Cr 3.

**ESL 100 College Writing**  
This section of College Writing (ENG 100) is intended for non-native speakers of English only. This course focuses on the analysis of professional and student writing in terms of how to use the English language effectively in the academic classroom. The writing assignments encourage students to apply the principles discussed in class to their own work. This course cannot be used to satisfy a Humanities requirement. Prerequisite: ESL 104 or college readiness in writing. Every semester. Cr 3.

**ENG 101 Independent Writing**  
English 101 is offered as an alternative college writing course for students who prefer to work independently on academic writing with an instructor's guidance. The main business of the course is conducted in individual conferences; therefore, the course is more intensive than ENG 100. This course emphasizes style, sentence structure, organization, and development. The major challenge of the course is the self-discipline that students will need to work independently. Prerequisite: college readiness in writing. This course fulfills the college writing requirement. Every semester. Cr 3.

**ENG 103 A Modular Approach to the Writing Process**  
This course for college writers in various disciplines is divided into three units or modules, each of which earns one credit hour. Each unit runs for approximately one-third of a semester. Students may enroll in one, two, or all three modules and receive separate grades for each module they complete. The second and third units do not require the earlier unit(s) as prerequisites. Any or all of the units may be taken in conjunction with ENG 100 College Writing. The first unit, "Practical and Descriptive Grammar for College Writers," gives students a thorough knowledge of traditional "prescriptive" grammar and introduces them to modern "descriptive" grammar. The second unit, "Editing, Revising, and Rewriting," focuses on skills in proofreading, editing, revising, and rewriting, and also covers the use of computer programs for writing assistance. The third unit, "Research Skills Across the Disciplines," studies the use of library resources (especially online and other computer databases), documentation and bibliography formats from a range of disciplines, and other techniques crucial to writing analytic research papers. Variable cycle. Cr var.

**ENG 140 Reading Literature**  
An introduction to the premises and techniques of literary analysis. The course emphasizes the close reading of texts from different historical periods and introduces students to literary conventions and terminology as well as library and Internet resources available for research. In this course, students will learn to use concepts of the discipline and conventions of academic discourse with an emphasis on critical writing. Every semester. Cr 3.

**ENG 145 Topics in Literature**  
This course emphasizes oral and written analysis and interpretation of literary and other cultural texts within and across historical contexts. Though topics vary, each provides a broad introduction to the concepts of literary history and periodization as these are understood within the discipline and familiarizes students with the basic terms and methods of literary analysis. Every semester. Cr 3.

**ENG 245 Introduction to Literary Studies**  
This is a required course for all English majors. It may be taken concurrently with other 200-level courses in the Department, but is a prerequisite for all 300- and 400-level courses except those in creative writing. The course will have a double focus. Students will be introduced to a variety of methodologies important to an insightful analysis of literature and other cultural texts. They will also learn research procedures and techniques of effective critical writing. Every semester. Cr 3.

**Language**

**ENG 230 Literacy Studies**  
A course dedicated to examining the history, concepts, and practices of literacy, with readings drawn from socio-linguistics, the social and cultural history of literacy and of print culture, the sociology and history of education, and reader response studies. The course will examine changing concepts of literacy, orality, and illiteracy, with special attention given to the following: the historical, social, and cultural dynamics influencing reading and writing practices; the plurality of literacy practices; and the theoretical debates over the meaning of the word "literacy" itself. Students will also do ethnographic studies of their own literacy practices and the ways in which these differ from one social context to another. Every semester. Cr 3.

**ENG 330 History of the English Language**  
This course includes a survey of the prehistory of the language as well as a detailed study of Old, Middle, Early Modern, and Modern English and the forces that shaped these stages. Some methods of modern linguistic science are utilized in examining current usage. Change and development of the language are emphasized. Every fall. Cr 3.

**ENG 331 Modern Grammars**  
Designed to acquaint students with the three most common forms of English grammatical analysis: traditional, structural, and post-generative/transformational. The mechanics of the various analyses will be examined, and comparisons will be made to determine what tentative combination best explains the structure of English. Variable cycle. Cr 3.
ENG 336 Old English Language and Literature
An introduction to the grammar of English in the earliest period, 700-1050. The first several weeks concentrate on grammar and enable students to translate elementary prose (e.g., prefaces by King Alfred, Apollonius, the Anglo-Saxon Chronicle). Later weeks introduce students to Anglo-Saxon culture and literature, particularly to alliterative poetry. Major prose and poetic works are studied through looking jointly at Modern English translations and the original works. *Beowulf*, *The Wanderer*, *Elene*, and *The Phoenix* are works typically studied. Variable cycle. Cr 3.

ENG 337 Studies in Rhetoric
The course will introduce students to the many ways of thinking about rhetoric throughout history and stress the value of rhetorical criticism in analyzing texts, discourse, and language. Topics will vary, but may survey theories of rhetoric from Plato and Aristotle to Campbell and Nietzsche or examine contemporary theoretical approaches to rhetoric, ranging from the neo-Aristotelian, dramaturgical, experiential and sociolinguistic to the postmodern. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

ENG 338 Studies in Language
Under this title is offered a variety of topics on language which include the following: linguistic approaches to literary analysis; language and culture; grammatical structure in English and related languages; and the history of linguistic thought. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Variable cycle. Cr 3.

ENG 430 Independent Study in Linguistics
By instructor's permission. See Department for application form. Cr var.

ENG 431 Seminar on Literacy Studies and the Teaching of Writing
The seminar will consider topics in composition theory and practice within the broad context of histories and theories of literacy. Participants will be asked to make connections between curricular design or pedagogical practices and such issues as the history of public education and English studies, theories of discourse, writing and language use, and definitions of literary language and textuality. There will be consideration of contemporary research debates on the teaching of writing. This seminar is required for students enrolled in the Internship on the Teaching of Writing. Fulfills the general education capstone requirement. Prerequisite: 36 credit hours in English, including ENG 245 or permission of the instructor. Cr 3.

ENG 432 Internship in the Teaching of Writing
The Internship will provide qualified upper-class English majors with supervised experience in the teaching of writing. There is also the possibility of placement in tutoring and in community literacy programs. Students registering for the internship must also register for the Seminar on Literacy Culture and the Teaching of Writing. Application and screening for the internship take place through the College Writing Committee. Cr var.

Criticism and Theory Courses

ENG 340 History of Literary Criticism and Theory
An historical study of the key critics and theorists from Plato and Aristotle to the present day. Every year, fall. Cr 3.

ENG 341 Contemporary Critical Theories
An introduction to major schools of literary criticism developed in the twentieth century. Emphasis is placed on identifying points of agreement and divergence between various theories and methods for interpreting literature. Specific theories to be studied may include (but are not limited to) structuralism, psychoanalytic theory, Marxist criticism, deconstruction, feminist theory, and the new historicism. Every semester. Cr 3.

ENG 342 Topics in Contemporary Theory
This course studies in-depth selected theoretical approaches to literature and culture. It will focus either on a single current theory or, through a comparative method, two to three different theories (e.g., structuralism and formalism, Marxism and cultural criticism, or deconstruction and feminism). May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Every semester. Cr 3.

ENG 440 Independent Study in Literary Criticism and Theory
By instructor's permission. See Department for application form. Cr var.

ENG 441 Seminar in Literary Criticism and Theory
Fulfills the general education capstone requirement. Students should consult the Department's Course Guide for detailed descriptions. Prerequisite: 36 credit hours in English, including ENG 245 or permission of the instructor. Cr 3.

Genre and Form

ENG 262 Poetry
This course studies poetry as a way of knowing and experiencing the world, introduces important concepts in analyzing and appreciating poetry, and offers the opportunity for students to develop skills in interpretation, literary analysis, and discussion. While primary attention will be on poetic forms, figurative languages and the poetic "canon," it will also consider the relationship between historical context and changes in poetic
This course will introduce important concepts in analyzing fiction and enable students to develop skills in interpretation, literary analysis, and discussion. It will focus on narrative forms and rhetorical structures (such as voice, plot, diction, figurative language) in various historical periods, and will both examine and challenge the concept of genre. Every semester. Cr 3.

**ENG 264 Performance Genres**
This course will study dramatic performance from its roots in cultural ritual to its historical development in drama as well as its more contemporary manifestations in television and film. Students will investigate the social functions of performance in several cultures and epochs, focusing on conventions of language and stagecraft, dramatic experimentation, and technical innovation. Every fall. Cr 3.

**ENG 318 Autobiography**
This course will focus on autobiographical forms with emphasis on the emergence and development of the genre. Possible topics include American autobiography, medieval lives, and the confession. The course may be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Variable cycle. Cr 3.

**ENG 319 Studies in Genre and Form**
The content of this course is flexible, but will focus upon some aspect or dimension of genre studies not treated through other course rubrics. Possible topics include women and the romance, the vampire novel and popular culture, or the novel of sensation. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

**ENG 378 The Novel of Self Development**
Originally developed in German literature, the novel of self-development or Bildungsroman depicts an adolescent male who eventually acquires a philosophy of life based on his conscious effort to gain personal culture. This course investigates the changes the idea of Bildung underwent at the hands of various authors in the nineteenth and early twentieth centuries in their adaptation of the original form, including the revision of selfhood to address the Bildung as a female as well as a male province. Works to be considered may include Goethe's *Wilhelm Meister's Apprenticeship*, Bronte's *Jane Eyre*, Dickens' *David Copperfield*, Joyce's *Portrait of the Artist as a Young Man*. Variable cycle. Cr 3.

**ENG 418 Independent Study in Genre and Form**
By instructor's permission. See Department for application form. Cr var.

**ENG 419 Seminar in Genre and Form**
Fulfills the general education capstone requirement. Students should consult the Department's Course Guide for detailed descriptions. Prerequisite: 36 credit hours in English, including ENG 245 or permission of the instructor. Cr 3.

**Writing Courses**

**ENG 201 Creative Writing**
An introduction to the principles and practices of writing fiction and poetry; other genres may be added at the discretion of the instructor. Students will be exposed to a variety of writing modes through exercises and engagement with literary texts. Emphasis is on using imaginative and precise language, on developing critical skills through workshops, and on assembling a portfolio of revised student writing. Prerequisites: College writing or equivalent and ENG 120. Every semester. Cr 3.

**ENG 202 Memoir and Autobiography**
This course offers orientation in the technique of narrative autobiographical writing. Using journal writing, observational writing, and free writing techniques, students will learn to access story material from memory and develop a personal writing practice. They will be assigned readings in memoir and autobiography, and will assemble a portfolio of essays and personal writings. Every fall. Cr 3.

**ENG 203 Topics in Writing**
A course for prospective writers interested in studying the stories, novels, poems, biographies, memoirs, and letters of established writers, with an eye to learning aspects of craft, technique, and the creative process from a close and focused inspection of key facets of their works and lives. Areas of study will vary from semester to semester, but will include close textual reading and practice in both creative and expository writing. Every spring. Cr 3.

**ENG 300 Fiction Writing**
A course for those who, in a creative writing course or on their own, have written several pieces of fiction and are ready for more advanced work. Emphasis will be on writing well-developed short stories and on understanding the basic elements of fiction. A better-than-average competence in using English is required. Prerequisite: ENG 201. Every spring. Cr 3.

**ENG 301 Poetry Writing**
A course for those who, in a creative writing course or on their own, have developed basic skills of reading and revising poetry, and who are
interested in developing a sense of how poetry has been written in the past by major poets and how it is being created in the present. Emphasis will be on imitation of past and present writers, exercises that stress the elements of poetry, and the development of personal approaches. Prerequisite: ENG 201. Every fall. Cr 3.

ENG 302 Fiction Workshop
An advanced course requiring the completion of at least two short stories or a substantial part of a novel. Prerequisites: ENG 300 or instructor's permission. May be repeated for three additional credits with instructor's permission. Every fall. Cr 3.

ENG 303 Poetry Workshop
A course for advanced students who, after experimenting with different approaches and styles, are developing their own themes and voices as poets. Work toward a completed chapbook-length manuscript or portfolio of poems will be the basis for the course grade. Prerequisite: ENG 301 or instructor's permission. May be repeated for three additional credits with instructor's permission. Every spring. Cr 3.

ENG 304 Advanced Memoir
This course offers orientation and practice in the fundamentals of narrative autobiographical writing. We focus on the use of memory—key scenes, remembered characters, and evocative seasons of life—as source material for the writing of personal essays and autobiographical stories. We work with prose narrative material only (prose material that tells a story, as opposed to analytical essays or expository articles), and the boundaries between fact and invention in this course will necessarily sometimes blur. Readings will be drawn from the works of contemporary writers prominent in the field, from period journals and diaries, and from texts on memoir as a literary genre. May be repeated for three additional credits with instructor's permission. Prerequisite: ENG 202 or permission. Cr 3.

ENG 305 Rhetoric, Syntax, and Style
The course focuses on the fundamentals of sentence-level writing, teaching students the possibilities of English style both for their own prose and for textual analysis. By examining contemporary texts in the context of traditions of rhetoric, students will develop a theoretical grasp of rhetoric, syntax, and style as a basis for editing and revision. Cr 3.

ENG 306 Writing the Novel
This course offers instruction in the preliminary stages of writing a novel, including the uses of synopsis outlines, building well-developed scenes, and experimenting with style, narrative voice, and point of view. Work in class will involve lectures on craft, the critique of student work, and discussions of published texts. Using an expanding synopsis outline, students will produce 50 pages of revised work. Prerequisites: ENG 302 preferred; permission of instructor. May be repeated for three additional credits with instructor's permission. Variable cycle. Cr 3.

ENG 309 Newswriting
This course covers the basics of news-story writing for the print media with intensive practice in news gathering, background research, interviewing, covering a beat, covering social and political issues, and consideration of ethical and legal issues related to American journalism. Every fall. Cr 3.

ENG 400 Independent Study in Creative or Expository Writing
By instructor's permission. See Department for application form. Cr var.

ENG 401 Writing Minor Thesis
The student, working in collaboration with a faculty advisor, produces a thesis of 10—15 poems or 25—50 pages of fiction or non-fiction. The thesis may be multi-genre, by the student's choice. Prerequisites: ENG 302, 303, 304, or 306. Cr. 1.

ENG 409 Internship in Professional Writing
By application to the Department and arrangement with campus or local newspaper or journal. Prerequisite: ENG 309 or 310, or permission of the Department. Every semester. Cr var.

ENG 410 Independent Study in Journalism
By instructor's permission. See Department for application form. Cr var.

ENG 411 Seminar in Journalism
Fulfills the general education capstone requirement. Students should consult the Department's Course Guide for detailed descriptions. Prerequisite: 36 credit hours in English, including ENG 245 or permission of the instructor. Cr 3.

Interdisciplinary and Cultural Studies

ENG 244 Introduction to Cultural Studies
This course introduces students to the history, concepts, and methods of cultural studies. Students will read a variety of critical texts from a number of different theoretical perspectives, including semiotics, Marxist theory, psychoanalytic theory, gender studies, and cultural anthropology, and will also read selected texts from specific areas of cultural analysis, such as television studies or film theory. The course examines specific aspects of past or present popular cultures. Every semester. Cr 3.
ENG 310 Topics in Journalism
Under this rubric the English Department will offer a variety of advanced courses which have journalistic writing as a major component of the course work. Topics include American culture and world communication, and the right to privacy. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Prerequisite: ENG 309. Cr 3.

ENG 344 Sex/Gender and Sexuality
This course will investigate sex/gender and sexuality as analytic categories for understanding culture. Through a consideration of both history and theory, the course will explore different models for understanding sex/gender and sexuality, including their interaction with other categories of difference such as race and class. It will also explore the effect of these models on our understanding of literature, mass culture, theories of identity, and contemporary social life. Every spring. Cr 3.

ENG 345 Racial Formations
Guided by the concept of "racial formations," this course will foreground the definition of "race." It will ask questions about whether race is a biological or discursive category, about the relationship between race and identity, and about how racial identity is informed by class, gender, sexuality, and other socio-historical "formations." Course materials may include literature, film, criticism and theory, scientific and historical readings, and popular culture texts such as television, video, and music. Variable cycle. Cr 3.

ENG 346 Language, Literature and the Politics of Identity in Contemporary Ireland
An examination of the relations among literature, language and the politics of identity in Ireland today. Readings will include political, historical, and cultural materials from various communities of discourse competing to shape Irish identity for the twenty-first century, including traditional republicanism and unionism, new nationalism, historical revisionism, feminism, and consumer capitalism. Variable cycle. Cr 3.

ENG 347 Topics in Cultural Studies
This course explores specific cultural practices of the past and present. The goal of the course is to introduce students to the different ways in which popular culture has been analyzed and the ways in which different popular cultures have sustained themselves. Although topics courses will vary in subject matter, they will all share the common objective of examining the ways in which a given culture makes sense of itself. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

ENG 348 Topics in Interdisciplinary Studies
This course investigates literature in relation to other disciplines, with an emphasis on how various fields of knowledge contextualize and elucidate our understanding of literary production. Topics may vary and include, for example, anthropology and drama, Freud and literature, literature and technology, and parallel movements in art and/or music and literature. Because of the diverse range of interdisciplinary studies, material is drawn from film, video, music, and art, as well as from printed texts. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

ENG 444 Independent Study in Interdisciplinary and Cultural Studies
By instructor's permission. See Department for application form. Cr var.

ENG 445 Seminar in Interdisciplinary and Cultural Studies
Fulfills the general education capstone requirement. Students should consult the Department's Course Guide for detailed descriptions. Prerequisite: 36 credit hours in English, including ENG 245 or permission of the instructor. Cr 3.

Historical—Ancient and Biblical

ENG 315 Ancient Literature
The course will vary between being focused on Greek and Roman literature and on literatures outside the Mediterranean/Aegean ancient world. Every fall. Cr 3.

ENG 316 The Bible
The Bible, arguably the single most influential work (or group of works) in Western culture, will be studied as a literary text, with emphasis on selected books that have had the greatest literary influence, including Genesis, Exodus, Psalms, Job, and the Gospels. The course may also discuss the history of the texts, problems of translation, and/or influence. Variable cycle. Cr 3.

ENG 317 Studies in Ancient and Biblical Literature and Culture
Some topics studied in this course take a comparative approach to ancient and biblical literatures, including that of the Graeco-Roman civilization, but are not limited to classical texts. Other topics take a more narrow approach and may involve combined studies of ancient and/or biblical literature and the culture of a later period. Possible topics include "The Late Classical Era through Christian Antiquity," "The Bible and Early Western Literatures and Cultures," "Women Writers of Antiquity," and "Images of Women in Ancient Literature." May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

ENG 415 Independent Study in Ancient and Biblical Literature and Culture
By instructor's permission. See Department for application form. Cr var.
**Historical—Medieval**

**ENG 320 Continental Literature**
Readings in major works from the Middle Ages through the sixteenth century. Texts typically include some or all of the following: Augustine's *Confessions*, Boccaccio's *Decameron*, Petrarch's *Sonnets*, Dante's *Divine Comedy*, Machiavelli's *The Prince*, Marguerite de Navarre's *Heptameron*, Montaigne's *Essays*. All texts are read in modern translations. Variable cycle. Cr 3.

**ENG 325 Epic and Romance**
This course will focus on the emergence and development of Epic and Romance. Possible topics include "the Epic," "Arthurian Romance," and "Medieval Epic and Romance." The course may be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Variable cycle. Cr 3.

**ENG 350 Medieval English Literature**
A survey of genres popular from the twelfth to the fifteenth centuries (including debates, lyrics, romances, allegories, drama), with emphasis on literature of fourteenth-century England. Major readings will typically include Chaucer's *Troilus, The Pearl*, and *Sir Gawain and the Green Knight*. Variable cycle. Cr 3.

**ENG 351 Chaucer and the Medieval World**
An exploration of Chaucer's historical, philosophical, and literary world through his major comic narrative, *Canterbury Tales*. Variable cycle. Cr 3.

**ENG 352 Medieval Drama**
This course will introduce the theater of the medieval world, which ranges from the liturgical, ritual drama of the church, to the morality plays—performed by traveling companies—and the mystery cycles, produced by civic and guild pride in the fifteenth century. Tudor plays of the early sixteenth century may also be read. Attention will be paid to the aesthetic and theological principles underlying the conjunction of farce and high seriousness in the plays, as well as to distinctly medieval techniques of staging and production. Variable cycle. Cr 3.

**ENG 353 Medieval Women Writers**
The course focuses on women writing in various discursive milieux during the long period between the third and the sixteenth centuries. Writers include literate nuns, female courtly love lyricists, laywomen mystics, the first professional woman writer Christine de Pizan, and women dramatists. Non-English texts will be read in modern translation. Variable cycle. Cr 3.

**ENG 354 Studies in Medieval Literature and Culture**
This course explores literature and culture ranging from the fifth and sixth centuries through the late fifteenth century. Some topics that may recur include Anglo-Latin and Anglo-French literature and scholarship; feminist studies of medieval culture; and allegory, symbol, and sign. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

**ENG 450 Independent Study in Medieval Studies**
By instructor's permission. See Department for application form. Cr var.

**ENG 451 Seminar in Medieval Studies**
Fulfills the general education capstone requirement. Students should consult the Department's Course Guide for detailed descriptions. Prerequisite: 36 credit hours in English, including ENG 245 or permission of the instructor. Cr 3.

**Historical—Renaissance**

**ENG 355 English Renaissance Literature and Culture**
A survey of major genres and writers of the English Renaissance. The course is concerned with the historical context of the production and reception of Renaissance texts. Emphasis is on how sixteenth and seventeenth century innovations in formal techniques are related to cultural and institutional change. Typical writers will include More, Spenser, Marlowe, Wroth, Sidney, Shakespeare, Lanier, Donne, and Milton. Topics and issues covered include gender and the erotic, humanism and power, religion, imperialism, social hierarchy, and notions of selfhood. Every fall. Cr 3.

**ENG 357 Elizabethan and Jacobean Drama**
A study of selected plays from the English Renaissance. The course may focus on a particular theme, genre, sociopolitical issue, or author. Typical topics include theater and the state, unruly women, magic and witchcraft, the construction of the “other,” and rebellion. Playwrights typically included are Kyd, Marlowe, Dekker, Webster, Middleton, and Jonson. Variable cycle. Cr 3.

**ENG 360, 361 Shakespeare**
ENG 360 and 361 each feature close reading of five to seven Shakespearean plays, and focus attention both on theatrical and philosophical meanings. Both courses include tragedies and comedies; neither is introductory nor prerequisite to the other. ENG 360 often includes a section on Shakespeare's history plays, while ENG 361 includes a section on Shakespeare's "romances." Every semester. Cr 3.
ENG 362 Studies in Shakespeare
An advanced course in Shakespeare that emphasizes the application of various critical and scholarly approaches to important aspects of the poet and dramatist's work. Typical subjects include allegorical elements in Shakespeare's plays; Shakespeare and the daemonic; Shakespeare and computers; Shakespeare and popular culture; Shakespeare, theater, and the state; Shakespeare's sources; Shakespeare, gender, and sexuality. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

ENG 363 Studies in the Renaissance
Selected topics and writers from the sixteenth and seventeenth centuries. The course may focus on an author, genre, historical moment, socio-historical problem, or discursive practice. Typical topics include popular culture, the "New Science," pastoral and politics, literature of "New World" exploration and colonization, the market, the English Civil War. Courses will typically study the relation of diverse practices of writing or generic conventions to the social and political order of Renaissance England. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

ENG 455 Independent Study in the Renaissance
By instructor's permission. See Department for application form. Cr var.

ENG 456 Seminar in the Renaissance
Fulfills the general education capstone requirement. Students should consult the Department's Course Guide for detailed descriptions. Prerequisite: 36 credit hours in English, including ENG 245 or permission of the instructor. Cr 3.

Historical—Eighteenth Century

ENG 370 Literature of Discovery, Exploration, and Colonialism
Focusing upon literatures of the Atlantic, this course examines literary, historical, and discursive connections between European, Creole, and indigenous cultures in the early period of European expansion. Topics to be explored include the commercial, religious, and scientific origins of European exploration, "New World" representations, and the social organization of colonialism. Because area of inquiry will be determined by the instructor, this course may also satisfy the Renaissance requirement. Students should consult the Department's Course Guide for specific descriptions. Variable cycle. Cr 3.

ENG 379 Earlier Women Writers
This course focuses upon the efforts of women writers in the early modern period to create, negotiate, and contest the terms of a developing literary culture. Depending on content, which varies, ENG 379 may also satisfy the Renaissance or nineteenth-century category requirement. In all cases, instructors will attend to the successes and limitations of gender as a category of analysis. Students should consult the Department's Course Guide for detailed descriptions. Variable cycle. Cr 3.

Historical—Eighteenth Century American Literature

ENG 367 Literature and Culture of the Early Republic
Focusing upon representative early American texts, this course considers questions of revolution, the transition from colonialism, emergent nationalisms, and constructions of citizenship within the context of the American War for Independence and the ensuing years of the Early Republic. Variable cycle. Cr 3.

ENG 368 Studies in Eighteenth-Century American Literature and Culture
More specialized than ENG 367, this course offers the opportunity for intensive focus upon a single genre, author, issue, or historical moment, to be determined by the instructor. Typical topics include science in/and the New World, American nationalisms, the rise of slavery in the colonies, witchcraft and public order, the French Revolution in America, The Great Awakening and women's public life, and colonial autobiography before Franklin. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

Historical—Eighteenth Century British Literature

ENG 365 Restoration and Eighteenth-Century Literature and Culture
Focusing mostly upon representative or canonical texts, this is a multi-generic course intended to provide an overview of British literature and culture in the "long" eighteenth century, 1660-1800. Readings will be organized around several of the following cultural and historical issues: political and religious controversies; the role of science and experimentation; the creation of the literary professional; women and the domestic sphere; the growth of the British Empire. Critical and theoretical texts may accompany literary readings. Every fall. Cr 3.

ENG 366 Studies in the Restoration and Eighteenth Century
More specialized than ENG 365, this course offers the opportunity for intensive focus upon a single genre, author, issue, or historical moment to be determined by the instructor. Typical topics include satire and the politics of "wit," the cult of sensibility, theater and anti-theatricality, the eighteenth-century long poem, and seduction and the scandalous memoir. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

ENG 369 Emergence of the Novel

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The course explores the emergence of the novel as a new literary mode, one both dependent upon and distinguishable from the kinds of prose narrative which are usually described as its origins: journalism, scandalous memoirs, Puritan autobiographies, conduct books, etc. Variable cycle. Cr 3.

**ENG 465 Independent Study in the Eighteenth Century**
By instructor's permission. See Department for application form. Cr var.

**ENG 466 Seminar in the Eighteenth Century**
Fulfills the general education capstone requirement. Students should consult the Department's Course Guide for detailed descriptions. Prerequisite: 36 credit hours in English, including ENG 245 or permission of the instructor. Cr 3.

**Historical—Nineteenth Century American Literature**

**ENG 380 Early Nineteenth-Century American Literature and Culture**
The literature and culture of the United States to the Civil War. While particular writers, works, and theoretical emphases may vary with the instructor, the course will consider historical context and may include canonical and non-canonical texts in a variety of literary and cultural forms: long and short fiction, poetry and song, non-fiction essays, slave narratives, political pamphlets and journalism, and paintings. Possible topics include the growth of female authorship; social reform movements; and the formation and interpretation of the American literary canon. Variable cycle. Cr 3.

**ENG 382 The Earlier American Novel**
The American novel to 1900 with attention to historical context, generic development, and thematic connections between texts. The course may include various types of novels, such as epistolary, gothic, romance, domestic, and realist, as well as canonical and non-canonical writers. Critical and theoretical texts may accompany literary readings. Variable cycle. Cr 3.

**ENG 383 Studies in African-American Literature and Culture**
This course will explore various topics in African-American literature and culture. Specific courses may focus on literary traditions, genres, and themes; literary and cultural periods or movements; theoretical issues in the development or study of African-American literature; or the work of a single author. Possible topics include the slave narrative, African-American non-fiction prose, the Harlem Renaissance, the Black Arts Movement, African-American women's writing, African-American literary and cultural theory, Black popular culture. Because reading materials and areas of inquiry will be determined by the instructor, this course may also satisfy the Literatures Since 1900 requirement. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Every year. Cr 3.

**ENG 384 Late Nineteenth-Century American Literature and Culture**
This course covers the historical period associated with the rise of realism and naturalism in American literature that is traditionally marked by the end of the Civil War and the beginning of World War I. While the course's focus may vary, it will explore the definitions of realism and naturalism with regard to both historical context and aesthetic agendas. In testing definitions of American realism and naturalism, the course may ask questions about whose reality, whose America, and whose intellectual and cultural traditions have shaped our understanding of the literary movements that arose in response to major changes in American society during the late nineteenth and early twentieth centuries. Variable cycle. Cr 3.

**ENG 385 Studies in Nineteenth-Century American Literature and Culture**
Specific themes, works, or writers prominent in nineteenth-century American literature and culture. The course may focus on a particular literary tradition, genre, or theme; a literary and cultural movement; a theoretical issue in the development or study of nineteenth-century American literature; or the work of a single author. Possible topics include slavery and abolition in American literature, nineteenth-century popular culture, the domestic novel, American Renaissance, and Whitman and Dickinson. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

**Historical—Nineteenth Century British Literature**

**ENG 371 Romantic Writing**

**ENG 373 Studies in Romantic Literature and Culture**
The course will explore themes and issues unique to the Romantic Period, a time of unprecedented change in literature, the arts, and society. Although the content of the course will vary, it will generally include a mixture of literary and cultural forms, including poetry, fiction, nonfictional prose, painting, and drama. Possible themes will include women and Romanticism; Romantic writing and the French Revolution; Romanticism and popular culture; forms of Romantic autobiography; Romantic fiction. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.
A study of the canonical novels produced during the nineteenth century, including texts by the Brontes, Dickens, Thackeray, George Eliot, and Hardy. The course will examine narrative forms, narrators and narratees, plots and stories; cultural forms such as the literary pen name; the material production of books, serials, and newspaper stories; the cultural predominance of fiction during the period; the cultural production of subjectivity and readership; and the uses and readings of history in fiction. Variable cycle. Cr 3.

ENG 376 Victorian Literature and Culture
Victorian writing, including poetry, novels, plays, autobiography, and non-fiction by writers such as the Brontes, the Brownings, Carlyle, Dickens, George Eliot, Elizabeth Gaskell, George Gissing, Thomas Hardy, Hopkins, John Stuart Mill, the Rossettis and the pre-Raphaelites, Ruskin, Pater, Tennyson, Wilde. Readings will be organized around several of the following Victorian intellectual, ideological, and cultural issues: the relation of Victorianism to neo-classicism, Romanticism, and modernism; the situation of women; theories of gender and sexuality; industrialism; materialism; aestheticism; decadence; scientific and religious controversies; the emergence of psychoanalysis. Variable cycle. Cr 3.

ENG 377 Studies in Nineteenth-Century British Literature and Culture
Topics will vary from semester to semester. Sample topics include: Fin de Siecle Literature and Culture; Nineteenth Century Intellectual History and Culture (e.g., Wollstonecraft, John Stuart Mill, Darwin, Marx, Nietzsche, Freud); Victorian Poetry and the Visual Arts; 19th-Century Psychology and Culture; Contemporary Film Appropriations of Victorian Fiction. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

ENG 475 Independent Study in the Nineteenth Century
By instructor's permission. See Department for application form. Cr var.

ENG 476 Seminar in Nineteenth-Century Studies
Fulfills the general education capstone requirement. Students should consult the Department's Course Guide for detailed descriptions. Prerequisite: 36 credit hours in English, including ENG 245 or permission of the instructor. Cr 3.

Literatures Since 1900

ENG 387 Women Writers Since 1900
This course introduces students to the diverse concerns of modern and contemporary women writers. It could be organized around a thematic, theoretical, or historical question or could be devoted to two or three figures. It may include writers from First and Third world countries, immigrant writers, and writers of the African Diaspora. Every year, spring. Cr 3.

American Literature Since 1900

ENG 391 American Poetry Since 1900
This course will focus on American poetry written since 1900. While primary texts and historical or theoretical emphases will vary with the semester, the course will consider poetic forms and strategies, and relations to literary modernism and to American thematics and traditions. In most semesters, the course will focus on three or four major poets, examining their poetry against a broader poetic and historical context. Variable cycle. Cr 3.

ENG 393 The American Novel Since 1900
This course will study various types of novels (such as the realist novel, the social protest novel, the modernist novel, the Gothic novel, and the autobiographical novel) with attention to social and historical contexts and to thematic connections between texts. It is not purely a survey of "Great American Novels," but may include both canonical and non-canonical writers. Critical and theoretical texts may accompany literary readings. Variable cycle. Cr 3.

ENG 394 Studies in American Literature and Culture Since 1900
This course will be organized around different literary periods, geographical regions, fields of study, and intellectual and cultural movements. Possible topics include the Harlem Renaissance, literature and the left, literature of new social movements (Black power, feminism, lesbian and gay rights), youth cultures, the Vietnam era, immigrant writers, American Indian writers, southern writers, Caribbean writers in the USA, and Maine writers. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

British Literature Since 1900

ENG 390 British Poetry Since 1900
This course will focus on poetry written in Britain since 1900, with emphases on such questions as the development of modernism, poetic forms and strategies, links to political and cultural developments, and new forms and strategies after modernism. The course will usually focus on three or four specific poets read against a broader poetic and historical context. Poets may include T. S. Eliot, Hugh MacDiarmid, D. H. Lawrence, Stevie Smith, Liz Lochhead, Maeve McGuickian, or writers associated with the "New British Poetries." Variable cycle. Cr 3.

ENG 392 British Novel Since 1900
This course will focus primarily on novels written with reference to the British literary tradition of the twentieth century, exhibiting the stylistic and thematic concerns associated with literary impressionism, and early and late modernism, by such writers as Joseph Conrad, Ford Madox

**ENG 398 Studies in British Literature and Culture Since 1900**
This course will focus on the interrelated literatures of Britain's distinctive cultures in England, Scotland, Wales and Northern Ireland. It will be organized around different literary periods, cultures, theoretical and historical emphases and social movements. Possible topics include British modernism, the Scottish Renaissance, race and writing in Britain, writing and nationalism. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

**Other National Literatures Since 1900**

**ENG 324 Studies in Canadian Literature and Culture**
This course offers students an in-depth study of specific regional, cultural, or political developments in Canadian literature and film. Students may investigate the works of ethnic minorities, women, or particular authors. They may also focus on formative historical periods in the social development of Canada and the literature these periods have inspired (e.g. Quebec literature, literature of the Great Depression). May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

**ENG 395 Irish Literature and Culture**
Irish literature in English and Irish culture will be studied in relation to three phases in the political and cultural development of Ireland as a nation: 1) the period of Irish nationalism prior to independence in 1922; 2) the formative years of nation building and its myth-making from independence to 1960; 3) 1960 to the present. Variable cycle. Cr 3.

**ENG 396 James Joyce**
An examination of Joyce's major texts, including *Dubliners, A Portrait of the Artist as a Young Man, Ulysses*, and selections from *Finnegans Wake*. Emphasis will be on *Ulysses*. The course also will include relevant biographical, critical and contextual material. Variable cycle. Cr 3.

**ENG 397 Studies in Irish Literature and Culture**
Topics in Irish literature and culture, often set in the context of Irish history and politics. Sample topics include: Irish drama, Irish film, Yeats and Joyce, Joyce and Beckett, and women and Irish culture. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

**International Literature Since 1900**

**ENG 321 Modernisms**
This course will focus on some aspect or aspects of American, British, Continental, and international literary modernisms. Students should expect to explore writing from the first half of the twentieth century and to investigate issues of literary innovation, modernity and historical change, self-understandings as "modern," competing literary versions of modernism, and theoretical/historical versions of modernism. Variable cycle. Cr 3.

**ENG 322 Modern Autobiography**
The concept of the self has undergone critical changes in the history of autobiography. Many modern autobiographical writers have completely dispensed with traditional notions of the self, expanding the genre and giving it a strong literary focus. By comparing a selection of autobiographical texts by modern authors such as Rilke, Stein, Barthes, and H. D. with more traditional forms of autobiography, the course investigates the historical vicissitudes in the conceptualization of a "self." Variable cycle. Cr 3.

**ENG 326 Studies in International Literature Since 1900**
Literature since 1900 has become increasingly international especially because of expanded availability of translated texts. This course explores topics in literature that are international in scope whether through specific influences or in response to historical, philosophical, political, and aesthetic developments. Although the range and focus of the course will vary, topics will include studies in Commonwealth and European literatures as well as literatures of specific regions such as Africa, the Caribbean, South America. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

**ENG 327 Modern Short Story: Themes and Methods**
Detailed consideration of from six to ten short story collections reflecting contemporary themes and narrative methods. Although selections will vary, the recent reading list has included Jorge Luis Borges, Franz Kafka, Anton Chekhov, James Joyce, Thomas Mann, Virginia Woolf, Isaac Babel, Grace Paley, Flannery O'Connor, Katherine Anne Porter, and Zora Neale Hurston. A necessarily wide range of themes is confronted: the corruption of reality by dream; personal inadequacy, alienation, and paranoia; self-deceit; varieties of ignorance and cowardice; the moral insight afforded the artist; violence as a mode of self-discovery. Prerequisite: junior class standing or permission of the instructor. Variable cycle. Cr 3.

**ENG 328 Modern Novel: Themes and Methods**
Works by six or more distinguished novelists expressing contemporary subject matter and technique. Among representative themes students will consider those of dream and illusion, revolution and personal revolt, alienation and anxiety, crime and self-assertion; among narrative techniques, ellipsis and adaptations of stream-of-consciousness. The list of novelists will vary, but recent assignments include Knut Hamsun, Franz Kafka, Thomas Mann, Herman Hesse, Andre Malraux, D. H. Lawrence, James Joyce, Christina Stead, Virginia Woolf, Rebecca West, and Djuna Barnes.
Prerequisite: junior class standing or permission of the instructor. Variable cycle. Cr 3.

ENG 329 Modern Drama
A survey of modern English and Continental dramatists who have had a revolutionary impact on the modern theater. Authors to be considered might include Buchner, Strindberg, Ibsen, Pirandello, Brecht, Ionesco, Beckett, Pinter, Fornes, Churchill, and Norman. The course will emphasize the experience of drama as much as possible by viewing video productions of several plays. Variable cycle. Cr 3.

ENG 490 Independent Study in Literature Since 1900
By instructor's permission. See Department for application form. Cr var.

ENG 491 Seminar in Literature Since 1900
Fulfills the general education capstone requirement. Students should consult the Department's Course Guide for detailed descriptions. Prerequisite: 36 credit hours in English, including ENG 245 or permission of the instructor. Cr 3.

Approved Electives
Up to six credit hours of specific approved courses offered by other departments and programs may be applied toward English major elective credit. Consult the English Department coordinator of advising for the list of approved courses.

Experimental Courses
Occasionally the English Department offers special courses not listed individually in the catalog. They appear in the current Schedule of Courses under the designation 199, 299, 399, or 499. Such courses will usually be experimental: pursuing original research, testing new alignments of figures or materials, or trying out courses before including them in the Department curriculum.
History Major

History Overview

Professors: Albee, Carey; Associate Professors: Bischof, Eagan, Johnson, Tuchinsky, Whitmore, Zhao; Assistant Professors: Rowe; Associate Professor Tuchinsky and Full Professor Carey are serving as Associate Deans of the College of Arts, Humanities, and Social Sciences. Professors Emeriti: Albee, Cole, Holden.

With a synergy of two close disciplines, the History Program and the Political Science program have joined together into the same department to expand their curriculum and course offerings to their students. The department offers two distinct majors: a B.A. degree in History and a B.A. degree in Political Science. The two programs deliver a variety of courses, often interconnected, that are of interest to students in both majors.

Additionally, the faculties in the department offer a minor in History and a minor in Political Science. It is common for a student majoring in one program to be able to quickly add a minor in the other program, as there is a well-coordinated schedule of classes that allow students to maximize their studies and earn their degrees in a more effective manner.

History, as a discipline and intellectual field, embraces all past human activity: there is no phenomenon without history. Historians apply various methodologies to discover and organize facts about people and events and to create from them meaningful explanations and narratives. History itself changes: through recognition of diversity, use of new technology, and focus on new questions. One is: “Whose History is this, anyway?”

Through a series of introductory and advanced courses, history majors become familiar with past knowledge, the forces of change, and the varieties of historical scholarship dealing with societies and cultures throughout the world. They also learn to collect, evaluate, organize, and interpret evidence, and to present it in oral, written, and digital forms. Students with grounding in historical knowledge possess the central core of an excellent liberal arts education. The curriculum provides a basis for active citizenship, as well as for graduate schools, and employment. History majors are prepared for jobs in teaching, public history, journalism, numerous other professions such as law, and public and private positions requiring research, writing, oral expression and critical thinking skills.

BA in History - History/Social Sciences Teacher Education K-8 Certification Track

Description

See Program Requirements

Program Requirements

The curriculum for this track of the history degree is designed to provide prospective K-8 teachers a strong academic foundation in History and Social Studies along with a thorough interdisciplinary education in math, science, and English language and literature. The curriculum also offers a continuous focus on both the theory and practice of teaching through a sequence of pre-internship education courses and field experiences.

Students completing the 120-hour degree will have satisfied the USM Core Curriculum and the History Major as well as liberal arts courses required for initial K-8 teacher certification. Graduates are eligible for recommendation for K-8 teacher certification in Maine.

USM Core Curriculum (including pre-internship education courses):

- EYE 108-Culture, Identity and Education (recommended) (3 cr)
- EDU 100 Exploring Teaching (recommended) (3 cr)
- College Writing-ENG 100 (3 cr)
- Cultural Interpretation-ENG 145 (3 cr)
- Quantitative Reasoning- MAT 120 (4 cr)
- Creative Expression (3 cr)
- Socio-Cultural Analysis- HRD/SBS 200: Multicultural Human Development (3 cr)
- Science Exploration- (4 cr)
- Ethical Inquiry- EDU 310: Purpose of Schooling in a Democracy recommended (3 cr)
- Diversity (3 cr)
- International (3 cr)
- Cluster:
  - EDU 305: Foundations of Cultural and Linguistic Diversity
  - SED 335: Students with Exceptionalities in General Education
  - SED 420: Multi-Tiered Systems of Educational Support (9 cr)

### Liberal Arts Certification Requirements:

(Note: Through the Core Curriculum and the major, students meet the minimum English and Social Studies credits required for State certification at the elementary level.)

- English—Through the Core Curriculum, students meet the minimum credits required for State certification at the elementary level. (6 cr)
  - ENG 305 is also recommended.
- Science—Students must take one lab science in addition to Science Exploration. (6 cr)
- Social Studies—Through the major the students become highly qualified to teach middle level social studies.

### History/Social Studies Major Requirements:

- European History (6 credits)
  - HTY 101 and 102
  - (Students may substitute a World History survey for this requirement.)
- United States History and Government (9 credits)
  - HTY 121, 122, 123 (choose two)
  - POS 101
- Geography (3 credits)
  - GEO 101 or 120
- Diversity/International Requirement (6 credits)
  - POS 104, 205; ANT 220, 222; HTY 141, 142, 152, 171, 172, 181, 182 (choose two)
- Methods (3 credits)
  - HTY 200
- Electives (9 credits)
  - Choose three from the following:
    - Any HTY 300-level course
    - POS 261, 262, 392, 393, 463
  - Capstone (3 cr)
    - HTY 400

### Professional Education Internship Year Requirements (30 cr)

- EDU 452 Teaching Science K-8 (3 cr)
- MME 405 Teaching Mathematics K-8 (3 cr)
- EDU 451 Teaching Social Studies K-8 (3 cr)
- EDU 565 Teaching Reading (3 cr)
- EDU 566 Introduction to the Writing Process (3 cr)
- EDU 441 Seminar in Teaching and Learning I (3 cr)
- EDU 442 Seminar in Teaching and Learning II (3 cr)
- EDU 324 Student Teaching (9 cr)

### Electives:

Students must complete elective credit to complete the 120 credit hour degree. For those students interested in teaching at the middle level, it is recommended that they complete coursework in a second content area (e.g., English, mathematics, science) to become highly qualified to teach that content area in addition to social studies. Those students interested in teaching high school social studies may want to use their elective credits to bolster their content knowledge in the following social studies disciplines: anthropology, economics, geography, or political science. Finally, students should consider taking education courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

### Other Requirements:

Acceptance into the Bachelor of Arts in History/Social Studies K-8 Teacher Certification Track is contingent upon admission to USM and successful completion of the University's writing and mathematics proficiency requirements. Other acceptance criteria include a minimum 3.0
GPA and experience working with children. No more than 60 credits can be transferred into the program.

Students must maintain a high level of academic achievement. Minimum academic requirements to remain in the program are as follows:

- A grade of C or better in all University Core and major coursework.
- A grade of B or better in all professional education coursework.
- An overall GPA of 3.00 or better.

Prior to admission to the professional internship year, students must pass the Praxis I and II exams and demonstrate satisfactory progress toward the State of Maine Core Teaching Standards.

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: [http://www.maine.gov/doe/cert/fingerprinting/](http://www.maine.gov/doe/cert/fingerprinting/)

All students must formally declare their entry into a teacher certification concentration by completing the declaration procedures found on the Office of Educator Preparation web site at [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation). Passing Praxis I scores, subscription to Tk20, and two recommendation forms are necessary to complete the declaration process.

**Tk20 Subscription:**

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of the costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation website: [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation)

Professional Education Council Policy: In order for USM's Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed within the context of the Unit's data management system (i.e. Tk20).

Students who fail to meet any of the academic or professional requirements of this track of the major must withdraw from this track, though they may still complete all requirements for the B.A. in History without certification.

**BA in History - History/Social Studies Education 7-12 Teacher Certification Track**

**Description**

See Program Requirements

**Program Requirements**

The curriculum for this track of the history degree is designed to provide prospective 7-12 teachers a strong academic foundation in History and Social Studies along with a continuous focus on both the theory and practice of teaching through a sequence of pre-internship education courses and field experiences.

Students completing the 120-hour degree will have satisfied the USM Core Curriculum and the History Major. Graduates are eligible for recommendation for 7-12 teacher certification in Maine.

**USM Core Curriculum (including pre-internship education courses):**

- EYE 108-Culture, Identity and Education (recommended) (3 cr)
- EDU 100 Exploring Teaching (recommended) (3 cr)
- College Writing-ENG 100 (3 cr)
- Cultural Interpretation (3 cr)
History/Social Studies Major Requirements: (39 cr)

Field I
- HTY 101 Western Civilization I
- HTY 102 Western Civilization II

Field II (complete one of the following pairings)
- HTY 121 and one other: HTY 122, 123, or 142
- HTY 122 and one other: HTY 121, 123, 141, or 142
- HTY 123 and one other: HTY 121, 122, or 141
- HTY 141 and one other: HTY 122, 123, or 142
- HTY 142 and one other: HTY 121, 122, or 141

Field III (select two)
- HTY 152 The Islamic Near East
- HTY 171 Traditional East Asia
- HTY 172 Modern East Asia
- HTY 181 Latin America I
- HTY 182 Latin America II

Research methods course
- HTY 200 Reference, Research, and Report Writing

Elective advanced history courses
- Select five 303-399 level courses in consultation with your major advisor.
- The Department of History will occasionally double-list upper-level courses from other departments. History majors may count only one course offered by another department and double-listed as a history course as fulfilling a history major requirement.

Capstone
- HTY 400 Senior Seminar

Foreign Language/Foreign Culture Requirement

This requirement can be fulfilled in several ways: by achieving a grade of at least C- in the final semester of an intermediate-level course or by examination, or by achieving a grade of at least C- in the final semester of a beginning-level course or by examination, together with either approved international programs and study abroad experiences or approved other upper-level courses. Students majoring in History must accomplish one of the following, and must consult with their advisor about these options.

- Completion of one of the following courses at USM with a grade of at least C- fulfills the language requirement:
  - American Sign Language: ASL 202 (Intermediate American Sign Language)
  - French: FRE 202 (Intermediate French II) or FRE 207 (Intensive Intermediate French) or FRE 206 (Reading French II)
  - German: GER 202 (Intermediate German II) or GER 206 (Reading German II)
  - Greek: GRE 251 (Introduction to Greek Literature I)
  - Latin: LAT 251 (Introduction to Latin Literature I)
  - Russian: RUS 202 (Intermediate Russian II)
  - Spanish: SPA 202 (Intermediate Spanish II) or SPA 207 (Intensive Intermediate Spanish)

- Completion of a foreign language at the beginning level with a grade of at least C- in the final semester or the equivalent by examination, plus an approved one-semester study experience of six credit hours in a non-English-speaking country. This study must be discussed with the student's academic advisor, and be approved by the Chair of the Department of History and Political Science.

- Completion of a foreign language at the beginning level with a grade of at least C- in the final semester or the equivalent by examination, plus two additional courses or their six-credit-hour equivalent. These upper-level (300 or 400) courses may be from either the Department of History and Political Science, or from other departments, and their content must cover topics or areas of the world with a non-United States, non-European emphasis. These courses must be discussed with the student's academic advisor, and approved by the Chair of the Department of History and Political Science.

Professional Education Internship Year Requirements (18 cr)
EDU 441 Seminar in Teaching and Learning I (3 cr)
EDU 442 Seminar in Teaching and Learning II (3 cr)
EDU 404 Methods of Teaching Secondary Social Studies (3 cr)
EDU 413 Professional Internship in Secondary Education (9 cr)

Electives:

Students must complete elective credit to complete the 120 credit hour degree. For those students interested in teaching at the middle level, it is recommended that they complete coursework in a second content area (e.g., English, mathematics, science) to become highly qualified to teach that content area in addition to social studies. Those students interested in teaching high school social studies may want to use their elective credits to bolster their content knowledge in the following social studies disciplines: anthropology, economics, geography, or political science. Finally, students should consider taking education courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

Other Requirements:

Acceptance into the Bachelor of Arts in History/Social Studies 7-12 Teacher Certification Track is contingent upon admission to USM and successful completion of the University's writing and mathematics proficiency requirements. Other acceptance criteria include a minimum 3.0 GPA and experience working with children. No more than 60 credits can be transferred into the program.

Students must maintain a high level of academic achievement. Minimum academic requirements to remain in the program are as follows:

- A grade of C or better in all University Core and major coursework.
- A grade of B or better in all professional education coursework.
- An overall GPA of 3.00 or better.

Prior to admission to the professional internship year, students must pass the Praxis I and II exams and demonstrate satisfactory progress toward the State of Maine Core Teaching Standards.

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: [http://www.maine.gov/doe/cert/fingerprinting/](http://www.maine.gov/doe/cert/fingerprinting/)

All students must formally declare their entry into a teacher certification concentration by completing the declaration procedures found on the Office of Educator Preparation web site at [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation). Passing Praxis I scores, subscription to Tk20, and two recommendation forms are necessary to complete the declaration process.

Tk20 Subscription:

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation website: [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation)

Professional Education Council Policy: In order for USM's Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed within the context of the Unit's data management system (i.e. Tk20).

Students who fail to meet any of the academic or professional requirements of this track of the major must withdraw from this track, though they may still complete all requirements for the B.A. in History without certification.

BA in History

Description

History offers a major that leads to a bachelor of arts degree and a minor for students majoring in other disciplines. The major consists of 39
credit hours in history plus a foreign language requirement. The minor consists of 18 credit hours in history. In addition, the Department offers an internship program in cooperation with area historical societies, museums, libraries, and other institutions.

Majors should, after consultation with an advisor, focus at least three of their history electives (300-level courses) upon a particular country, continent, era, or theme of their choosing and select courses from other departments that complement this concentration.

College Level Equivalency Program (CLEP) examinations are available in Western Civilization and United States History. Unusually well-prepared entering students who pass one or more of these examinations may substitute 300-level course(s) for the HTY 101/102 and/or HTY 121/122/123 introductory surveys.

A history major or minor must achieve at least six credits of B or better grades in history courses. No grade of D will count toward fulfillment of a history major or minor. Majors and minors are reminded that, in addition to History requirements, they must also meet those of the University Core curriculum.

**Program Requirements**

**History Requirements**

To graduate with a bachelor of arts in history, a student must successfully complete a minimum of 39 credits in history courses as follows:

**Field I**
- HTY 101 Western Civilization I
- HTY 102 Western Civilization II

**Field II** (complete one of the following pairings)
- HTY 121 and one other: HTY 122, 123, or 142
- HTY 122 and one other: HTY 121, 123, 141, or 142
- HTY 123 and one other: HTY 121, 122, or 141
- HTY 141 and one other: HTY 122, 123, or 142
- HTY 142 and one other: HTY 121, 122, or 141

**Field III** (select two)
- HTY 152 The Islamic Near East
- HTY 171 Traditional East Asia
- HTY 172 Modern East Asia
- HTY 181 Latin America I
- HTY 182 Latin America II

Research methods course
- HTY 200 Reference, Research, and Report Writing

Elective advanced history courses

Select five 303-399 level courses in consultation with your major History advisor.

History will occasionally double-list upper-level courses from other. History majors may count only one course offered by another department and double-listed as a history course as fulfilling a history major requirement.
- HTY 400 Senior Seminar

**Foreign Language/Foreign Culture Requirement**

This requirement can be fulfilled in several ways: by achieving a grade of at least C- in the final semester of an intermediate-level course or by examination, or by achieving a grade of at least C- in the final semester of a beginning-level course or by examination, together with either approved international programs and study abroad experiences or approved other upper-level courses. Students majoring in History must accomplish one of the following, and must consult with their advisor about these options.

- Completion of one of the following courses at USM with a grade of at least C- fulfills the language requirement:
  - American Sign Language: ASL 202 (Intermediate American Sign Language)
  - French: FRE 202 (Intermediate French II) or FRE 207 (Intensive Intermediate French)
  - German: GER 202 (Intermediate German II) or GER 206 (Reading German II)
  - Greek: GRE 251 (Introduction to Greek Literature I)
Latin: LAT 251 (Introduction to Latin Literature I)
Russian: RUS 202 (Intermediate Russian II)
Spanish: SPA 202 (Intermediate Spanish II) or SPA 207 (Intensive Intermediate Spanish)

- Completion of a foreign language at the beginning level with a grade of at least C- in the final semester or the equivalent by examination, plus an approved one-semester study experience of six credit hours in a non-English-speaking country. This study must be discussed with the student's academic advisor, and be approved by the Chair of the Department of History and Political Science.
- Completion of a foreign language at the beginning level with a grade of at least C- in the final semester or the equivalent by examination, plus two additional courses or their six-credit-hour equivalent. These upper-level (300 or 400) courses may be from either the Department of History and Political Science, or from other departments, and their content must cover topics or areas of the world with a non-United States, non-European emphasis. These courses must be discussed with the student's academic advisor, and approved by the Chair of the Department of History and Political Science.

Minor in History

Description

See Program Requirements

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 18.

Requirements: six courses in History, at least four of which must be at the level of 200 and above, selected in consultation with an History faculty member and approved by the Department chair.

History Course Descriptions

The following courses are offered by the History Department.

HTY 101 Western Civilization I
A basic survey and introduction to the heritage of Western society from ancient to early-modern times. Particular attention is given to the ancient civilizations of Egypt, Greece and Rome. Medieval civilization is explored with a focus on the institutions it bequeathed to the modern world. The Renaissance and Reformation and the rise of the great nation-states are studied. Throughout the course important individuals are considered such as Alexander the Great, Caesar, Charlemagne, Michelangelo, and Elizabeth I. The course also introduces students to historical method. Cr 3. Every Fall & Spring semester.

HTY 102 Western Civilization II
A basic survey and introduction to the heritage of Western society from early modern times to the atomic age. Particular attention is given to the Enlightenment, the French Revolution, the rise of the industrial era, the growth of nationalism, and the World Wars. Personalities such as those of Napoleon, Hitler, and Stalin are studied. The course also introduces students to historical method. Cr 3. Every Fall & Spring semester.

HTY 121 United States History to 1800
A thematic treatment of the formative period of early American history from the era of European colonial expansion to the so-called Revolution of 1800. Political, social, economic, intellectual, and institutional development provides a context for addressing the peoples, personalities, and events of the colonial and early national stages of growth of the United States and its relations with the larger world. Cr 3. Every Fall & Spring semester.

HTY 122 United States History 1800 to 1900
A thematic treatment of the nineteenth-century United States and its peoples. Chronological coverage of the nation’s political, social, economic, intellectual, and institutional development provides the context for addressing the personalities and events of the country and its relations with the larger world. Cr 3. Every Fall & Spring semester.
HTY 123 United States History since 1900
A continuation of the treatment of the American people and nation extends coverage of political, social, economic, intellectual, institutional, and diplomatic development through the twentieth century. The events, issues, and peoples of the modern nation and their relation to the larger world are covered within the country’s increasing international involvement. Cr 3. Every Fall & Spring semester.

HTY 141 African American History to 1865
Topics covered in this course survey the persistence of African culture in the Americas, the Atlantic slave trade, an in-depth analysis of slavery as it impacted women and children, and the early African American voice as found in primary sources. The course will use various forms of media in instruction and research. Cr 3.

HTY 142 African American History from 1865
A continuation of HTY 141. This course will cover such topics as Black leadership, lynching, the Harlem Renaissance, African Americans abroad, civil rights, and popular culture. The course will use various forms of media in instruction and research. Cr 3.

HTY 152 The Islamic Near East
This is a basic, introductory survey of the history of the eastern Mediterranean/Near Eastern region ca. 600 C.E. to the present. The course emphasizes the origin and development of Islamic religion and the establishment, spread, and evolution of Islamic institutions in Arabia, Egypt, Mesopotamia (Iraq), Palestine-Syria, and Anatolia (Turkey). Attention is given to the historical and continuing interaction between the Islamic people of the Near East and non-Islamic people both within and without the region. Cr 3.

HTY 171 Traditional East Asia
The history and culture of China and Japan from earliest times to about 1700, with emphasis on the composition of the “traditional” societies. Cr 3. Every Fall semester.

HTY 172 Modern East Asia
China and Japan since about 1700, emphasizing contrasting moves toward modernization in two traditional societies. Cr 3. Every Spring semester.

HTY 181 Latin America I
This survey outlines the nature of the pre-Columbian Indian civilizations, their conquest by the European powers and the creation of the Hispanic and Portuguese empires in America. Cr 3. Every Fall semester.

HTY 182 Latin America II
This survey begins with the shattering of Iberian colonialism, and moves rapidly into the twentieth century. Special attention is given to Mexico, Brazil, Argentina and Cuba, and their varying solutions to the problem of national development. Cr 3. Every Spring semester.

HTY 200 Reference, Research, and Report Writing
An introduction to research and writing, designed to prepare undergraduates for the requirements of upper-level courses in history and the social sciences with emphasis on practical methods of utilizing a library, locating materials, taking and organizing notes, and writing and rewriting research papers and reports. History majors are strongly encouraged to take this course in the sophomore year, but no later than the first semester of the junior year. Preference to history majors. Prerequisite: sophomore status or permission. Cr 3. Every Fall & Spring semester.

HTY 300 History Internship
Professional experience in one of a variety of positions in public and private institutions that utilizes the knowledge and research skills of historians. Students work one day per week, keep a journal, write an evaluation, and are visited on the job by a faculty member. Open to selected students. Graded pass/fail, so does not count for major credit. Can be taken twice. Cr 3. Available every semester by Internship coordinator permission. Students should consult with Internship coordinator at least one semester prior to beginning their internship work.

HTY 303 History of the Ancient Near East and Greece
This course surveys the early history of the eastern Mediterranean region from ca. 4000 to ca. 300 B.C.E. The evolutions of Near Eastern civilizations in Mesopotamia, Egypt, Israel/Palestine, and Anatolia are examined and related to the development of Greek civilization in the Aegean area. Special attention is given throughout to social and religious issues, e.g., the early history of Judaism. Prerequisite: HTY 101 or equivalent. Cr 3.

HTY 304 History of Rome
This course surveys the political, social, and religious history of the Roman state from the eighth century B.C.E. to the fifth century C.E. Emphasis is given to the period of the Roman Republic (509-31 B.C.E.) and to the rise of Christianity within the Roman Empire. Prerequisite: HTY 101 or equivalent. Cr 3.

HTY 305 The Historical Jesus
This course is a “workshop” wherein the participants analyze and evaluate a variety of documents (both ancient and modern) which purport to describe the life and career of Jesus of Nazareth. The goal is to develop historiographical skills (including writing) as well as to illuminate the subject’s life. Cr 3.
HTY 306 Roman Sexuality and Early Christianity
This course will explore ancient Roman relations concerning human biology, sexuality, and morality; the structure and definition of “family”; the gender-conscious operation of the extended household (including slaves and free clients); and the relationship of the family to the Roman state. The primary focus is the Roman imperial period, ca. 100 B.C.E. to 300 C.E. Because this same period witnessed the origins of Christianity within the Roman Empire, the course also is concerned with Christian variations to these same issues. Cr 3.

HTY 307 Judaism, Christianity, and Islam: Origins and Interactions
This course will survey the origins, nature, and early history of the world’s three major monotheistic religions: Judaism, Christianity, and Islam. Necessarily this involves a survey of the history of the Mediterranean/Near Eastern world in which these religions first appeared and prospered. The chronological focus is ca. 600 B.C.E. to ca. 800 C.E. Cr 3.

HTY 308 Polytheists, Jews, and Christians in the Roman Empire
This course, an exploration of the nature and function of religion in human society, uses the Roman Empire as a sample environment. The course will examine these independent religious communities as well as their interactions. Cr 3.

HTY 309 Religious Violence and Persecution in Early Western History
An interdisciplinary investigation of religious violence and persecution in early Western history. The course explores why religion and violence so often seem to be connected. Accordingly, the course will explore the general nature of religion and the historical function of religion in human society. Cr 3.

HTY 311 Medieval Civilization
Europe from late antiquity through the Carolingian Empire, Islamic Empire, Byzantine Empire, Medieval Church and State, and the coming of the Renaissance and Reformation. Prerequisite: HTY 101 or permission. Cr 3.

HTY 312 Renaissance and Reformation
A study of the transformation of European society from the world of the Renaissance to the crisis of the Reformation. The course will concentrate on the development of Italian humanism and its influence on Northern Europe. The rise of the Reformation will be examined through the personalities of Martin Luther and John Calvin and the intense feelings that engendered the religious wars and the Counter Reformation. Prerequisite: HTY 101 or permission. Cr 3.

HTY 316 French Revolution and Napoleon
The course takes the French Revolution as a climax of major intellectual, political, and social trends in eighteenth-century Europe. Thorough coverage is given to the Old Regime, the Enlightenment and the influence of the American Revolution. There is in-depth analysis of the coming, course and outcome of the French Revolution itself, and its impact outside France. The Napoleonic era is handled as the culminating phase of the revolution and as a major influence on nineteenth-century Europe. Prerequisite: HTY 102 or permission. Cr 3.

HTY 317 Early Russian History
A survey of the political, social, economic, and cultural history of the peoples of Russia to the mid-nineteenth century. The course covers geographical factors, the nature of Byzantine influence, the impact of invasions, and Russia’s contacts with the West. Contrasts between the experiences of Russia and Western Europe are stressed; contrasts with other civilizations are also noted. Prerequisite: HTY 101 or HTY 102 or permission. Cr 3.

HTY 318 Russia and the Soviet Union Since 1855
A survey of the progression from autocratic to communist society, through such influences as internal pressures for reform, structural weaknesses, wars and invasions, and various ideologies. The role of the intelligentsia is noted in the nineteenth century; there is a strong emphasis on cultural aspects of Russian and Soviet developments. Prerequisite: HTY 102 or permission. Cr 3.

HTY 324 World Wars I and II: European War and Diplomacy
A study of the causes, course, and consequences of the First and Second World Wars. The questions of inevitability and responsibility, the nature of total war, the workings of alliances, the effect of the military upon politics, the wisdom of the peace settlements, and the impact of war upon European society are among the subjects to be considered. Prerequisite: junior or senior status. Cr 3.

HTY 326 History of England
A survey of England from Anglo-Saxon times to the beginning of the twentieth century, with emphasis on the nature of English monarchy, the development of political institutions, and evolving constitutionalism. Particular attention is given to broad movements such as the Reformation, the Industrial Revolution, and Imperialism. Prerequisite: HTY 101 or permission. Cr 3.

HTY 330 Germany: Bismarck To Hitler
A study of the formation of the German Empire, the rise of a powerful industrial state, Weltpolitik and defeat in World War I, the Weimar Republic, Nazism and the Third Reich, Germany in World War II, and the partition of Germany in 1945. The course analyzes nationalism and examines cultural, social, and economic factors which help clarify Germany’s role in the modern world. Prerequisite: junior or senior status. Cr 3.
HTY 334 The Holocaust: Policy, Practice, Response
An examination of the roots of anti-Semitism in European history, the development of the policy of the extermination of the Jews and others in Nazi Germany, and the implementation of the policy throughout Europe during the Second World War. The varied aspects of the response of individuals and governments to the experience of the Holocaust are also considered. Prerequisite: HTY 102, another course in twentieth-century Europe or the United States is also recommended. Cr 3.

HTY 335 Genocide in Our Time
This course will analyze the nature of evil/genocide by examining examples of governmentally or ideologically initiated murder. It will seek to understand the historical background and reality of victim, bystander, and victimizer. It will use a number of approaches, namely psychological, philosophical, religious, sociological, and political to help our understanding. Prerequisite: permission of the instructor. Cr 3.

HTY 339 European Women's History
A survey of women’s lives in historical context, from ancient times to the twentieth century. Emphasis is placed on various themes over time and across cultures, including those of work, family, political involvement, aspects of gender and class differences, and intellectual and cultural contributions. The field of women’s history and its methodology are also considered. Prerequisite: a prior history survey course and/or a women’s studies course are recommended. Cr 3.

HTY 351 Colonial America
The first half of the semester is devoted to the discovery, exploration and colonization of the American colonies. The second half concentrates on the social and political development of these colonies, touching upon various aspects of colonial life and emphasizing the growing maturation of society. Prerequisite: HTY 121 or permission. Cr 3.

HTY 352 The American Revolution
A study of the 1763-1789 period, stressing the breakdown of Anglo American relations; American independence and its ideological underpinnings; the Revolutionary War; the postwar struggle to strike a balance between too much government and too little; and the drafting and ratification of the U.S. Constitution. Prerequisite: HTY 121 or permission. Cr 3.

HTY 354 Hamilton and Jefferson
The 1789-1815 period as viewed through the lives of Alexander Hamilton and Thomas Jefferson. Their ideological struggle leading to the rise of the Federalist and Democratic-Republican parties, and the political, economic, and diplomatic challenges facing the infant United States will be considered extensively. Prerequisite: HTY 122 or permission. Cr 3.

HTY 355 The Age of Jackson, 1815-1850
A study of the life and times of the “Old Hero” Andrew Jackson, with extensive consideration given to the rise of Jacksonian democracy and the impact on American politics of the controversies surrounding the Bank of the United States, internal improvements, the protective tariff, “Manifest Destiny,” and the sectional-slavery issues. Prerequisite: HTY 122 or permission. Cr 3.

HTY 356 Civil War and Reconstruction
An examination of the period 1850-1877, dealing with the background and causation of the war; Lincoln and the secession crisis; the military, political, diplomatic, and economic aspects of the Civil War; and the challenges and ultimate failure of reconstruction after 1865. Prerequisite: HTY 122 or permission. Cr 3.

HTY 357 The Gilded Age in America, 1869-1898
The United States in the age of enterprise with emphasis on the development of political and economic radicalism, the commercialization of agriculture, the rise of the American city, new directions in social thought, concentration of industrial wealth and financial power, and American foreign policy. Prerequisite: HTY 122 or permission. Cr 3.

HTY 358 Early Twentieth-Century United States, 1898-1938
The United States from 1898 to 1938. Analysis and interpretation of cultural, economic, and political developments of the Progressive Era, World War I, the 1920s, and the Depression and New Deal. Prerequisite: HTY 123I or permission. Cr 3.

HTY 359 The United States since 1939
The United States from the Depression and New Deal through World War II, the Cold War, the Civil Rights Movement, and the Vietnam War. Discussion of economic, political, and social developments and interpretation of these developments. Prerequisite: HTY 122 or permission. Cr 3.

HTY 360 History of Maine
A survey of Maine’s social, economic and political life from exploration and early settlement to the present. Cr 3.

HTY 361 History of the American Frontier
The Turner thesis, historiography, and adaptations to the challenges of the environment are considered. Various frontiers from the Atlantic seaboard to the last frontier on the Great Plains are studied. Prerequisites: two of the following: HTY 121,122, and 123 or permission. Cr 3.

HTY 364 History of Women in the United States
A chronological survey of the evolving role of women in the development of the United States from the colonial period to the present. Cr 3.

**HTY 366 History of Religion in America**
A history of religion in American society from the colonial era to the present, examining theology, organization, leaders, critics, and the religious contribution to the American experience. Prerequisites: two of the following: HTY 121, 122, and 123 or permission. Cr 3.

**HTY 372 American Social and Intellectual History I**
An analysis of the evolution of American religious, political, economic, social, and scientific thought from the colonial period to 1865. The course examines major principles, assumptions, and values; the relation of American thought to class structure, ethnic and racial associations, mobility, and immigration; and the relation of American thought to contemporary intellectual patterns in the Western world. Prerequisite: HTY 121 or 122 or permission. Cr 3.

**HTY 373 American Social and Intellectual History II**
A continuation of HTY 372 from 1865 to the present. Prerequisite: HTY 121 or 122 or permission. Cr 3.

**HTY 374 Photographing American History**
This course focuses on how the invention of photography in 1839 forever altered the ways humans understood and made sense of both their past(s) and their present(s). Students analyze major historical events and moments in American history as captured through a camera, learn to read photographs as texts, and explore how the photograph has shaped American history and culture. Prerequisite: ENG 100. HTY 122 or HTY 123 recommended but not required. Cr 3.

**HTY 375 History of American Culture**
This course presents selected examples of American popular arts and entertainments from 1830 to the present and places them in their historical and critical contexts. The course emphasizes that the production and transmission of culture is a reaction to social, political, and economics forces and events. Prerequisite: College Writing; Recommended: HTY 122 or 123

**HTY 377 Chinese Thought: Confucianism, Daoism, and Zen Buddhism**
Prior to the modern era, the Chinese interpreted their world through traditional idea systems, the most prominent of which were Confucianism, Taoism, and Buddhism. This course will explore these traditions: their assumptions and values, their varieties and internal tensions, and their relationships to the larger social system. Prerequisite: HTY 171 recommended. Cr 3.

**HTY 378 Diplomatic History of the United States I**
This course covers the development of key United States foreign policies from the Revolution to 1913-14. Prerequisite: HTY 121 or 122 or permission. Cr 3.

**HTY 379 Diplomatic History of the United States II**
Analysis and discussion of United States foreign policy since 1914. Considers the origins and effects of policy and also differing interpretations of issues such as the nature of “isolationism” and “interventionism,” the origins of the world wars and the Cold War, the meaning of “Vietnam,” and the relative influence of economics and ideology in shaping policy and action. Prerequisite: HTY 123 or permission. Cr 3.

**HTY 380 The 1960s**
This course examines social, political, economic, and cultural developments in the United States in the period from 1960 to 1970. It also looks at events worldwide, and the contested meaning of “The Sixties.” Cr.3.

**HTY 381 Latin America and the United States**
A survey of U.S.-Latin American relations with emphasis on the efforts of the U.S. government and multi-national corporations to adjust to the growth of nationalism, state capitalism, and socialism in Latin America. Cr 3.

**HTY 383 The Society and Culture of Latin America**
This seminar seeks to examine, through the use of popular novels and films, the principal characteristics of Latin American culture. Such elements as the role of dictators and revolutionaries, of machismo and imperialism, and of great haciendas, folklore, and religions will be considered. Cr 3.

**HTY 388 Revolution of Modern China**
A course on the political history of modern China from the 1840s to the present. Focusing on the political, social, and cultural revolutions, this course will examine their causes, courses, and consequences, particularly the ways in which these revolutions shaped the course of the political development of modern China. Prerequisite: HTY 172 recommended. Cr 3.

**HTY 390 Traditional Japan: Court and Warriors**
This course examines Japanese history before 1800. The primary focus will be on major political and social trends that led to the transformation of state and society. Attention will also be given to religious beliefs, rituals, art, and literature. Prerequisite: HTY 171 recommended. Cr 3.
HTY 394 Selected Topics in History
An analysis of a selected historical problem not already covered by regular course offerings in history will be offered. The course may be repeated for credit when different topics are offered. (Offered occasionally.) Cr 3.

HTY 397 Independent Study Semester
This is the course designator for students who participate in the History Department’s semester abroad exchange program with University College Winchester in England. Cr 3-15.

HTY 398 Independent Study in History
An independent research course offered only in fall or spring semester, primarily for juniors and seniors. The course material should not be part of regular department offerings. To enroll for the course, the student, in the prior semester, must present a proposal to an appropriate professor who will agree to mentor and evaluate the project. The normal outcome is a research paper. Application forms are available in history offices on both campuses. Cr 3.

HTY 400 Senior Seminar
The capstone to the major and required for the degree, this seminar explores the nature and the craft of history. The topic will vary but will always be a particular theme or set of issues to which the student will be expected, through discussion and writing, to apply the knowledge and skills acquired in previous history courses. Prerequisites: HTY 200 and senior status. Preference to history majors. Cr 3.

Other courses in the College of Arts, Humanities, and Social Sciences have historical interest. With prior approval from the Department, majors may apply one such course toward their history requirements. Majors also are encouraged to take such courses as supplementary electives.
Liberal Studies Humanities

Liberal Studies

The Liberal Studies Major has two tracks: Classics and Humanities

Classics Track Coordinator: Jeannine Uzzi, 47 Exeter Street, Portland

Humanities Track Coordinator: Julien Murphy, Philosophy, 47 Exeter Street, Portland

BA in Liberal Studies

Description

There are 2 tracks within this degree (see below for details):

- Classics
- Humanities

Classics Track

The Liberal Studies - Classics track is an interdisciplinary major for students who value classics and its liberal arts approach to education and who wish to explore the ancient world and the classical tradition from the perspectives of a variety of disciplines.

Liberal Studies-Classics is available in traditional face-to-face format, blended, or fully online with some synchronous requirements. Students are asked to consult their student success or faculty advisor to determine which format best suits their needs and then to meet with the classics/liberal studies faculty major advisor/coordinator to design a pathway through the major.

Humanities Track

Explore history, philosophy, art, literature, language and more with the distinguished Humanities faculty at USM. This major provides the opportunity to combine existing liberal arts credits from other institutions with USM Humanities courses to create an efficient and coherent path to degree completion.

The humanities is the study of the human condition and its relationship to human cultures, social and political formations, and the natural world. The humanities comprise a variety of disciplines such as history, philosophy, religion, the arts, language, and literature. Methodologically, humanists are eclectic, drawing upon multiple approaches ranging from critical theory and cultural studies to empiricism, hermeneutics, historicism, philology, narrative, and exegesis. The humanities also includes scholarly, professional, technical, and creative writing.

The Humanities offer the framework and skills for meeting the challenges of our complex and constantly changing world:

- knowledge of cultural, intellectual, artistic, and literary traditions
- appreciation of the cultural and historical contours of diversity
- skills of close reading, analysis, synthesis, persuasion/rhetoric, and communication
- intellectual curiosity
- global, historical, and ethical awareness

LSH - 15-week and 7-week Online and Traditional Live Format:

This major has been developed to be offered in both a traditional live format as well as in an online format. LSH-prefixed courses are offered
Finishing a degree is challenging. Work and family commitments often make it difficult to maintain steady progress toward a degree. Courses may be offered in the traditional 15-week fall and spring semesters in addition to some course availability in 7-week sessions. USM’s 7-week online format offers students both the convenience of taking classes online and the opportunity to focus on one course at a time. Students can make steady progress while taking one course per session. If life interrupts a session, the next session is right around the corner. In addition, USM offers a 4-week online winter session, and two 7-week sessions each summer. Graduation is a step closer every seven weeks.

The Liberal Studies, Humanities Council consists of the following faculty: Libby Bischof (History) Meghan Brodie (Theatre) Gary Johnson (History) Bud McGrath (English) Julien Murphy (Philosophy) Gerald Peters (English) Eve Raimon (English) Adam Tuchinsky (History) Jeanine Uzzi (Classics) Kate Wininger (Philosophy)

Program Requirements

There are 2 tracks within the Liberal Studies degree (see below for details):

- Classics
- Humanities

Classics Track Requirements

Requirements for the Baccalaureate Degree

All students are reminded that, in addition to meeting Departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the College of Arts, Humanities, and Social Sciences, and the University’s Core curriculum.

Major Credit and Grade Policy

Courses to be taken for major credit at other institutions must be approved in advance. Grades of C or better must be achieved in all courses for major or minor credit. Courses taken pass/fail are not acceptable.

Recommended Pre-Major Courses

CLA 171, “Etymology for Everyone” and/or LIN 185, “Language, Mind, and Society”

Recommended Entry Year Experiences

HON 101 (0001), “Myth, Monsters, and Metamorphoses” or HON 101 (0002), “Power, Corruption, and Foundings in the Ancient World”

Required Courses* (41 total credits)

Introduction Course* (3 cr)

- LSH 240, “Introducing the Humanities”

Foundational Courses* (17 cr)

1. One course on the history of ancient Greece or Rome: CLA 291 or 292, HTY 101, 303, 304, 306, 308 or equivalent

2. Two semesters introductory Latin: LAT 101\(^1\) and 102 or equivalent

[1] If available, students may elect GRE 101, 102, and 251 for the major in lieu of LAT 101, 102, and 251. Students transferring into the major with preparation in ancient language may be required to take a placement test or reading exam.

3. One theory course: CLA 285, ENG 245, HUM 300, PHI 215 or equivalent

4. One history of philosophy course: PHI 105, 107, 109, 310 or equivalent

Topics Course* (3 cr)

LSH 340 or any CLA (or classics-related) course at the 3xx or 4xx level or equivalent
(Students are encouraged to fulfill this requirement via study abroad.)

**Sequence* (15 cr)**

1. One Latin literature (reading) course: LAT 251, “Introduction to Latin Literature I” or equivalent

2. **Four** of the following courses or equivalents; students are encouraged to propose other courses on topics relevant to classics to fulfill this requirement; students outside USM are encouraged to fulfill this requirement with face-to-face courses on their home campuses whenever possible; courses in this category must be 2xx or higher.

   - ARH/CLA 321
   - CLA 285, 291, 292, 383, 384
   - ENG 305 or 315
   - HTY 303, 304, 306, 308
   - PHI 310
   - POS 390

**Capstone Experience* (3 cr)**

- CLA 410, “Antiquity and Modernity: Capstone Experience in Classics” or
- LSH 440, “Capstone Experience in the Humanities” or equivalent capstone experience

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**Humanities Track Requirements**

**Requirements for the Baccalaureate Degree**

All students are reminded that, in addition to meeting Departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the College of Arts, Humanities and Social Sciences, and the University's Core curriculum.

**Major Credit and Grade Policy**

Courses to be taken for major credit at other institutions must be approved in advance. Grades of C or better must be achieved in all courses for major or minor credit. Courses taken pass/fail are not acceptable.

**Honors Status**

Honors status in the major is granted if the student's GPA in Liberal Studies, Humanities Track is at least 3.5 or higher upon completion of all requirements for the major.

**Required Courses* (36 total credits)**

Please note prerequisites.

- LSH 240 Introducing the Humanities* (3 credits)
- Foundation Courses* (12 credits)
  - Western Civilization: HTY 101 or HTY 102
  - Language, Literature, and the Arts
    - One of the following: ENG 245, PHI 220, PHI 230 and MUS 100
    - AND
    - One of the following: GRE 101, 102, or 251; LAT 101, 102, or 251; CLA 171, ENG 330, ENG 305, LIN 185, PHI 205
  - Philosophy: PHI 102, 103, 105, 106, 107, 109, 110, or 112
- LSH 340: Topics in the Humanities (3 credits)
- Sequence* (15 credits)
  
  In consultation with the humanities track coordinator, students will complete one of the following sequences.
  1. Media, Art, Literature
  2. Religion and Ethics
  3. Gender, Race, and Identity
  4. Students may also complete a period, region, or theme-based sequence in consultation with the coordinator.
- LSH 440: Capstone in the Humanities* (3 credits)
Below are the course options to complete the required upper-level sequences. With the permission of the program coordinator, students may substitute relevant courses. At least three courses must be at the 300-level or above.

**Media, Art, and Literature**

- ARH 310 Art History: Cross-Cultural Perspectives
- ARH 311 Gender Identity and Modern Art
- ARH 318 History of Photography
- ARH 321 Classical Art
- ARH 322 Medieval Art
- ARH 323 Renaissance Art
- ARH 324 Seventeenth and Eighteenth-Century Art
- ARH 325 American Art
- ARH 326 Nineteenth-Century European Art
- CLA 283 The Epic Hero in Ancient Literature
- CLA 285 Classical Mythology
- CLA 384 What Would Antigone Do?
- CLA 410 Capstone
- CMS 374 Media Criticism and Aesthetics
- CMS 380 Film Genres
- CMS 384 Film and Cultural Studies
- CMS 394 Theories of Film
- ENG 315 Ancient Literature
- ENG 316 The Bible
- ENG 317 Studies in Ancient and Biblical Literature and Culture
- ENG 318 Autobiography
- ENG 319 Studies in Genre and Form
- ENG 320 Continental Literature
- ENG 321 Modernisms
- ENG 322 Modern Autobiography
- ENG 324 Studies in Canadian Literature and Culture
- ENG 325 Epic and Romance
- ENG 326 Studies in International Literature Since 1900
- ENG 327 Modern Short Story
- ENG 328 Modern Novel
- ENG 329 Modern Drama
- ENG 330 History of the English Language
- ENG 336 Old English Language and Literature
- ENG 337 Studies in Rhetoric
- ENG 340 History of Literary Criticism and Theory
- ENG 341 Contemporary Critical Theories
- ENG 344 Sex/Gender and Sexuality
- ENG 345 Racial Formations
- ENG 346 Language, Literature and the Politics of Identity in Contemporary Ireland
- ENG 350 Medieval English Literature
- ENG 351 Chaucer and the Medieval World
- ENG 352 Medieval Drama
- ENG 353 Medieval Women Writers
- ENG 354 Studies in Medieval Literature and Culture
- ENG 355 English Renaissance Literature and Culture
- ENG 357 Elizabethan and Jacobean Drama
- ENG 360, 361 Shakespeare
- ENG 362 Studies in Shakespeare
- ENG 363 Studies in the Renaissance
- ENG 365 Restoration and Eighteenth-Century Literature and Culture
- ENG 366 Studies in the Restoration and Eighteenth Century
- ENG 367 Literature and Culture of the Early Republic
- ENG 368 Studies in Eighteenth-Century American Literature and Culture
- ENG 369 Emergence of the Novel
- ENG 370 Literature of Discovery, Exploration, and Colonialism
- ENG 371 Romantic Writing
- ENG 373 Studies in Romantic Literature and Culture
- ENG 375 Nineteenth-Century British Novel
- ENG 376 Victorian Literature and Culture
• ENG 377 Studies in Nineteenth-Century British Literature and Culture
• ENG 378 The Novel of Self Development
• ENG 379 Earlier Women Writers
• ENG 380 Early Nineteenth-Century American Literature and Culture
• ENG 382 The Earlier American Novel
• ENG 383 Studies in African-American Literature and Culture
• ENG 384 Late Nineteenth-Century American Literature and Culture
• ENG 385 Studies in Nineteenth-Century American Literature and Culture
• ENG 387 Women Writers Since 1900
• ENG 390 British Poetry Since 1900
• ENG 391 American Poetry Since 1900
• ENG 392 British Novel Since 1900
• ENG 393 The American Novel Since 1900
• ENG 394 Studies in American Literature and Culture Since 1900
• ENG 395 Irish Literature and Culture
• ENG 396 James Joyce
• ENG 397 Studies in Irish Literature and Culture
• ENG 398 Studies in British Literature and Culture Since 1900
• FRE 293 French Cinema
• FRE 331 Workshop in French Literary Analysis
• FRE 367 Genres and Periods in French Literature
• FRE 369 Topics and Themes in French Literature
• FRE 467 Genres and Periods in French Literature
• FRE 469 Topics and Themes in French Literature
• HTY 311 Medieval Civilization
• HTY 312 Renaissance and Reformation
• HTY 355 The Age of Jackson
• HTY 374 Photographing American History
• HTY 377 Chinese Thought
• MUS 206 Jazz History
• MUS 220 20th Century Music
• MUS 225 World Music
• PHI 211 Media Ethics
• PHI 215 Philosophy of Literature
• PHI 220 Philosophy of Art
• PHI 221 Philosophy of Film
• PHI 235 Philosophy and Social Media
• PHI 275 Nature of Compassion
• PHI 310 History of Ancient Philosophy
• PHI 380 Postmodernism
• PHI 390 Hermeneutics
• RUS 281 Russian Literature in English
• RUS 293 Russian Cinema
• RUS 351 Seminar in Russian Literature
• THE 351-3 Dramatic Literature and Theatre I-III
• THE 360 Butches, Bitches, and Buggers
• THE 480: Adaptation, Text, Theatricality

Religion and Ethics

• ARH 321 Classical Art
• ARH 322 Medieval Art
• ARH 323 Renaissance Art
• ARH 324 Seventeenth and Eighteenth-Century Art
• BIO 602 Ethical Issues in Biology
• CLA 285 Classical Mythology
• CLA 292 Rome, from Republic to Empire
• CLA 384 What Would Antigone Do?
• ENG 316 The Bible
• ENG 317 Studies in Ancient and Biblical Literature and Culture
• HTY 303 History of the Ancient Near East and Greece
• HTY 304 History of Rome
• HTY 305 The Historical Jesus
• HTY 306 Roman Sexuality and Early Christianity
Gender, Race, and Identity

- ARH 310 Art History: Cross-Cultural Perspectives
- ARH 311 Gender Identity and Modern Art
- ARH 325 American Art
- ARH 326 Nineteenth-Century European Art
- CLA 283 The Epic Hero in Ancient Literature
- CLA 285 Classical Mythology
- CLA 292 Rome, from Republic to Empire
- CLA 321 Art, Architecture, and Archaeology of the Ancient World
- CLA 384 What Would Antigone Do?
- CLA 410 Capstone
- ENG 318 Autobiography
- ENG 321 Modernisms
- ENG 322 Modern Autobiography
- ENG 326 Studies in International Literature Since 1900
- ENG 344 Sex/Gender and Sexuality
- ENG 345 Racial Formations
- ENG 346 Language, Literature and the Politics of Identity in Contemporary Ireland
- ENG 353 Medieval Women Writers
- ENG 367 Literature and Culture of the Early Republic
- ENG 370 Literature of Discovery, Exploration, and Colonialism
- ENG 371 Romantic Writing
- ENG 373 Studies in Romantic Literature and Culture
- ENG 375 Nineteenth-Century British Novel
- ENG 376 Victorian Literature and Culture
- ENG 377 Studies in Nineteenth-Century British Literature and Culture
- ENG 378 The Novel of Self Development
- ENG 379 Earlier Women Writers
- ENG 380 Early Nineteenth-Century American Literature and Culture
- ENG 382 The Earlier American Novel
Course Descriptions

LSH 240 Introducing the Humanities
This course examines the origins, development, and future of the humanities through the texts and methods of the following disciplines: classics, history, literary studies, philosophy, religion and the Arts. Prerequisites: EYE and College Writing Cr 3.

LSH 340 Topics in the Humanities
Consideration of selected problems, approaches, issues or themes in the humanities. May be repeated for credit. Prerequisite: LSH 240 or permission of the instructor Cr 3.

LSH 398 Independent Study in the Humanities
The course provides students with an opportunity to design a set of readings and learning objectives on an interdisciplinary topic of interest in the humanities. Students must complete an independent study proposal and obtain permission of a faculty mentor and the program coordinator. Students must meet regularly with the faculty mentor. May be repeated for credit. Prerequisite: LSH 240 or permission of the instructor. Cr 3.

LSH 440 Capstone in the Humanities
This course probes the relationship between humanism and the humanities in the 20th century, the recent crisis of the humanities in higher education, and new directions in digital and global humanities. Prerequisites: LSH 240, and senior status in a humanities major or permission of the instructor. Cr 3.

Modern and Classical Languages and Literatures
MCLL Overview

Professors: Aicher; Associate Professors: Erickson, Suscavage, Uzzi; Professors Emeritae: Crochet, Hinckley

A foreign language major offers a uniquely rich and diverse humanities background. The study of languages sensitizes us to other cultures and the relativity of values; it frees us from the confines of monolingualism and provincialism; it increases our understanding of and competence in our native language; and, most important, it is an inquiry into language as language: the structure, system, code by which we interpret the world to ourselves and others. Through in-depth study of literature we develop skills of close reading and literary analysis, and in all our courses we hone our writing skills.

A foreign language is also a valuable and marketable skill in many professions, especially international relations and trade, government service, journalism, travel, social services, the arts, and teaching.

Additional Information

The Department offers a major in French (with two different tracks) and broader, interdepartmental majors in Classics (two tracks). Also Classics, French, and Spanish minors are available which augment other majors in the College of Arts, Humanities, and Social Sciences.

The Department also offers a number of courses in English translation requiring no knowledge of a foreign language and open to any student interested in foreign or classical literature, civilization, and film. Independent study courses, numbered 470, are available to qualified students with the permission of the instructor and the Department chair.

English for Speakers of Other Languages

Also offered through the Department are higher level ESOL (English for Speakers of Other Languages) courses for students whose first language is not English. These courses focus on the linguistic skills necessary for academic work at a university as well as adjustment to and knowledge of American culture. There is no major or minor in this program.

English Language Bridge Program

Students applying to the University who meet regular admission requirements but whose TOEFL scores fall below the required level may be eligible for admission to the University through the English Language Bridge Program offered through the ESOL Department.

For further information on the ESOL program contact Bart Weyand, program director, 101 Payson Smith Hall, Portland.

Policies

Beginning courses (101-102) are for students who have never studied the language. Courses numbered 103 are a review of this beginner's level. Intermediate level courses (201-202 for modern languages, 251-252 for the ancient languages) are for students with two or more successful years of high school language study. Those whose background does not fit any of these categories, especially Franco-American students and students with Hispanic, German, or Italian heritage, should consult an instructor in the language before registering. Courses numbered 105-206 give students a reading proficiency in French or German for research in their field, graduate school language requirements, or cultural enjoyment. Courses numbered 107 and 207 are intensive, 8-credit language courses offered during the summer only; 107 and 207 cover the same material as 101-102 and 201-202, respectively. Students who have received credit for 102 or 202 cannot also receive credit for 107 and 207, respectively. Partial credit may be awarded if the student has received credit for 101 or 201 only.

The Department grants credit in French, German, Greek, Latin, and Spanish to enrolled students who present evidence of competency in one of those languages by completing the appropriate Advanced Placement Examination Board. For more details, contact the chair of the Department.

All majors, including group contract majors, must achieve grades of B or better for at least 12 credits in their major courses. No grade of D will count toward fulfillment of major. A student who has received a grade of B- or above in a 300-level language class may not take 101, 102, or 201 for credit.

Students are also urged to get extra practice in French, German, Italian, Russian, Spanish, and Japanese by participating in informal conversation tables sponsored by the Department. Tutoring is available, often at no cost to the student. For information, see the Department assistant.

State of Maine certification for foreign language teachers requires 30 credits at the level 300 and above for the first language and 18 credits at the level 300 and above for the second language.

All major programs in the Department of Modern and Classical Languages and Literatures require that the student fulfill the requirements of the Core curriculum.

Study Abroad
All students, regardless of major, are eligible to study in a foreign country, normally after studying the language of that country for two years on the college level and usually in their junior year. For the study of German, USM has a study abroad program at the University of Salzburg in Austria. For French, the University of Maine System has a formal program associated with the University of Le Mans in France. USM participates in the University of Maine Partnership Maine-France-Quebec which offers students a variety of opportunities to study in a chosen field at any number of partner institutions in France and Quebec. (http://www.maine.edu/system/asa/IntlOppsStudentsPMFQ.php). USM has also a longstanding exchange with the Université Laval in Quebec. In addition, there are a number of programs that the French Section strongly supports and recommends, among them the program at the Centre International d'Etudes Françaises at the Université Catholique de l'Ouest in Angers, France (http://www.uco.fr/CIDEF/). Other departments at USM occasionally organize summer programs that might interest students majoring in French. For Spanish, there is a Summer Session program in Santiago de Compostela, Spain, as well as other options available in Latin America and Spain. Students interested in study abroad should consult with the chair of the Department or with the Office of International Exchange to explore these and other possibilities.

**Group Contract in Foreign Languages**

The Self-Designed Major Program of the College of Arts, Humanities, and Social Sciences provides students with a flexible opportunity to tailor their major to their interests and needs in foreign language study. The following group contract options are available within the Self-Designed Major Program:

- Classics
  - Classical Languages
  - Latin for Teachers, k - 12

Please refer to the section on interdepartmental majors of this catalog or contact the chair of the Department of Modern and Classical Languages and Literatures for additional information.

**Minors**

Because the knowledge of a foreign language, or languages, or language study areas, is valuable to all majors in other CAS disciplines, the Department offers minor programs in Classical Languages, French, The Greek World, Latin, The Roman World, and Spanish.

**BA in French**

**Description**

The Department offers a major in French with two different tracks: Literary Studies and French Studies.

The Department also offers three different options for a French Minor: French Minor, French Language Minor and a French Studies Minor.

**Policies**

Beginning courses (101-102) are both for true beginners who have never studied French before as well as students with a background in French who are not sure of their exact proficiency level. These students are advised to take the Placement Test offered in the Department before the beginning of classes each semester. The Office of Prior Learning Assessment in conjunction with the French Section helps to evaluate students with varied language backgrounds, such as foreign or Franco-American students to determine their level of competency and whether it is appropriate to waive specific requirements or grant credit. FRE 470 Independent Study is offered only under exceptional and extraordinary circumstances. It cannot replace a regularly offered course. All French majors must achieve grades of B or better for at least 12 credits in their major. No grade of D will count toward fulfillment of the major. Concerning graduation requirements, all students need 120 credits, which include 45 credits for the French major and successful completion of the Core requirements. Students should be aware of the Core requirements as detailed in the undergraduate catalog and should note that a number of the courses for the French major count for the Core requirements as well.

The Department grants credit in French to an enrolled student who presents evidence of competency in the language by receiving a score of 3 or above on the appropriate Advanced Placement Examination Board. College Level Examination Program (CLEP) exams are used for either course-equivalency or elective credits. For more details, contact the chair of the Department.

Students are also urged to get extra practice in French by participating in informal conversation tables sponsored by the Department. Tutoring is available, often at no cost to the student. For information, see the Department assistant.
State of Maine certification for foreign language teachers requires 30 credits at the level 300 and above for the first language and 18 credits at the level 300 and above for the second language.

All major programs in the Department of Modern and Classical Languages and Literatures require that the student fulfill the requirements of the Core curriculum.

**Program Requirements**

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 39 credits.

**Track 1 Literary Studies**

Requirements

A. Language Classes (21 credits)

Seven language courses among the following:

- FRE 201 202 Second-year French
- FRE 301 302 Third-year French (6)
- FRE 303 Thème et Version
- FRE 305 French Phonetics
- FRE 330 The Art of Writing
- FRE 331 Workshop in French Literary Analysis
- FRE 367 Genres and Periods in French Literature
- FRE 369 Topics and Themes in French Literature
- FRE 467 Genres and Periods in French Literature
- FRE 469 Topics and Themes in French Literature
- FRE 475 Capstone in French

B. French Civilization (6 credits)

Two courses in French or Francophone civilization, among the following:

- FRE 291 French Civilization I
- FRE 292 French Civilization II
- FRE 293 Topics in French/Francophone Cinema
- FRE 294 Topics and Themes in Francophone Studies
- FRE 367 Genres and Periods in French Literature
- FRE 369 Topics and Themes in French Literature
- FRE 467 Genres and Periods in French Literature
- FRE 469 Topics and Themes in French Literature
- FRE 475 Capstone in French

C. French Literature (12 credits)

Three 300-level French courses, including FRE 331 and two courses in literature (FRE 367, FRE 369, FRE 399) (9 credits)

One 400-level French course, including FRE 475 (3 credits)

- FRE 331 Workshop in French Literary Analysis
- FRE 367 Genres and Periods in French Literature
- FRE 369 Topics and Themes in French Literature
- FRE 467 Genres and Periods in French Literature
- FRE 469 Topics and Themes in French Literature
- FRE 475 Capstone in French

*FRE 399 may be substituted for FRE 367 or FRE 369 when offered.

Substitutions or alternatives to these curricular offerings may be considered by the French Section as appropriate.

**Track 2 French Studies**

Requirements

A. Language Courses (15 credits)

Five courses among the following:

- FRE 201 202 Second-year French
- FRE 301 302 Third-year French (6)
- FRE 303 Thème et Variation
- FRE 305 French Phonetics
- FRE 330 The Art of Writing

B. Civilization (6 credits)

Two courses in French or Francophone civilization or electives, among the following:

- FRE 291 French Civilization I
- FRE 292 French Civilization II
- FRE 293 Topics in French/Francophone Cinema
- FRE 294 Topics and Themes in Francophone Studies
- ARH 322 Medieval Art

C. Electives (9 credits)

Three courses of electives, among the following:

- ARH 322 Medieval Art
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ARH 323</td>
<td>Renaissance Art</td>
<td>3</td>
</tr>
<tr>
<td>ARH 324</td>
<td>Seventeenth- and Eighteenth-Century Art</td>
<td>3</td>
</tr>
<tr>
<td>ARH 326</td>
<td>Nineteenth-Century European Art</td>
<td>3</td>
</tr>
<tr>
<td>ARH 327</td>
<td>Modern Art</td>
<td>3</td>
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<tr>
<td>ARH 328</td>
<td>Contemporary Art</td>
<td>3</td>
</tr>
<tr>
<td>ENG 347</td>
<td>Topics in Cultural Studies: Colonialism and Francophone</td>
<td>3</td>
</tr>
<tr>
<td>ENG 354</td>
<td>Studies in Medieval Literature and Culture (when topic</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>deals with France and England)</td>
<td></td>
</tr>
<tr>
<td>HTY 311</td>
<td>Medieval Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HTY 312</td>
<td>Renaissance and Reformation</td>
<td>3</td>
</tr>
<tr>
<td>HTY 313</td>
<td>French Revolution and Napoleon</td>
<td>3</td>
</tr>
<tr>
<td>HTY 360</td>
<td>History of Maine</td>
<td>3</td>
</tr>
<tr>
<td>HUM 301</td>
<td>French North America</td>
<td>3</td>
</tr>
<tr>
<td>HUM 310</td>
<td>French Settlement in the Northeast</td>
<td>3</td>
</tr>
<tr>
<td>POS 205</td>
<td>Introduction to Comparative Politics</td>
<td>3</td>
</tr>
<tr>
<td>POS 245</td>
<td>French Politics</td>
<td>3</td>
</tr>
<tr>
<td>POS 380</td>
<td>Issues Before the United Nations</td>
<td>3</td>
</tr>
<tr>
<td>POS 335</td>
<td>Politics in Western Europe</td>
<td>3</td>
</tr>
<tr>
<td>POS 405</td>
<td>The European Union</td>
<td>3</td>
</tr>
<tr>
<td>POS 406</td>
<td>Research in the European Union</td>
<td>3</td>
</tr>
<tr>
<td>D. Literature (6 credits)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>2 300-level French courses in literature, FRE 331 (required) and 1 of the following: FRE 367, FRE 369 or FRE 399 when offered:</td>
<td></td>
</tr>
<tr>
<td>FRE 331</td>
<td>Workshop in Literary Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FRE 367</td>
<td>Genres and Periods in French Literature</td>
<td>3</td>
</tr>
<tr>
<td>FRE 369</td>
<td>Topics and Themes in French Literature</td>
<td>3</td>
</tr>
<tr>
<td>E. Capstone (3 credits)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRE 475</td>
<td>Capstone in French</td>
<td>3</td>
</tr>
<tr>
<td>Strongly Recommended courses for both Tracks 1 and 2;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIN 185</td>
<td>Language, Mind, and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

Substitutions or alternatives to these curricular offerings may be considered by the French Section as appropriate.

Beginning courses (101-102) are both for true beginners who have never studied French before as well as students with a background in French who are not sure of their exact proficiency level. These students are advised to take the Placement Test offered by the Department of Academic Assessment (780-4383).

The Office of Prior Learning Assessment in conjunction with the French Section helps to evaluate students with varied language backgrounds, such as foreign or Franco-American students, to determine their level of competency and whether it is appropriate to waive specific requirements or grant credit. FRE 470 Independent Study is offered only under exceptional and extraordinary circumstances. It cannot replace a regularly offered course. Summer and junior year study in France or French Canada are encouraged and acknowledged by transfer credits. All majors already engaged in studies of French literature should maintain an active effort to reach fluency in speaking French through constant practice, use of the language laboratory, and participation in informal conversation tables. They are expected to have reached proficiency in speaking and writing French before their graduation. Each student's progress will be reviewed periodically by French faculty. All majors must complete at least 12 credits with a grade of B or better in their major courses. No grade of D will count toward fulfillment of a French major. All students must complete a minimum of 120 credits, which include 39 credits for the French major and successful completion of the Core requirements. Students should be aware of the Core requirements as detailed in the undergraduate catalog and should note that a number of the courses for the French major count toward Core requirements as well.

### BA in French Teacher Education K-12 Certification Track

**Description**

The curriculum for this track of the French degree is designed to provide prospective teachers a strong academic foundation in French along with
a continuous focus on both the theory and practice of teaching through a sequence of pre-internship education courses and field experiences. Students completing the 120-hour degree will have satisfied the USM Core Curriculum and the French Major as well as liberal arts courses required for initial teacher certification. Graduates are eligible for recommendation for K-12 teacher certification in Maine.

**Program Requirements**

**Course Requirements**

USM Core Curriculum (including pre-internship education courses):

- EYE 108: Culture, Identity and Education (recommended) (3 cr)
- EDU 100: Exploring Teaching (recommended) (3 cr)
- College Writing- ENG 100 (3 cr)
- Cultural Interpretation (3 cr)
- Quantitative (4 cr)
- Creative Expression (3 cr)
- Socio-Cultural Analysis- HRD/SBS 200: Multicultural Human Development (3 cr)
- Science Exploration- (4 cr)
- Ethics- EDU 310: Purpose of Schooling in a Democracy recommended (3 cr)
- Education Cluster (9 cr):
  - EDU 305: Foundations of Cultural and Linguistic Diversity
  - SED 335: Students with Exceptionalities in General Education
  - SED 420: Multi-Tiered Systems of Educational Support

French Major Requirements: (39 cr)

**Track 1 Literary Studies**

Requirements

- Language Classes (21 credits)
  7 Language courses among the following:
  - FRE 201-202 2nd year French (8)
  - FRE 301-302 3rd year French (6)
  - FRE 303 Thème et Version (3)
  - FRE 305 French Phonetics (3)
  - FRE 330 The Art of Writing (3)
- French Civilization (6 credits)
  2 courses in French or Francophone civilization, among the following:
  - FRE 291 French Civilization I (3)
  - FRE 292 French Civilization II (3)
  - FRE 293 Topics in French/ Francophone Cinema (3)
  - FRE 294 Topics and Themes in Francophone Studies (3)
- French Literature (12 credits)
  - 3 300-level French courses, including FRE 331 and 2 courses in literature (FRE 367, FRE 369, FRE 399) (9 credits)
  - 1 400-level French course, including FRE 475 (3 credits)
  - FRE 331 Workshop in French Literary Analysis (3)
  - FRE 367 Genres and Periods in French Literature (3)
  - FRE 369 Topics and Themes in French Literature (3)
  - FRE 467 Genres and Periods in French Literature (3)
  - FRE 469 Topics and Themes in French Literature (3)
  - FRE 475 Capstone in French (3)

*FRE 399 may be substituted for FRE 367 or FRE 369 when offered.

Substitutions or alternatives to these curricular offerings may be considered by the French Section as appropriate.

**Track 2 French Studies**

Requirements

- Language Courses (15 credits)
  5 courses among the following:
FRE 201-202 2nd year French (8)
FRE 301-302 3rd year French (6)
FRE 303 Thème et Variation (3)
FRE 305 French Phonetics (3)
FRE 330 The Art of Writing (3)

- Civilization (6 credits)
  2 courses in French or Francophone civilization or electives, among the following:
  - FRE 291 French Civilization I (3)
  - FRE 292 French Civilization II (3)
  - FRE 293 Topics in French/Francophone Cinema (3)
  - FRE 294 Topics and Themes in Francophone Studies (3)

- Electives (9 credits)
  3 courses of electives, among the following:
  - ARH 322 Medieval Art (3)
  - ARH 323 Renaissance Art (3)
  - ARH 324 17th and 18th Art (3)
  - ARH 326 19th European Art (3)
  - ARH 327 Modern Art (3)
  - ARH 328 Contemporary Art (3)
  - ENG 354 Studies in Medieval Literature and Culture (3)
  - (when topic deals with France and England)
  - HTY 311 Medieval Civilization (3)
  - HTY 312 Renaissance and Reformation (3)
  - HTY 313 French Revolution and Napoleon (3)
  - HUM 301 French North America (3)
  - HUM 310 French Settlement in the Northeast (3)
  - POS 205 Introduction to Comparative Politics (3)
  - POS 245 French Politics (3)
  - POS 380 Issues Before the United Nations (3)
  - POS 335 Politics in Western Europe (3)
  - POS 405 The European Union (3)
  - POS 406 Research in the European Union (3)

- Literature (6 credits)
  - 2 300-level French courses in literature, FRE 331 (required) and 1 of the following: FRE 367, FRE 369 or FRE 399 when offered:
    - FRE 331 Workshop in Literary Analysis (3)
    - FRE 367 Genres and Periods in French Literature (3)
    - FRE 369 Topics and Themes in French Literature (3)

- Capstone (3 credits)
  - FRE 475 Capstone in French (3)

**Strongly Recommended courses for both Tracks 1 and 2:**
- LIN 185 Language, Mind, and Society (3)
- Full-year or semester-abroad program
- Substitutions or alternatives to these curricular offerings may be considered by the French Section as appropriate.

**Professional Education Internship Year Requirements (18 cr)**
- EDU 441 Seminar in Teaching and Learning I (3 cr)
- EDU 442 Seminar in Teaching and Learning II (3 cr)
- EDU 503 Methods of Teaching Foreign Language (3 cr)
- EDU 413 Professional Internship in Secondary Education (9 cr)

**Electives:**

Students must complete elective credit to complete the 120 credit hour degree. For those students interested in teaching at the middle level (grades 6-8), it is recommended that they complete coursework in a second content area (e.g., English, mathematics, life or physical science) to become highly qualified to teach an additional content area. Those students interested in teaching high school may want to use their elective credits to bolster their content knowledge by taking additional courses in their major discipline and related fields. Finally, students should consider taking education courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

**Other Requirements:**
Acceptance into the Bachelor of Arts in French / K-12 Teacher Certification Track is contingent upon admission to USM and successful completion of the University's writing and mathematics proficiency requirements. Other acceptance criteria include a minimum 3.0 GPA and experience working with children. No more than 60 credits can be transferred into the program. Minimum academic requirements to remain in the program are as follows:

- A grade of C or better in all University Core and major coursework.
- A grade of B or better in all professional education coursework.
- An overall GPA of 3.00 or better.

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: http://www.maine.gov/doe/cert/fingerprinting/

All students must formally declare their entry into a teacher certification concentration by completing the declaration procedures found on the Office of Educator Preparation web site at http://usm.maine.edu/educatorpreparation. Passing Praxis I scores, subscription to Tk20, and two recommendation forms are necessary to complete the declaration process.

**Tk20 Subscription:**

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: http://usm.maine.edu/educatorpreparation

Students who fail to meet any of the academic or professional requirements of this track of the major must withdraw from this track and complete all requirements for the B.A. in French without certification.

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**BA in Self-Designed - Classical Languages**

**Description**

Coordinator: Jeannine Uzzi, 47 Exeter Street, Portland

Students can choose from among two tracks for the self-designed group contract major in classics. The Latin for Teachers track prepares students to teach K-12 Latin. The Classical Languages track prepares students for graduate study in classics and is especially suited for students who want intensive study in ancient language.

There is also a Liberal Studies-Classics track for students who value classics and its liberal arts approach to education and who wish to explore the ancient world and the classical tradition from the perspectives of a variety of disciplines. See Liberal Studies for additional information on this option.

**Program Requirements**

**Self-Designed Major - Classical Languages**

The minimum number of credits (exclusive of the University's Core curriculum) for the self-designed major in classical studies: 41. For grade requirements, please refer to the Modern and Classical Languages and Literatures section of this catalog.

I. Languages (20 credits)
   - A. Three Latin courses above the 100-level
   - B. Ancient Greek 101, 102, and 251

II. Civilization and Literature (18 credits)
   - A. CLA 291 Golden Age of Greece OR HTY 303 History of Ancient Near East and Greece
   - B. CLA 292 Rome, from Republic to Empire OR HTY 304 History of Rome
   - C. One of the following courses in ancient literature:
     - CLA 270 Homer's Odyssey and Joyce's Ulysses
     - CLA 283 Epic Hero
BA in Self-Designed - Classics, Latin Teacher Education K-12 Certification Track

Description

Coordinator: Jeannine Uzzi, 47 Exeter Street, Portland

Students can choose from among two tracks for the self-designed group contract major in classics. The Latin for Teachers track prepares students to teach K-12 Latin. The Classical Languages track prepares students for graduate study in classics and is especially suited for students who want intensive study in ancient language.

There is also a Liberal Studies-Classics track for students who value classics and its liberal arts approach to education and who wish to explore the ancient world and the classical tradition from the perspectives of a variety of disciplines. See Liberal Studies for additional information on this option.

The curriculum for the Latin for Teachers track of the Classics degree is designed to provide prospective teachers a strong academic foundation in Latin along with a continuous focus on both the theory and practice of teaching through a sequence of pre-internship education courses and field experiences.

Students completing the 120-hour degree will have satisfied the USM Core Curriculum and the Latin Major as well as liberal arts courses required for initial teacher certification. Graduates are eligible for recommendation for K-12 teacher certification in Maine.

Program Requirements

Course Requirements

USM Core Curriculum (including pre-internship education courses):

- EYE 108-Culture, Identity and Education (recommended) (3 cr)
- EDU 100 Exploring Teaching (recommended) (3 cr)
- College Writing-ENG 100 (3 cr)
- Cultural Interpretation (3 cr)
- Quantitative (4cr)
- Creative Expression (3cr)
- Socio-Cultural Analysis- HRD/SBS 200: Multicultural Human Development (3 cr)
- Science Exploration- (4 cr)
- Ethics- EDU 310: Purpose of Schooling in a Democracy recommended (3 cr)
- Education Cluster (9 cr):
  - EDU 305: Foundations of Cultural and Linguistic Diversity
  - SED 335: Students with Exceptionalities in General Education
  - SED 420: Multi-Tiered Systems of Educational Support
The minimum number of credits (exclusive of the University's Core curriculum) for the self-designed Latin for Teachers track is 41 credits. For grade requirements, please refer to the Modern and Classical Languages and Literatures section of this catalog.

- **Language and Literature**
  - Latin (LAT): 101, 102, 251, 310, 470 (or 23 credits of LAT)
  - CLA 171 (Etymology for Everyone), 3 credits
  - CLA 410 (Capstone Experience in Classics with significant work in Latin), 3 credits

- **History and Civilization**
  - CLA 285 (Classical Mythology), 3 credits
  - CLA 292 (Rome: Republic to Empire) or HTY 304 (History of Rome), 3 credits

- **Electives**
  - Two additional courses (6-8 credits) from among the following on Greek culture or language: ARH/CLA 321, CLA 283, CLA 292, CLA 384, HTY 303, PHI 310, POS 390, or any course in ancient Greek (GRE).

**Professional Education Internship Year Requirements (18 cr)**

- EDU 441 Seminar in Teaching and Learning I (3 cr)
- EDU 442 Seminar in Teaching and Learning II (3 cr)
- EDU 503 Methods of Teaching Foreign Language (3 cr)
- EDU 413 Professional Internship in Secondary Education (9 cr)

**Electives:**

Students must complete elective credit to complete the 120 credit hour degree. For those students interested in teaching at the middle level (grades 6-8), it is recommended that they complete coursework in a second content area (e.g., English, mathematics, life or physical science) to become highly qualified to teach an additional content area. Those students interested in teaching high school may want to use their elective credits to bolster their content knowledge by taking additional courses in their major discipline and related fields. Finally, students should consider taking education courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

**Other Requirements:**

Acceptance into the Bachelor of Arts in Latin / K-12 Teacher Certification Track is contingent upon admission to USM and successful completion of the University's writing and mathematics proficiency requirements. Other acceptance criteria include a minimum 3.0 GPA and experience working with children. No more than 60 credits can be transferred into the program.

Students must maintain a high level of academic achievement. Minimum academic requirements are as follows:

- A grade of C or better in all University Core and major coursework.
- A grade of B or better in all professional education coursework.
- An overall GPA of 3.00 or better.

Prior to admission to the professional internship year, students must pass the Praxis I and II exams, and demonstrate satisfactory progress toward the State of Maine Core Teaching Standards.

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: [http://www.maine.gov/doe/cert/fingerprinting/](http://www.maine.gov/doe/cert/fingerprinting/)

All students must formally declare their entry into a teacher certification concentration by completing the declaration procedures found on the Office of Educator Preparation web site at [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation). Passing Praxis I scores, subscription to Tk20, and two recommendation forms are necessary to complete the declaration process.

**Tk20 Subscription:**

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Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by
the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed with in the context of the Unit’s data management system (i.e., Tk20).

Students who fail to meet any of the academic or professional requirements of this track of the major must withdraw from this track though they may still complete all requirements for the B.A. in Classics without certification.

**Minor in Ancient Civilization**

**Description**

The minor in Ancient Civilization is an interdisciplinary study of life, literature, and art in ancient Greece and Rome.

**Program Requirements**

(15 credits)

CLA 283 (Epic Hero), CLA 285 (Classical Mythology), CLA 291 (Golden Age of Greece) or HTY 303 (History of the Ancient Near East and Greece), CLA 292 (Rome: Republic to Empire) or HTY 304 (History of Rome) and one of the following: CLA 384 (What Would Antigone Do), ENG 315 (Ancient Literature), ARH/CLA 321 (Classical Art), PHI 310 (History of Ancient Philosophy), POS 390 (Ancient and Medieval Political Theory), THE 351 (Dramatic Literature and History); students may propose another relevant 300-level course for their elective.

**Minor in Classical Languages**

**Description**

The minor in Classical Languages includes courses in both ancient Greek and Latin, as well as the Classics capstone course.

**Program Requirements**

Two semesters of Latin; ancient Greek 101 and 102; one additional semester of Latin or ancient Greek; CLA 410

**Minor in French**

**Description**

See Program Requirements

**Program Requirements**

Fifteen credits total including FRE 301, 302, 1-2 courses in civilization (FRE 291 or 292, 293, or 294) and 1-2 courses in literature (FRE 331, 367, 369, 467, 469).
Minor in French Civilization

Description
See Program Requirements

Program Requirements
Fifteen credit total including 2 of the following courses (FRE 291, 292, 293, 294) and 3 of the following: ARH 222, ARH 233, ARH 244, ARH 266, ARH 277, ARH 288, ENG 354 (when the topic deals with France and England), HTY 311, HTY 312, HTY 313, HUM 301, HUM 310, POS 205, POS 245, POS 380, POS 335, POS 405, POS 406

Minor in French Language

Description
See Program Requirements

Program Requirements
Fifteen credits total included FRE 201, 202, 301, 302, 303, 305

Minor in Latin

Description
The minor in Latin is designed to complement other humanities majors, and is good preparation for post-graduate study in law and the health sciences.

Program Requirements
LAT 251, 252, 310 plus one of the following: CLA 2921, HTY 304, LAT 470

Minor in Spanish

Description
See Program Requirements

Program Requirements
SPA 201, 202, 303, 304, and students may then choose any other Spanish course in the 300 level to complete the minor.
Minor in The Greek World

Description
The minor in the Greek World is an interdisciplinary study of life in ancient Greece.

Program Requirements
Ancient Greek 101 and 102 plus 12 credit hours selected from the following: CLA 283, 384, 285, 291, HTY 303, PHI 310, GEY 110, ENG 315

Minor in The Roman World

Description
The minor in the Roman World is a subset of Latin.

Program Requirements
LAT 101 and 102 plus 12 credit hours selected from the following: CLA 283, 384, 285, 292, HTY 304, ENG 315

Course Descriptions

Literature and Civilization in English Translation

CLA 171 Etymology for Everyone
Etymology is the study of word origins and derivations. This course focuses on the learning of the Latin and Greek roots of English as a key to the improvement of English vocabulary. No prior knowledge of Latin or Greek is necessary, nor are there any other prerequisites. Cr 3.

CLA 270 Homer's Odyssey and Joyce's Ulysses
A close reading of the Odyssey and Ulysses, emphasizing the continuous parallels that tie Joyce's epic of Dublin to Homer's ancient song. Topics of comparison include the hero, family romance, and narrative strategies. Cr 3.

CLA 285 Classical Mythology
Examination of the myths of Greece and Rome from a variety of perspectives: anthropological, etiological, historical, psychoanalytical, structural. Cr 3.

CLA 291 The Golden Age of Greece
The literature, history, politics, philosophy, art, and architecture of the fifth century B.C. with particular attention to the achievements of Athens. Lectures, discussion, papers, slides, films. Cr 3.

CLA 292 Rome, from Republic to Empire
The literature, history, politics, philosophy, art, and architecture of Rome in the first century B.C. Lectures, discussion, papers, slides, films. Cr 3.

CLA 321 Art, Architecture, and Archaeology of the Ancient World
This class explores the art, architecture, and archaeology of ancient Greece and Rome. Areas of investigation may include body image/ideal, architecture and politics, art and power, gender and sexuality, and mythology. Students will be expected to respond in written form to secondary literatures. This course is equivalent to ARH 321. Prerequisites: ENG 100; one CLA course or one ARH course, or permission of instructor. Cr 3.

CLA 383 The Epic Hero in Ancient Literature
Intensive readings in English translations of Gilgamesh, Iliad, Odyssey, Argonautica, Aeneid; discussion, papers. Cr 3.
CLA 384 What Would Antigone Do? Tragic Questions, Modern Responses
Exploration of ancient and modern ethical dilemmas via Greek tragedy (in English translation) and ancient and modern responses to it. Readings will be selected from Aeschylus, Sophocles, Euripides, Aristophanes, Plato, Aristotle, Nietzsche, Martha Nussbaum, and modern dramatists. Prerequisites: ENG 100/101/104C or HON 100 plus one of the following courses in ancient Greek culture: CLA 283H, CLA 291I, GRE 251, HON 101, HTY 101I, HTY 303, PHI 310L, or permission of instructor. Cr. 3.

CLA 410 Antiquity and Modernity: Capstone Experience in Classics
This course explores current issues in the field of classics and the impact of the classical tradition on contemporary culture. It includes selected readings of Latin and/or Greek in dialogue with modern texts, projects in the art of translation, and a thesis project. Prerequisites: LAT 251 or GRE 251 or equivalent. LAT 251 or GRE 251 may be taken concurrently with the Capstone. Not open to first or second year students. Cr. 3.

FRE 283 Contemporary French Thinkers
Readings and discussion of recent works of French literature selected for their philosophical and ethical importance: Saint-Exupery, Sartre, Camus, de Beauvoir, Teilhard de Chardin and others. No knowledge of French is necessary. Cr 3.

FRE 291 French Civilization I: An Historical Approach
Aspects of the society, institutions, arts, literature, and religion of France, from the origins to the end of the 19th century. No French is spoken in the classroom. Cr 3.

FRE 292 French Civilization II: French Revolution to Present
Aspects of the society, institutions, arts, literature, and religions of France from the French Revolution to the present. No French is spoken in the classroom. Cr 3.

FRE 293 French/ Francophone Cinema
This course introduces students to movements and themes which have marked French/ Francophone cinema and acquaints students with aspects of French/ Francophone cultures through representative films from the French-speaking world. Prerequisites: ENG 100/104 or permission of instructor. Cr 3.

FRE 294 Topics and Themes in Francophone Studies
This course, interdisciplinary in nature, draws from novels, short stories, poetry, plays, and other cultural documents. Students will gain an understanding of the complexities and specificities of Francophone entities in and outside of Europe. No French will be spoken in this class. Course may be repeated for credit the topic is different. Prerequisites: College writing or permission of instructor. Cr. 3.

FRE 304 Le cafe Francais
This course is designed to develop students ability to speak and comprehend French while learning about current issues in France and the francophone world. Periodic presentations by the instructor and/or invited speakers on topics of cultural interest related to the French-speaking world (e.g., current events, film, art, music, cuisine, business, politics, cross-cultural encounters) will be followed by general discussion and small group conversation. Course repeatable for credit. Prerequisites: FRE 202 or permission. Cr. 1.

GER 281 The German Novelle
The study of the genre of the novelle and its development through the major literary movements from the early 19th century to the present. Authors read vary, but normally include Goethe, Tieck, E.T.A. Hoffmann, Kleist, C.F. Meyer, Storm, Musil and Mann. No knowledge of German is necessary. Cr 3.

RUS 281 Russian Literature in English Translation
The content of this course will vary. Topics will include: Russian literature of the 19th century, Russian literature of the 20th century, recent Soviet literature, Russian theater and cinema. The readings for RUS 281 and the discussions will be in English. Cr 3.

RUS 291 Russian and Soviet Culture and Civilization
A historical view of Russian and Soviet society and culture from the origins of the East Slavic settlements to the present day. No Russian is required. Cr 3.

RUS 293 Survey of Russian Cinema
A chronological overview of the Russian cinema from its beginnings before 1917 to the present, including the work of major directors: Eisenstein, Tarkovsky, Shepitko, and Mikhalkov. Films will be presented in a historical and political context provided by readings and lectures. Prerequisite: ENG 100C or equivalent. Cr 3.

SPA 270 The Culture and Civilization of Spain
This course examines aspects of the society, institutions, art, literature, and religion of Spain from its origins to the present. No knowledge of Spanish is necessary. Cr 3.

SPA 281 Masterpieces of Spanish American and Brazilian Literature
This is a study of contemporary literature representative of current trends in Spanish America and Brazil. Cr 3.

**Classes: Greek and Latin**

**GRE 101 Beginning Greek I**  

**GRE 102 Beginning Greek II**  
Prerequisite: GRE 101 or equivalent. Cr 4.

**GRE 251 Introduction to Greek Literature I**  
A study of Plato's Apology, Crito and selections from the Phaedo. Prerequisite: GRE 102 or equivalent. Cr 3.

**GRE 252 Introduction to Greek Literature II**  
A study of selected books from Homer's Iliad or Odyssey. Prerequisite: GRE 251. Cr 3.

**GRE 310 Seminar in Greek Literature**  
Readings in Greek prose and poetry; a different author will be read each semester. Translation, supplementary reading, paper. Prerequisite: GRE 252. Cr 3.

**GRE 470 Independent Study**  
Cr. Variable.

**LAT 101 Beginning Latin I**  

**LAT 102 Beginning Latin II**  
Prerequisite: LAT 101 or equivalent. Cr 4.

**LAT 251 Introduction to Latin Literature I**  
Selected readings from masters of Latin prose and poetry. Prerequisite: LAT 102 or equivalent. Cr 3.

**LAT 252 Introduction to Latin Literature II**  
Continuation of LAT 251. Cr 3.

**LAT 310 Seminar in Latin Literature**  
Readings in Latin prose and poetry; a different author will be read each semester. Translation, supplementary reading paper. Prerequisite: LAT 252. Cr 3.

**LAT 470 Independent Study**  
Cr. Variable.

**French**

**FRE 101 Beginning French I**  
This beginner's course in French stresses the acquisition of cultural information and introduces the student to the four skills of language learning: listening comprehension, speaking, reading and writing. This course requires additional work with coordinated language CDs and/or MP3 files. Opportunity for practice with DVDs and computer exercises is available. Cr 4

**FRE 102 Beginning French II**  
Continuation of FRE 101. Prerequisite: FRE 101 or equivalent. Cr 4.

**FRE 103 Review of Elementary French**  
Elementary French for students with some previous study of the language who feel the need for a refresher course before entering FRE 201. Cr 3.

**FRE 105 Reading French I**  
Beginner's course in French aiming exclusively at a reading knowledge of the language. No French spoken. Recommended also as preparation for language tests required by graduate schools. Cr 3.

**FRE 107 Intensive Beginning French**  
An intensive course for the beginning student, covering a full year's work at the college level to prepare the student for the intermediate level of college French. Emphasis is placed upon the four skills of language learning: speaking, understanding, reading and writing along with an introduction to contemporary culture and civilization. The course requires additional work with coordinated language CDs and/or MP3 files.
Opportunity for practice with DVDs and computer exercises is available. Offered during summer only. Cr 8.

FRE 201 Intermediate French I
Review of grammatical structures with further development of listening comprehension, speaking, reading and writing skills. The emphasis will be on understanding cultures and contemporary life of French-speaking countries through reading and discussion. This course requires additional work with coordinated language CDs or MP3 files. Opportunity for practice with DVDs and computer exercises is available. May count for credit toward the French major. Prerequisites: FRE 102, or FRE 103, or FRE 107; two years of high school French or the equivalent or instructor's permission. Cr 8.

FRE 202 Intermediate French II
Continuation of FRE 201. Credits may count toward the French major. Prerequisite: FRE 201I or the equivalent or instructor's permission. Cr 4

FRE 206 Reading French II
Further practice of the skill acquired in FRE 105 through an accelerated reading of books on various topics (fiction, history, science, etc.). Successful completion of this course satisfies the foreign language requirement for the History major. Beneficial for students planning to attend a graduate school. May be counted as elective credit toward the French major. Prerequisites: FRE 105, 102, 103, or instructor's permission. Cr 4.

FRE 207 Intensive Intermediate French
This is an intensive course for the intermediate student, covering a full year's work at the college level. Emphasis is placed on the development of listening comprehension, speaking, reading and writing along with an introduction to contemporary culture and civilization. The course requires additional work with coordinated language CDs or MP3 files in an online workbook. Opportunity for practice with DVDs and computer exercises is available. May be counted for credit toward the French major. Offered during summer only. Prerequisite: FRE 102 or FRE 107 or permission. Cr 8.

FRE 300 French/Francophone Practicum
In this course students participate in a number of activities in the French language, enabling them to develop and strengthen their ability in speaking and comprehending. They also gain an awareness and appreciation of various cultures of the French-speaking world. Since immersion content will vary, this course may be repeated, to a total of 3 credits. Prerequisites: FRE 202I or equivalent, or permission of instructor. Cr 1 or 0.

FRE 301 Practical French I
Comprehensive review of French grammar, enrichment of vocabulary, and practice in conversation, using a variety of materials, including films, videos, songs, interviews, newspapers and periodicals. Emphasis will be on achieving proficiency in all areas. Prerequisite: FRE 202I or equivalent. Cr 3.

FRE 302 Practical French II
Continuation of FRE 301. Prerequisites: FRE 301 or equivalent. Cr 3.

FRE 303 Thème et Version
In this course, students will learn techniques and the art of translation through an analysis of the major linguistic and cultural differences between French and English. Translations will be done from French into English and from English into French. Prerequisite: FRE 202I or 207I, or permission. Cr 3.

FRE 304 Le Cafe Francais
This course is designed to develop students' ability to speak and comprehend French while learning about current issues in France and the francophone world. Periodic presentations by the instructor and/or invited speakers on topics of cultural interest related to the French speaking world (e.g. current events, film, art, music, cuisine, business, politics, cross-cultural encounters) will be followed by general discussion and small group conversation. Course repeatable for credit. Prerequisite: FRE 202 or permission. 1 cr.

FRE 305 French Phonetics
A formal study of the French sound system and an initiation into phonetic transcription with practical and remedial work in pronunciation. Prerequisite: FRE 202I or equivalent. Cr 3.

FRE 330 Art of Writing
This course will be devoted to developing the student's ability to write clear, nuanced, and well-articulated French in a variety of modes and formats. We will study and emulate various types of texts in order to develop a sense of style in French. The focus will be on writing strategies, the organization of ideas, and a continued appreciation for words and language use. This course continues the work in FRE 301 and 302. Cr. 3.

FRE 331 Workshop in French Literary Analysis
This course is designed to introduce students to reading strategies and fundamental techniques of French literary analysis and critical interpretation through close readings of short texts representative of the three genres (narrative, poetry and theatre). These works deal with concepts relevant to our everyday lives: questions of identity, self/other relations, desire, jealousy, time, longing, hypocrisy, the family society, solitude. Although the primary focus will be the individual texts, students will engage with the aesthetic, cultural, philosophical and social context of the works. All coursework will be conducted in French. This course is a prerequisite for all other 300-level French literature courses.
FRE 367 Genres and Periods in French Literature
Each course in this group, "Genres and Periods," deals with a specific literary genre (novel, poetry, theatre) and/or time period (Medieval, Renaissance, seventeenth, eighteenth, nineteenth, or twentieth century). Sample topics: nineteenth-century French novel, seventeenth-century French theatre, twentieth-century French fiction. This course may be repeated for credit provided that the topic is different. Prerequisite: FRE 331 or equivalent. Cr 3.

FRE 369 Topics and Themes in French Literature
Each course in this group, "Topics and Themes," deals with a subject and/or a theme in French or Francophone literature. This course may be repeated for credit provided the topic is different. Prerequisite: FRE 331 or equivalent. Cr 3.

FRE 467 Genres and Periods in French Literature
An advanced course in the group "Genres and Periods," which deals with a specific literary genre (novel, poetry, theatre) and/or time period (Medieval, Renaissance, seventeenth, eighteenth, nineteenth, or twentieth century). Sample topics: nineteenth-century French novel, seventeenth-century French theatre, twentieth-century French fiction. This course may be repeated for credit provided the topic is different. Prerequisite: FRE 367 or 369 or equivalent. Cr 3.

FRE 469 Topics and Themes in French Literature
An advanced course in the group "Topics and Themes," which deals with a major subject and/or theme in French or Francophone literature. Prerequisite: FRE 367 or 369 or equivalent. Cr 3.

FRE 470 Independent Study

FRE 475 Capstone in French
This senior seminar will focus on a particular cultural history or literary theme or question in French or Francophone literature and/or civilization. The topic will vary but will provide students the opportunity to use the tools of critical analysis acquired in previous courses to engage in discussions regarding practical issues where students can demonstrate their oral and rhetorical skills as well as strategic thinking. Prerequisite: FRE 367 or FRE 369. Cr. 3.

German

GER 101 Beginning German I
This beginner's course in German stresses the acquisition of cultural information and introduces the student to the four skills of language learning: listening comprehension, speaking, reading, and writing. In conjunction with class meetings, additional work is required using language lab resources. Opportunity for practice with videotapes and computer exercises is available. Cr 5.

GER 102 Beginning German II
Continuation of GER 101. Prerequisite: GER 101 or equivalent. Cr 5.

GER 105 Reading German I
Elementary course in German aiming exclusively at a reading knowledge of the language. No German spoken. Not offered every year. Cr 3.

GER 107 Intensive Beginning German and GER 107 Lab
An intensive course for the beginning student, covering a full year's work at the college level to prepare the student for the intermediate level of college German. Emphasis is placed upon the four skills of language learning: speaking, understanding, reading, and writing, along with an introduction to contemporary culture and civilization. Daily practice in the language lab is required (for two additional credits). Offered during the summer only. Cr 6. (With lab, Cr 8.)

GER 201 Intermediate German I
Review of grammar. Further development of listening comprehension, speaking and reading skills. Emphasis on understanding German culture and contemporary life through reading and discussion of short stories, articles and essays. Students are encouraged to also register for laboratory practice (one more credit). Prerequisite: GER 102, two years of high school German or the equivalent. Cr 4.

GER 202 Intermediate German II
Continuation of GER 201. Prerequisite: GER 201I or the equivalent. Cr 4.

GER 206 Reading German II
Further practice of the reading skill acquired in GER 105. Recommended also as preparation for language tests required by graduate schools. Prerequisites: GER 105, 102 or instructor's permission. Not offered every year. Cr 3.

GER 321 Composition and Conversation in German I
Systematic training in correct pronunciation and usage, and in vocabulary building, with written and oral practice. Prerequisite: GER 202 or equivalent. Cr 3.
GER 322 Composition and Conversation in German II
Continuation of GER 321. Reading and discussion of historical, journalistic, and literary material covering life in Germany from World War I to the present. Prerequisite: GER 321 or equivalent. Cr 3.

GER 351 Introduction to German Literature I
Reading and discussion of selected works representing the major literary movements from Enlightenment to Realism. Readings are in German; class discussions and exams are in English. Prerequisite: GER 202 or GER 206 or an equivalent reading ability of German. Cr 3.

GER 352 Introduction to German Literature II
Reading and discussion of selected works representing the major literary movements from Naturalism to the present. Readings are in German; class discussions and exams are in English. Prerequisite: GER 202 or GER 206 or an equivalent reading ability of German. Cr 3.

GER 470 Independent Study
Cr. Variable.

Russian

RUS 101 Beginning Russian I
A course for beginners that includes the four skills of listening comprehension, speaking, writing, and reading. Students are also provided with cultural information needed to use the language correctly. The course emphasizes the acquisition of real Russian by using authentic materials. Cr 5.

RUS 102 Beginning Russian II
Continuation of RUS 101. Prerequisite: RUS 101 or equivalent. Cr 5.

RUS 201 Intermediate Russian I
This course further develops the four skills of listening comprehension, speaking, writing, and reading. The course provides students with the cultural information they need to use the language correctly. The aim of the course is for students to acquire "real" Russian and be able to deal with authentic materials. Prerequisite: RUS 102 or equivalent. Cr 4.

RUS 202 Intermediate Russian II
Continuation of RUS 201. Prerequisite: RUS 201 or the equivalent. Cr 4.

RUS 301 Advanced Intermediate Russian I
This course involves intermediate-level work in the four skills of listening comprehension, speaking, writing, and reading that promotes the student toward an advanced level. The course emphasizes the development of the student's active and passive vocabularies and deeper knowledge of Russian culture. The course is taught primarily in Russian. Prerequisite: RUS 202 or equivalent. Cr 3.

RUS 302 Advanced Intermediate Russian II
This is the transitional course in the language acquisition sequence. Students who complete the course satisfactorily are ready to begin advanced-level work in all four skill areas. The class is conducted entirely in Russian. Prerequisite: RUS 301 or equivalent. Cr 3.

RUS 321 Advanced Russian
Students will read a variety of authentic texts ranging from newspapers to encyclopedias to literary works and will write extended essays, discuss ideas and argue points of view on a variety of subjects. They are also required to listen to or watch real Russian media. Students may also work on the art of translation. Prerequisite: RUS 302 or equivalent. Cr 3.

RUS 351 Seminar in Russian Literature
Topics for this seminar will be chosen from the following: historical surveys, genre surveys in the novel, short story, drama, and Russian women writers. All coursework is in Russian. The emphasis is on language and style. Prerequisites: RUS 281 and RUS 321. Cr 3.

RUS 470 Independent Study
Cr. Variable.

Spanish

SPA 101 Beginning Spanish I
A beginning course in Spanish in the four skills of language learning: listening comprehension, speaking, reading, and writing. In addition, audio-visual work is required. Cr 4.

SPA 102 Beginning Spanish II
Continuation of SPA 101. Prerequisite: SPA 101 or equivalent. Cr 4.

SPA 107 Intensive Beginning Spanish
An interactive intensive language course in which the skills of listening, reading, speaking, and writing will be emphasized and evaluated. Students will participate in daily lab activities. This course can be used as a substitute for a first-year language experience or as a beginning refresher course. Offered during the summer only. Cr 8.

SPA 201 Intermediate Spanish I
Review of grammatical structures. Further development of listening comprehension, speaking, reading and writing skills. Continued emphasis on understanding of Hispanic culture and civilization through reading and discussion of literary and historical texts as well as frequent reference to contemporary customs and events. Students are encouraged to also register for laboratory practice. Prerequisite: SPA 102 or SPA 107, two years of high school Spanish or the equivalent. Cr 3.

SPA 202 Intermediate Spanish II
Continuation of SPA 201. Prerequisite: SPA 201 or the equivalent. Cr 3.

SPA 207 Intensive Intermediate Spanish
An interactive intensive language course in which the skills of listening, reading, speaking, and writing will be emphasized and evaluated. Students will participate in daily lab activities. This course can be used as a refresher course and can fulfill the requirements for an intermediate proficiency course. Prerequisite: SPA 102, SPA 107, or equivalent. Offered during the summer only. Cr 8.

SPA 300 Topics in Conversation
This course is a bridge between basic language proficiency and more advanced levels. All four language skills will be emphasized but in-class work will center on speaking. Prerequisite: SPA 202 or permission. Cr 3.

SPA 304 Advanced Conversation and Composition
This course focuses on listening, reading, speaking, and writing, with an emphasis on oral and written communication and critical thinking. Activities are communicative as well as cooperative with a focus on learning in context. Taught in Spanish. Prerequisite: SPA 300 or equivalent. Cr. 3.

SPA 305 Introduction to Hispanic Literature
A comprehensive introduction to literary analysis of Hispanic texts with an emphasis on acquiring the concepts and technical vocabulary needed to describe and discuss literary issues effectively. Taught in Spanish. Prerequisite: SPA 304 or equivalent. Cr. 3.

SPA 332 Advanced Grammar and Stylistics
This course involves systematic training in grammatical and compositional fluency and accuracy. Translation techniques will also be a component of the course. Prerequisite: SPA 304 or equivalent/permission. Cr 3.

SPA 351 Readings in Contemporary Spanish Literature
An introduction to the literature of contemporary Spain. All discussions and readings will be in Spanish. Prerequisite: SPA 304 or equivalent/permission. Cr 3.

SPA 352 Readings in Modern Latin American Literature
An introduction to the literature of modern Latin America. All discussions and readings will be in Spanish. Prerequisite: SPA 304 or equivalent/permission. Cr 3.

SPA 360 Hispanic Cinema
This course will explore specific themes in Hispanic Cinema. Films will be analyzed in a cultural and historical context. Topics will vary. Films are in Spanish with subtitles. Cr. 3.

SPA 450 Topics in Hispanic Language and Literature
An advanced seminar in Hispanic language, culture, and literature. Prerequisite: SPA 332, SPA 351 or SPA 352, or permission of the instructor. Cr 3.

SPA 470 Independent Study
Cr. Variable.

English for Speakers of Other Languages

ESL 006 Intensive Grammar
This course is a part of the Intensive English Language program (IELP). It focuses on building a stronger foundation in the grammatical skills necessary for more natural and accurate English, both oral and written. Through a series of grammatical exercises, meaningful drilling, and analysis of the structure of the English language, students will become more adept at producing a wider variety of language with a higher knowledge of use and form. The course will not only introduce new structures in language but also review and expand upon those already learned. (The credit for this course does not apply toward a baccalaureate or an associate's degree.) Prerequisite: instructor's permission. Cr 1.5.

ESL 007 Listening and Oral Communication
ESL 008 Reading and Writing
This intermediate/higher intermediate course is a part of the curriculum of the Intensive English Language program. The course focuses on the improvement of the reading and writing skills that are necessary for the university classroom. All of the reading is from authentic sources. Emphasis is placed on developing speed and comprehension of the skill areas. Students will develop a greater sense of confidence in using written English as a method of communication. Emphasis will be placed on achieving completeness and coherence in written compositions and on understanding the mechanical aspects of the essay. In reading, students will learn to read for meaning and to analyze basic texts and a short novel. Through reading, writing, and specific exercises, students will expand their grasp of vocabulary and idiom needed for academic work. Prerequisite: instructor's permission. Cr 3.5.

ESL 009 Intensive Reading and Speaking Fluency
This course is part of the curriculum of the Intensive English Language program. It focuses on the development of the fluency in speaking and reading that are necessary for the university classroom. Emphasis is on understanding the mechanical aspects of the essay. In reading, students will learn to read for meaning and to analyze basic texts and a short novel. Through reading, writing, and specific exercises, students will expand their grasp of vocabulary and idiom needed for academic work. Prerequisite: instructor's permission. Cr 1.5.

ESL 010 English for Speakers of Other Languages Level I: Intermediate Reading, Writing, and Vocabulary
An intermediate-level English language course for students whose first language is not English. This is a developmental ESL course designed to help students compose fluent and accurate writing as used in academic settings. Students will develop a greater sense of confidence in using written English as a method of communication. Emphasis will be placed on achieving completeness and coherence in written compositions and on understanding the mechanical aspects of the essay. In reading, students will learn to read for meaning and to analyze basic texts and a short novel. Through reading, writing, and specific exercises, students will expand their grasp of vocabulary and idiom needed for academic work. Prerequisite: instructor's permission. Cr 3.

ESL 011 English for Speakers of Other Languages: Intermediate Grammar and Writing
An intermediate-level English language course for non-native speakers of English that will enable students to benefit from a stronger foundation in understanding and using English grammar correctly and confidently. Emphasis is on understanding the meaning, use, and form of common grammar structures needed for academic writing. Students will have a basic knowledge of English grammar, but will need more work on accurate production of English, both oral and written, through a series of grammatical, written, and oral exercises. This course will be more developmental in that it will prepare students for the more advanced ESL 102. Prerequisite: instructor's permission. Cr 3.

ESL 100 College Writing
This section of College Writing is intended for non-native speakers of English only. The course focuses on the analysis of professional and student writing as a way of sharpening awareness of how to use the English language effectively for use in the academic classroom. The writing assignments encourage students to apply the principles discussed in class to their own work. This course cannot be used to satisfy a humanities requirement. Prerequisite: ESL 104 or instructor's permission. Cr 3.

ESL 102 English for Speakers of Other Languages: Advanced Grammar and Writing
An advanced-level English language course for non-native speakers of English focusing on building a stronger foundation of grammatical skills that will aid students in producing more natural and accurate writing skills in the English language. Emphasis is placed on understanding and using grammar structures needed for academic writing and discussion on the university level. Through a series of grammatical exercises, meaningful drilling, both written and oral, and analysis of the structure of English, students will become better used to producing more complex sentences and short essays. Prerequisite: ESL 011 or instructor's permission. Cr 3.

ESL 103 English for Speakers of Other Languages Level II: Higher Intermediate Reading, Writing, and Vocabulary
A higher intermediate-level English language course for non-native speakers of English designed to help students produce grammatical, well-constructed, coherent English, in both written and spoken form. Based on the writing process, students will write and rewrite paragraphs and essays drawn from topical and academic reading, works of fiction, and class discussion. Students learn to read and analyze for content and style a variety of authentic works of fiction and non-fiction. A strong focus will be on enhancing the students' academic vocabulary. Prerequisite: ESL 010 or instructor's permission. Cr 3.

ESL 104 English for Speakers of Other Languages Level III: Advanced Reading, Writing, and Vocabulary
An advanced-level English language course for non-native speakers of English who are nearly ready for College Writing but need additional work in fine-tuning their language skills. Much of the work done in this class will focus on reading academic literature, fiction, and non-fiction, as well as the academic writing skills necessary for university work. Additional focus will be on vocabulary extension and the use of idiom. Students will be required to write short essays, keep a written journal, and make a major oral presentation in class. Prerequisite: ESL 103 or instructor's permission. Cr 3.
The primary mission of the School of Music of the University of Southern Maine is to prepare musicians for careers in teaching, performing, and related fields. In addition, the school provides support for music education throughout the state of Maine and New England; it actively participates in a mutually supportive relationship with the professional arts community; and it guides present and future audiences toward greater understanding of and appreciation for many different styles of music.

The School presents more than 100 performances and events each year featuring faculty, guest artists, and students.

The School of Music offers: a) courses and performance opportunities for all USM students, b) professional degrees in music education and performance, c) a liberal arts degree in music, d) a minor in music, and e) master's degrees and certificate programs (see the USM graduate catalog).

Students are accepted as undergraduate music majors into one of the following baccalaureate degree programs:

- Bachelor of Arts in Music, a liberal arts degree with a major in music;
- Bachelor of Music in Music Education, a professional degree in preparation for teacher certification in music K-12;
- Bachelor of Music in Composition, a professional degree with intensive study in composition;
- Bachelor of Music in Performance, a professional degree with intensive study in voice or orchestral/band instrument or piano, organ, or guitar performance;
- Bachelor of Music in Performance–Jazz Studies, a professional degree with intensive study in jazz and classical performance;
- Bachelor of Music in Performance–Musical Theater, a professional degree with intensive study in music and musical theater performance; including training in acting and dance (offered in conjunction with the Department of Theatre.); and
- Bachelor of Music in Performance–Piano Pedagogy, a professional degree with intensive study in piano teaching.

Admission Requirements

Admission to degree programs in music is based on the following criteria:

- performance audition;
- test of aural comprehension, rhythmic recitation, and sight singing; and
- diagnostic written test of music fundamentals, including intervals, scales, chords, and key signatures.

Applicants in music education will also have an interview. Applicants in musical theater will perform a two-minute monologue and execute a simple movement combination.

The audition committee will review each auditioner's complete application to USM, including high school records and recommendations.

Students may apply to the director of the School for advanced placement in music courses, which may be granted through portfolio review or special examination.

Transfer students

At the time of first registration in the School of Music, a transfer student's transcript will be evaluated. Based upon that evaluation, the student
will be held responsible for completing a certain number of semesters of MUS 442 (Recital Class) and major ensemble requirements, regardless of whether the student continues on a full-time or part-time basis.

For music performance and music education majors the appropriate jury level will be established through a jury held by the end of the student’s first semester of study at USM.

School Policies and Standards

Performance juries

Students perform juries according to the following schedule:

- Music Education majors: At the end of each academic year
- Music Performance majors: At the end of each semester
- Bachelor of Arts majors: No jury required

The jury panel will determine the level of performance, grade the performance pass/fail, and submit a written evaluation that will be included in the student's file.

Students who fail the juried exam will be placed on probation. Students who fail two consecutive juries will be dismissed from the program. Students are required to perform at the appropriate level of competence as established by the music faculty, and may perform required recitals only after attaining appropriate jury levels.

Grading Standards

Students must earn grades of C- or better in all courses that count toward fulfillment of major requirements. Grades of D and F do not fulfill prerequisite requirements. No course may be repeated more than once. Students who fail in the second attempt to pass a course with a grade of C- or better will be dismissed from the program.

The minimum cumulative grade point average for admission to junior- and senior-level music major courses is 2.25 for the Bachelor of Music in Performance and Bachelor of Arts degrees; it is 2.75 for students pursuing the Bachelor of Music in Music Education degree. Additional requirements for admission to upper division music education studies are enumerated in the Bachelor of Music in Music Education degree description.

Students who do not meet academic or applied music standards will be placed on probation and may be dismissed if by the end of the following semester they do not meet these standards. Students will be placed on probation or dismissed by the director of the School when they do not meet the standards of the School of Music. While on probation, students should carry a maximum of a 14-hour credit load. Students who have been dismissed may not enroll in music major courses, but may re-audition after one semester.

Applied Music

Students other than music majors and minors will be accommodated for applied music (private lessons) if a teacher's time is available, and will be subject to a fee in addition to the University tuition fee.

An applied music fee will be charged for all applied music (private lessons) and chamber music in addition to course tuition. Private lesson fees for music majors and minors are subsidized by the University; fees for other USM students are unsubsidized.

For a music major the University will subsidize the fee for up to eight semesters of required lessons. In the case of transfer students, a determination of the number of semesters of subsidized lessons will be made at the time of matriculation. For a music minor the University will subsidize the applied music fee to a maximum of eight credit hours if the student demonstrates adequate proficiency.

Students registering for applied music must report to the director of the School for assignment to an applied music teacher and scheduling of lessons.

A chamber music fee will be charged to each person for each enrollment in coached chamber music.

Music Core Requirements

To be considered a music major in good standing, and to be eligible for applied music subsidies, a student must be making reasonable progress toward the completion of a music degree. Initially, this will be interpreted to mean consistent progress toward completion of the music core and compliance with all other School requirements.

Each student enrolled as a major in a music degree program will take a prescribed course or sequence of courses in the following areas except...
where noted below:

Music Theory and Aural Skills

- Music Theory and Aural Skills 1 through 4, during the first four semesters of study; some degree programs require further study in music theory.

Music History

- Multi-Cultural Perspectives of American Popular Music and Jazz
- Music History Survey 1
- Music History Survey 2

Typically taken continuously from the second through fourth semesters of study. Some degree programs require further study in music history.

Functional Piano/Keyboard Skills

- Piano Class 1-4
- Jazz studies concentration students take Jazz Piano 1 and 2 in lieu of Piano Class 3 and 4. Bachelor of Arts students may exercise this same option.
- Piano and organ majors have special requirements—see individual program descriptions. Some degree programs require further study in keyboard skills.

Conducting

- Basic Conducting (music performance, except jazz studies concentration)
- Choral Conducting and Instrumental Conducting (music education)
- Jazz studies majors fulfill this requirement through Jazz Pedagogy
- Bachelor of Arts students are not required to take a conducting course.

Concert Attendance Policy

All music majors are required to attend a number of concerts and recitals each semester in order to maintain good standing in the School. Failure to meet the requirements of this policy can result in probation and suspension. The policy is administered through MUS 442 Recital Class.

BA in Music

Description

This degree program is designed to provide the opportunity for a scholarly study of music to meet the needs of those who wish to obtain a liberal arts education with an emphasis on music and those who plan to do graduate work in music. The program aims to instill a thorough understanding of music and its relationship to contemporary society. The study of music history and theory is central in this curriculum. Sufficient flexibility is built into the program to allow the individual student to establish areas of emphasis both in music and in the arts and sciences.

Program Requirements

The minimum number of credits required for the degree is 120.

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<thead>
<tr>
<th>Music CORE 29 credits</th>
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<tbody>
<tr>
<td>Music Theory and Aural Skills (16)</td>
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<tr>
<td>MUT 100 Music Theory and Aural Skills 1</td>
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<td>MUT 101 Music Theory and Aural Skills 2</td>
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<td>MUT 200 Music Theory and Aural Skills 3</td>
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<td>MUT 201 Music Theory and Aural Skills 4</td>
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<td>Music History (9)</td>
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<td>MUH 105 Multi-Cultural Perspectives of American Popular Music and Jazz</td>
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<td>MUH 222 Music History Survey 1</td>
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MUH 223 Music History Survey 2 3

Functional Piano (4)
MUS 150 Piano Class 1 1
MUS 151 Piano Class 2 1
MUS 250 Piano Class 3
  or MUS 252 Jazz Piano Class 1 1
MUS 251 Piano Class 4
  or MUS 253 Jazz Piano Class 2 1

Applied Music 4 credits required
  Private Lessons (4 semesters +) 4
  4 credits of private lessons required; up to 12 additional credits may be taken as electives
  MUS 442 Recital Class (8 semesters) 0

The University will subsidize up to a total of 16 credit hours of applied music lessons for a B.A. music student.

Ensembles 4 credits required
  8 semesters of ensemble; may include chamber music. Additional 4 credits may be taken as electives

Additional Music Classes 28 credits

  MUS 332 Counterpoint 3
  MUS 330 Form and Analysis 3
  MUS 480 Bibliography and Research in Music 3
  MUS 320 Seminar in Music History 3
  MUP 490 Senior Recital / Seminar 3
  Music Electives, may include applied music and/or ensemble credits 12

Additional Non-music Electives, including language study 27
  Bachelor of Arts students must achieve second-year proficiency in one foreign language. This may be achieved by examination for no academic credit.

Admission Information

Admission to all degree programs in music is based on the following criteria:

1. Performance audition on the applicant's major instrument.
2. Tests of aural comprehension, rhythmic recitation, and sight singing administered individually by a member of the staff.
3. A diagnostic written test of music fundamentals, including intervals, scales, chords, and key signatures.

Audition Information

BM in Composition

Description

This degree concentration is designed for those who wish to prepare for a career in music composition and those who plan to do graduate work in composition. The program aims to instill students with a thorough understanding of both traditional and contemporary compositional tools and prompts students to engage in the discourse surrounding the making of new music in our society. Private lessons, participation in the USM Composers Ensemble, regular composition and performance of new works, and classes in counterpoint and analysis are emphasized.

Program Requirements
The minimum number of credits required for the degree is 120.

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<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
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<td><strong>Music Theory and Aural Skills 22 credits</strong></td>
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<td>MUT 100 Music Theory and Aural Skills 1</td>
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<td>MUT 101 Music Theory and Aural Skills 2</td>
<td>4</td>
</tr>
<tr>
<td>MUT 200 Music Theory and Aural Skills 3</td>
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</tr>
<tr>
<td>MUT 201 Music Theory and Aural Skills 4</td>
<td>4</td>
</tr>
<tr>
<td>MUS 330 Form and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MUS 332 Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td><strong>Music History 14 credits</strong></td>
<td></td>
</tr>
<tr>
<td>MUH 105 Multi-Cultural Perspectives of American Popular Music and Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUH 222 Music History Survey 1</td>
<td>3</td>
</tr>
<tr>
<td>MUH 223 Music History Survey 2</td>
<td>3</td>
</tr>
<tr>
<td>MUS 220 Twentieth-Century Music or MUS 320 Seminar in Music History</td>
<td></td>
</tr>
<tr>
<td><strong>MUS 321 Literature of the Major Instrument (Composition)</strong></td>
<td>2</td>
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<tr>
<td><strong>Functional Piano 4 credits</strong></td>
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</tr>
<tr>
<td>MUS 150 Piano Class 1</td>
<td>1</td>
</tr>
<tr>
<td>MUS 151 Piano Class 2</td>
<td>1</td>
</tr>
<tr>
<td>MUS 250 Piano Class 3</td>
<td>1</td>
</tr>
<tr>
<td>MUS 251 Piano Class 4</td>
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</tr>
<tr>
<td><strong>Conducting 4 credits</strong></td>
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</tr>
<tr>
<td>MUS 244 Basic Conducting</td>
<td>2</td>
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<tr>
<td>MUE 313 Instrumental Conducting</td>
<td>2</td>
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<tr>
<td><strong>Applied Music 27 credits</strong></td>
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</tr>
<tr>
<td>Private Lessons in Composition (8 semesters)</td>
<td>24</td>
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<tr>
<td>MUP 390 Junior Recital</td>
<td>0</td>
</tr>
<tr>
<td>MUP 490 Capstone: Senior Recital</td>
<td>3</td>
</tr>
<tr>
<td>MUS 442 Recital Class (8 semesters - must have compositions performed in 4 semesters)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Ensemble Requirements 4.5 credits</strong></td>
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<tr>
<td>Major Ensemble (2 semesters)</td>
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<tr>
<td>University Chorale, Chamber Singers, Concert Band or University Orchestra</td>
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</tr>
<tr>
<td>MUS 406 Composer's Ensemble (7 semesters)</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Additional Courses</strong></td>
<td></td>
</tr>
<tr>
<td>Music Electives</td>
<td>8.5</td>
</tr>
<tr>
<td>University Core Curriculum and Non-Music Electives</td>
<td>36</td>
</tr>
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</table>

**Admission Information**

Admission to all degree programs in music is based on the following criteria:

1. Performance audition on the applicant’s major instrument or portfolio review.
2. Tests of aural comprehension, rhythmic recitation, and sight singing administered individually by a member of the staff.
3. A diagnostic written test of music fundamentals, including intervals, scales, chords, and key signatures.

Audition Information
BM in Music Education

Description

This degree program prepares students for careers in PK-12 school-based music teaching. Students completing this course of study are prepared to apply for state teacher certification in Maine and other states. Certification applications must be accompanied by scores from the Praxis I national teacher exam that must be successfully completed during the sophomore year, and the Praxis II exam that must be successfully completed prior to Professional Internship. Students are advised to meet with their advisor if they plan to seek teacher certification in states other than Maine.

As the field of music education requires a broad range of skills and competencies, students are required to complete substantial work in music theory, ear training, musicology, applied music, conducting, chamber music and ensembles, in addition to music education methods courses, field work and teaching internships. The music education curriculum reflects the full range of knowledge and skills required in current practice. All students complete a nearly identical curriculum with adjustments made to reflect the unique requirements of individualized areas of applied study (vocal, instrumental, piano, or guitar) identified during the audition process.

Program Requirements

All students are reminded that, in addition to meeting School requirements for a major leading to a baccalaureate degree, they must also meet the University's General Education requirements. The minimum number of credits required for the degree is 120.

<table>
<thead>
<tr>
<th>Music CORE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music Theory and Aural Skills (16)</td>
<td></td>
</tr>
<tr>
<td>MUT 100 Music Theory and Aural Skills 1</td>
<td>4</td>
</tr>
<tr>
<td>MUT 101 Music Theory and Aural Skills 2</td>
<td>4</td>
</tr>
<tr>
<td>MUT 200 Music Theory and Aural Skills 3</td>
<td>4</td>
</tr>
<tr>
<td>MUT 201 Music Theory and Aural Skills 4</td>
<td>4</td>
</tr>
<tr>
<td>Music History (9)</td>
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</tr>
<tr>
<td>MUH 105 Multi-Cultural Perspectives of American Popular Music and Jazz</td>
<td></td>
</tr>
<tr>
<td>MUH 222 Music History Survey 1</td>
<td>3</td>
</tr>
<tr>
<td>MUH 223 Music History Survey 2</td>
<td>3</td>
</tr>
<tr>
<td>Functional Piano (4) (keyboard players have substitute courses; see below)</td>
<td></td>
</tr>
<tr>
<td>MUS 150 Piano Class 1</td>
<td>1</td>
</tr>
<tr>
<td>MUS 151 Piano Class 2</td>
<td>1</td>
</tr>
<tr>
<td>MUS 250 Piano Class 3</td>
<td>1</td>
</tr>
<tr>
<td>MUS 251 Piano Class 4</td>
<td>1</td>
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<tr>
<td>Conducting (4)</td>
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</tr>
<tr>
<td>MUE 252 Choral Conducting</td>
<td>2</td>
</tr>
<tr>
<td>MUE 313 Instrumental Conducting</td>
<td>2</td>
</tr>
</tbody>
</table>

Applied Music (14 credits)

Classical performance in brass, guitar, percussion, piano, strings, voice, woodwinds

(7 semesters)

Composition (7 semesters)

Jazz performance - bass, drums, guitar, saxophone, trumpet and trombone

Semesters 1 & 2 - classical focus
Semesters 3 - 7 - jazz focus

Jazz performance - piano

Semesters 1 & 2 - classical focus
Semesters 3 & 4 - 2 cr. classical focus and 1 cr. jazz focus each semester
Semesters 5 - 7 - jazz focus

Jazz performance - voice

Semesters 1 & 2 - classical focus
Semesters 3 & 4 - 2 cr. classical focus and 1 cr. jazz focus each semester
Semesters 5 - 7 - jazz focus

MUP 491 Senior Recital 0
MUS 442 Recital Class (7 semesters) 0

Ensembles (7 credits)
Requirements for students studying applied classical performance in brass, percussion, strings or woodwinds
  Concert Band or Orchestra (7 semesters) 3.5
  Chorale or Chamber Singers (4 semesters) 2
  Chamber music (1 semester) 0.5
  Composer's Ensemble (1 semester) 0.5
  Jazz large or chamber ensemble (1 semester) 0.5

Requirements for students studying applied classical performance in voice:
  Chorale or Chamber Singers (7 semesters) 3.5
  Concert Band or Orchestra (4 semesters)* 2
  Chamber music (1 semester) 0.5
  Composer's Ensemble (1 semester) 0.5
  Jazz large or chamber ensemble (1 semester) 0.5

*One additional semester in any ensemble: chorale, chamber singers, concert band or orchestra

Additional Requirements
  MUS 360 Advanced Keyboard Skills 2
  MUS 372 Pedagogy of the Major Instrument (Piano) 2
  MUS 452 Accompanying (2 semesters) 1

Requirements for students studying applied classical performance guitar:
  Chorale or Chamber Singers (minimum of 4 semesters)* 2
  Concert Band or Orchestra (minimum of 4 semesters)* 2

*One additional semester in any ensemble: chorale, chamber singers, concert band or orchestra

  Chamber music (1 semester) 0.5
  Composer's Ensemble (1 semester) 0.5
  Jazz large or chamber ensemble (1 semester) 0.5

Requirements for students studying applied composition
  Composer's Ensemble (7 semesters) 3.5
  Chorale or Chamber Singers (2 semesters) 1
  Concert Band or Orchestra (2 semesters)* 1
  Chamber music (1 semester) 0.5
  Jazz large or chamber ensemble (1 semester) 0.5

Requirements for students studying applied jazz
  Jazz Ensembles (7 semesters) 3.5
  Chorale or Chamber Singers (2 semesters) 1
  Concert Band or Orchestra (2 semesters)* 1
  Chamber music (1 semester) 0.5
  Composer's Ensemble (1 semester) 0.5
  Large Jazz ensemble (1 semester) 0.5
*Note: Students without instrumental experience may substitute MUE 112 Percussion Techniques for one semester of Concert Band or Orchestra. Students are expected to audition for Concert Band or Orchestra each semester and may be placed in the percussion section of either ensemble following successful completion of MUE 112 and successful audition. Guitarists will complete three additional semesters in any ensemble: chorale, chamber singers, concert band, or orchestra.

### Additional Music Courses 42.5 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MUE 110 ProSeminar I</td>
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</tr>
<tr>
<td>MUE 150 ProSeminar II</td>
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<td></td>
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<tr>
<td>MUE 210 ProSeminar III</td>
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<td></td>
</tr>
<tr>
<td>MUE 250 ProSeminar IV</td>
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<td></td>
</tr>
<tr>
<td>MUE 310 ProSeminar V/Teaching Internship</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MUE 350 ProSeminar VI</td>
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<td></td>
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<tr>
<td>MUE 410 ProSeminar VII</td>
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<tr>
<td>MUE 450 Professional Internship</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>MUE 451 Professional Portfolio (see above; should count in general education)</td>
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<td></td>
</tr>
</tbody>
</table>

- MUE 111 Professional Foundation for Music Education 2
- MUE 112 Percussion Techniques 1
- MUE 211 Teaching Creative and Critical Listening PK-12 2
- MUE 251 Teaching Vocal Music PK-12 3
- MUE 253 Brass Techniques 1
- MUE 311 Research and Evaluation in Music Education 2
- MUE 312 Teaching Instrumental Music PK-12 2
- MUE 314 Guitar Techniques 1
- MUE 351 Teaching Improvisation in Music PK-12 2
- MUE 352 String Techniques 1
- MUE 353 Woodwind Techniques 1
- MUE 411 Teaching Music Composition PK-12 2

### Chamber Music (1 semester) 0.5
- See Ensembles, above

### Jazz Ensemble (1 semester) 0.5
- See Ensembles, above

### Composer's Ensemble (1 semester) 0.5
- See Ensembles, above

### Additional Non-music Courses 6 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRD/SBS 200 Multicultural Human Development</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SED 335 Students with Exceptionalities in General Education</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Admission to Upper Division in Music Education

Upper division music courses are typically designated by course numbers in the 300 or 400 range.

In order to enroll in upper division music courses, a music student must:

- Earn a grade of C- or better in all MUS courses.*
- Earn a grade of B- or better in all MUE and MUP courses.*
- Earn a Level II on the applied music jury.
- Pass Praxis I.
- Successfully complete EYE (if required), College Writing, and Quantitative Reasoning core courses.
- Earn a cumulative GPA of 2.75 or better.

*Note: These standards are in effect for all MUS, MUE, MUH, MUT, and MUP courses in both the lower and upper divisions of the program.

In March of the sophomore year students will complete the application for admission to Upper Division. This application and review are part of the advising process within ProSeminar IV. Students who fail to meet the above requirements may not enroll in upper division courses.

Senior recital requirements: Presentation of a solo recital in the senior year (or junior year with special permission). The recital contains 30 minutes of music including at least 25 minutes of solo performance; the remainder may be chamber music. Normally the program will be shared with another MUE senior or MUP junior recital. Programs exceeding 30 minutes of music require the special approval of the faculty. A student may not perform the required recital during the semester of Professional Internship.
The Professional Internship

This is a field-based student teaching experience. Students are placed with music educator mentors on a full-time basis in order to gain multiple guided and independent teaching experiences. In preparation for the Internship, students in music education must:

- Successfully complete all required coursework prior to the Internship;
- Successfully complete all performance juries and the recital prior to the Internship;
- Have a cumulative grade point average of 2.75 or above;
- Submit passing scores on the Praxis I Pre-Professional Skills test (must be completed by the sophomore year);
- Submit passing scores on the Praxis II Music content exam; and
- Submit proof of successful completion of Maine Department of Education required fingerprinting and background check.

The Capstone project for Music Education

This is the Professional Portfolio. The Professional Portfolio provides students with an opportunity to reflect upon their own growth and development in the teaching profession. The portfolio will include materials that demonstrate fulfillment of the USM Teacher Certification Standards. Upon completion, the Professional Portfolio is a document suitable for presentation and future reference.

The Professional Education Council, comprised of deans, department chairs, faculty, and school representatives from all programs offering initial teacher preparation, is the governing body for program review and evaluation for all initial-level teacher education programs at USM.

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: [http://www.maine.gov/doe/cert/fingerprinting/](http://www.maine.gov/doe/cert/fingerprinting/)

All students must formally declare their entry into a teacher certification concentration by completing the declaration procedures found on the Office of Educator Preparation web site at [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation). Passing Praxis I scores, subscription to Tk20, and two recommendation forms are necessary to complete the declaration process.

Tk20 Subscription:

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation)

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed with in the context of the Unit’s data management system (i.e., Tk20).

Admission Information

Admission to the Music Education degree is based on the following criteria:

a. Performance audition on the applicant's major instrument.

b. Tests of aural comprehension, rhythmic recitation, and sight singing administered individually by a member of the staff.

c. A diagnostic written test of music fundamentals, including intervals, scales, chords, and key signatures.

d. A brief interview with the Music Education faculty.

Audition Information
BM in Music Performance

Description

This degree program is designed for those who wish to prepare for a career in music performance and/or applied music teaching, and those who plan to do graduate work in applied music. The program aims to instill a thorough understanding of music and its relationship to contemporary society. Private lessons; solo, chamber and large ensemble performance; and the study of literature and pedagogy of the major instrument are emphasized. Basic understanding of the standards and opportunities for professional performance leads the student to realistic expectations for a career as a performer or teacher.

Program Requirements

The minimum number of credits required for the degree is 120.

Music CORE 30-34 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music Theory and Aural Skills (16)</td>
<td></td>
</tr>
<tr>
<td>MUT 100 Music Theory and Aural Skills 1</td>
<td>4</td>
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<tr>
<td>MUT 101 Music Theory and Aural Skills 2</td>
<td>4</td>
</tr>
<tr>
<td>MUT 200 Music Theory and Aural Skills 3</td>
<td>4</td>
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<tr>
<td>MUT 201 Music Theory and Aural Skills 4</td>
<td>4</td>
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<tr>
<td>Music History (12)</td>
<td></td>
</tr>
<tr>
<td>MUH 105 Multi-Cultural Perspectives of American Popular Music and Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUH 222 Music History Survey 1</td>
<td>3</td>
</tr>
<tr>
<td>MUH 223 Music History Survey 2</td>
<td>3</td>
</tr>
<tr>
<td>MUH 321 Classical and Romantic Music</td>
<td>3</td>
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<tr>
<td>or MUS 220 Twentieth-Century Music</td>
<td></td>
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<tr>
<td>Functional Piano (4) (not required for piano and organ majors)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 150 Piano Class 1</td>
<td>1</td>
</tr>
<tr>
<td>MUS 151 Piano Class 2</td>
<td>1</td>
</tr>
<tr>
<td>MUS 250 Piano Class 3</td>
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<tr>
<td>MUS 251 Piano Class 4</td>
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<tr>
<td>Conducting (2)</td>
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</tr>
<tr>
<td>MUS 244 Basic Conducting</td>
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</table>

Applied Music 27 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Lessons (8 semesters)</td>
<td>24</td>
</tr>
<tr>
<td>MUP 390 Junior Recital</td>
<td>0</td>
</tr>
<tr>
<td>MUP 490 Capstone: Senior Recital / Seminar</td>
<td>3</td>
</tr>
<tr>
<td>MUS 442 Recital Class (8 semesters)</td>
<td>0</td>
</tr>
</tbody>
</table>

Performance majors must complete satisfactorily a 30 minute recital in the junior year and a 50 minute recital in the senior year. The junior recital, 30 minutes of music, must include at least 25 minutes of solo performance. The senior recital, 50 minutes of music, must include at least 40 minutes of solo performance. All recitals must show a range of performance pieces demonstrating a variety of historical styles.

Ensemble Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocal Performance</td>
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</tr>
<tr>
<td>Major Ensemble (8 semesters)</td>
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</tr>
<tr>
<td>University Chorale or Chamber Singers</td>
<td>4</td>
</tr>
<tr>
<td>MUS 404 Opera Workshop</td>
<td>3</td>
</tr>
<tr>
<td>Band / Orchestra Instrument Performance</td>
<td></td>
</tr>
<tr>
<td>Major Ensemble (8 Semesters)</td>
<td></td>
</tr>
<tr>
<td>University Concert Band or Orchestra</td>
<td>4</td>
</tr>
<tr>
<td>MUS 406 Chamber Music</td>
<td>2</td>
</tr>
<tr>
<td>Piano Performance</td>
<td></td>
</tr>
<tr>
<td>MUS 406 Chamber Music</td>
<td>2</td>
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</tbody>
</table>
Organ Performance
MUS 401 University Chorale (4 semesters) 2
MUS 406 Chamber Music
(2 semesters; one completed playing continuo) 1
MUS 452 Accompanying or keyboard in a conducted ensemble 1

Guitar Performance
MUS 406 Chamber Music or playing guitar in a conducted ensemble 6

Area specific Music Course Requirements 13 - 27 Credits

Vocal Performance Credits
MUS 256/257 Diction 1 and 2 4
MUS 321 Literature of the Major Instrument 2
MUS 330 Form and Analysis 3
MUS 372 Pedagogy of the Major Instrument 2

Voice Majors only: Non-music course requirements 19-21 cr
Voice majors must meet a minimum proficiency in Italian and either French or German either by exam or through completion of the second semester of the basic course in the Department of Modern and Classical Languages and Literatures.
Italian 1 & 2 8 cr.
French or German 1 & 2 8-10 cr.
THE 102 Acting for the Non-Major 3 cr.

Band or Orchestra Instrument Performance
MUS 321 Literature of the Major Instrument 2
MUS 330 Form and Analysis 3
MUS 332 Counterpoint 3
MUS 372 Pedagogy of the Major Instrument 2

Piano Performance
MUS 321 Literature of the Major Instrument Piano 1 2
MUS 322 Literature of the Major Instrument Piano 2 2
MUS 330 Form and Analysis 3
MUS 332 Counterpoint 3
MUS 360/361 Advanced Keyboard Skills 1 & 2 4
MUS 372 Pedagogy of the Major Instrument Piano 1 2
MUS 373 Pedagogy of the Major Instrument Piano 2 2

Organ Performance
MUS 310/311 Organ Improvisation 1 & 2 2
MUS 321 Literature of the Major Instrument Organ 1 2
MUS 323 Literature of the Major Instrument Organ 2 2
MUS 330 Form and Analysis 3
MUS 332 Counterpoint 3
MUS 372 Pedagogy of the Major Instrument 2

Guitar Performance
MUS 321 Literature of the Major Instrument 2
MUS 330 Form and Analysis 3
MUS 332 Counterpoint 3
MUS 372 Pedagogy of the Major Instrument 2

Elective Credits 2 - 17 credits

Vocal Performance

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Music 2
Non-Music 0

Band or Orchestra Instrument Performance
Music 7
Non-Music 9

Piano Performance
Music 7
Non-Music 9

Organ Performance
Music 8
Non-Music 9

Guitar Performance
Music 7
Non-Music 9

Admission Information

Admission to all degree programs in music is based on the following criteria:

1. Performance audition on the applicant's major instrument.
2. Tests of aural comprehension, rhythmic recitation, and sight singing administered individually by a member of the staff.
3. A diagnostic written test of music fundamentals, including intervals, scales, chords, and key signatures.

Audition Information

BM in Performance - Jazz Studies

Description

This degree concentration is designed as foundation studies for those who wish to prepare for careers in jazz or commercial music performance and/or jazz instruction and those who plan to pursue graduate work in jazz studies. This program aims to instill a thorough understanding of this unique American art form and its relationship to contemporary society. Applied music, jazz improvisation, jazz arranging, jazz history, and jazz ensembles are emphasized. A basic understanding of the standards and performance opportunities for professional performance leads the student to realistic expectations for a career as a performer or teacher.

Program Requirements

The minimum number of credits required for the degree is 120.

Music CORE 28-32 credits

Music Theory and Aural Skills (16)
MUT 100 Music Theory and Aural Skills 1 4
MUT 101 Music Theory and Aural Skills 2 4
MUT 200 Music Theory and Aural Skills 3 4
MUT 201 Music Theory and Aural Skills 4 4

Music History (12)
MUH 105 Multi-Cultural Perspectives of American Popular Music and Jazz 3
MUH 222 Music History Survey 1 3
MUH 223 Music History Survey 2 3
MUS 206 Jazz History 3

Functional Piano (4) not required for pianists
MUS 150 Piano Class 1 1
MUS 151 Piano Class 2 1
MUS 252 Jazz Piano Class 1 1
MUS 253 Jazz Piano Class 2 1
Students in the jazz concentration will divide their 24 credit hours of applied music equally between classical applied studies and jazz applied studies by taking either a 2-credit or a 1-credit lesson in each area every semester.

Jazz students must take a jazz jury each semester and a classical jury during the spring semester. They are expected to pass a level 3 jury in each area prior to giving their senior recital.

Students in the jazz concentration must satisfactorily complete a 30 minute recital in the junior year and a 50 minute recital in the senior year. The junior recital should consist of 30 minutes of jazz repertoire, and the senior recital should consist of 25 minutes of jazz repertoire and 25 minutes of classical repertoire. The jazz repertoire shall demonstrate the student's skills at improvisation, composition, and arranging, and should be chosen under the guidance of their applied jazz instructor.

Ensembles 8 credits
- Major Ensemble, non-Jazz (4 semesters) 2
- University Chorale, Chamber Singers, Concert Band or Symphony Orchestra
- Large Jazz Ensemble (8 semesters) 4
- Chamber Jazz Ensemble (4 semesters) 2

Students should take a minimum of .5 credit of the appropriate section of MUS 406 Chamber Music - Jazz during each of their first two academic years. Students who are not selected for MUS 407 Jazz Ensemble may substitute additional credits of MUS 406 Chamber Music - Jazz with permission of the director of jazz studies. Guitarists and pianists may fulfill the Major Ensemble requirement by taking MUS 452 Accompanying or any small ensemble outside the jazz idiom.

Additional Music Courses 17 credits
- MUS 337 Jazz Arranging 3
- MUS 380 Jazz Improvisation 1 3
- MUS 381 Jazz Improvisation 2 3
- MUS 374 Jazz Pedagogy 2
- Electives 6

Additional Non-music courses
- One approved course from the School of Business 3
- Electives 6

Admission Information

Admission to the jazz degree concentration in music is based on the following criteria:

a. Performance audition on the applicant's major instrument. For most instruments, one selection should be from the jazz idiom and one from the classical genre. While performing jazz selections, the candidate should demonstrate their jazz improvisation abilities.

b. Tests of aural comprehension, rhythmic recitation, and sight singing administered individually by a member of the staff.

c. A diagnostic written test of music fundamentals, including intervals, scales, chords, and key signatures.

Audition Information
BM in Performance - Musical Theatre

Description

This degree program, offered in collaboration with the Theatre Department, is designed for those who wish to pursue a career in musical theatre performance. The program aims to instill a thorough understanding of music and theatre and their relationship to contemporary society. Private lessons, solo and ensemble performance, and the theatrical training necessary for this discipline are emphasized. A basic understanding of the standards and opportunities for professional performance leads the student to realistic expectations for a career as a performer or teacher.

Program Requirements

The minimum number of credits required for the degree is 120.

Music CORE 30-34 credits

Music Theory and Aural Skills (16)
- MUT 100 Music Theory and Aural Skills 1 4
- MUT 101 Music Theory and Aural Skills 2 4
- MUT 200 Music Theory and Aural Skills 3 4
- MUT 201 Music Theory and Aural Skills 4 4

Music History (12)
- MUH 105 Multi-Cultural Perspectives of American Popular Music and Jazz 3
- MUH 222 Music History Survey 1 3
- MUH 223 Music History Survey 2 3
- MUS 325 History of the American Musical Theatre 3

Functional Piano (4)
- MUS 150 Piano Class 1 1
- MUS 151 Piano Class 2 1
- MUS 250 Piano Class 3 1
- MUS 251 Piano Class 4 1

Conducting (2)
- MUS 244 Basic Conducting 2

Applied Music 27 credits

Private Lessons (8 semesters) 24
- MUP 490 Senior Recital / Seminar 3
- MUS 442 Recital Class (4 semesters) 0

Students in the musical theatre concentration will divide their 24 credit hours of applied music equally between classical applied studies and musical theatre coaching by taking either a 2-credit or a 1-credit lesson in each area every semester.

Ensembles 3.5 credits
- MUS 404 Opera Workshop: Musical Theatre (4 semesters) 2
- MUS 401 Chorale or MUS 405 Chamber Singers [3 semesters] 1.5

Additional Music Courses 2 credits
- MUS 321 Literature of the Major Instrument (Musical Theatre Literature) 2

Additional Theatre Courses 29 credits
- THE 120 Acting: Stage Movement/Voice 3
- THE 220 Acting: Scene Study 3
- THE 321 Acting: Advanced Scene Study 3
- THE 130, 131, 132, 133 Theatre Workshop, 4 semesters 4
Students in the musical theatre concentration will be expected to achieve an approved jury level at the end of each semester in order to stay in the program. They must successfully perform two significant roles and one chorus role in an approved music theatre production. Students must successfully complete a crew or backstage assignment; presence is required at all strikes for all productions in which students participate, whether as a crew or cast member.

**Admission Information**

Admission to the Musical Theatre program is based on the following criteria:

Vocal performance audition of two pieces from the Musical Theatre literature; one ballad and one up-tempo piece. The applicant should also be prepared to sing one classical or traditional piece.

a. Performance of a two to three minute memorized monologue
b. Execute a simple movement combination.
c. Tests of aural comprehension, rhythmic recitation, and sight singing administered individually by a member of the staff.
d. A diagnostic written test of music fundamentals, including intervals, scales, chords, and key signatures.

**Audition Information**

**BM in Performance - Piano Pedagogy**

**Description**

This degree concentration is for students who wish to prepare for a career in private piano teaching and those who wish to do graduate work in piano pedagogy. The program focuses upon the development of teaching techniques and performance skills. Specific areas of pedagogy study include: methods and materials, child development, learning theory as it pertains to music education, group and individual lesson formats, and business aspects of running a private studio. The program also includes a supervised piano teaching internship during the junior or senior year. A basic understanding of the standards and opportunities for teaching, as well as performance, leads the student to realistic expectations for a career in private piano teaching.

**Program Requirements**

The minimum number of credits required for the degree is 120.

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<th>Music CORE 30 credits</th>
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<td>Music Theory and Aural Skills (16)</td>
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MUH 105 Multi-Cultural Perspectives of American Popular Music and Jazz 3
MUH 222 Music History Survey 1 3
MUH 223 Music History Survey 2 3
MUH 321 Classical and Romantic Music or MUS 220 Twentieth Century Music 3
Conducting (2)
MUS 244 Basic Conducting 2

Applied Music 27 credits
Private Lessons (8 semesters) 24
MUP 390 Junior Recital 0
MUP 490 Capstone: Senior Recital / Seminar 3
MUS 442 Recital Class (8 semesters) 0
Students in the piano pedagogy concentration must play a full 50 minute recital in the senior year, including at least 40 minutes of solo repertoire. The recital should illustrate a range of historical styles.

Ensembles 4 credits
University Chorale or Chamber Singers 0.5
Any conducted ensemble 0.5
MUS 406 Chamber music 2
MUS 406 Chamber music or MUS 452 Accompanying 1

Additional Music Courses 30 credits
MUS 372 Pedagogy of the Major Instrument (Piano) 2
MUS 373 Piano Pedagogy 2 2
MUS 360 Advanced Keyboard Skills 1 2
MUS 361 Advanced Keyboard Skills 2 2
MUS 376 Class Piano Teaching 1 2
MUS 377 Class Piano Teaching 2 2
MUS 332 Counterpoint 3
MUS 330 Form and Analysis 3
MUS 321 Literature of the Major Instrument (piano) 2
MUS 322 Piano Literature 2 2
MUS 378 Practicum in Piano Pedagogy 1 3
MUS 379 Practicum in Piano Pedagogy 2 3
Applied Music–Jazz Piano 2

Additional Elective Courses 6 credits
Electives 6

Admission Information

Admission to all degree programs in music is based on the following criteria:

a. Performance audition on the applicant's major instrument.
b. Tests of aural comprehension, rhythmic recitation, and sight singing administered individually by a member of the staff.
c. A diagnostic written test of music fundamentals, including intervals, scales, chords, and key signatures.

Audition Information

Minor in Music (Bachelor of Arts)
Description
This minor program is designed to provide an opportunity for candidates working toward the bachelor of arts degree who demonstrate interest and ability to continue music studies at the undergraduate level.

Program Requirements
The minor consists of MUT 100 Music Theory and Aural Skills 1, one of the Music CORE history requirements (MUH 105, MUH 222, or MUH 223) and 13 credits of music electives, excluding MUS 100 and MUS 110. At least six of these credits must be taken at USM.

Applied music fees, to a maximum of eight credit hours, will be subsidized by the University provided that the student demonstrates adequate proficiency.

Admission Information
Admission to degree programs in music including the minor is based on the following criteria:

1. performance audition;
2. a test of aural comprehension, rhythmic recitation, and sight singing; and
3. a diagnostic written test of music fundamentals, including intervals, scales, chords, and key signatures.

Audition Information

Course Descriptions

• Undergraduate
• Graduate

Undergraduate

Courses Primarily for Non-Majors

MUP 101 Applied Music
An opportunity to continue at the college level the private study of piano, voice, organ, guitar, or any orchestra or band instrument. One half-hour lesson per week for twelve weeks. Restricted to non-majors and certain music students. May be repeated for credit. Special fee assessed. Cr 1.

MUP 102 Applied Music
An opportunity to continue at the college level the private study of piano, voice, organ, guitar, or any orchestra or band instrument. One hour lesson per week for twelve weeks. Restricted to non-majors and certain music students. May be repeated for credit. Special fee assessed. Cr 2.

MUS 100 Music Appreciation and History
A survey of music from the Gregorian chant to the modern times, covering musical practices of the renaissance, baroque, classical, romantic, and contemporary periods. Representative works by the outstanding composers of each period. Open to all students. Cr 3.

MUS 102 Music of the Portland Symphony
A course designed to increase the student's understanding and appreciation of the music scheduled for the Portland Symphony Orchestra's regular concerts of the semester. Attendance is required at the concerts in addition to regularly scheduled classes. Historical background, biography of composer, musical analysis, rehearsal and performance techniques, and music criticism. Open to all students. Cr 3.

MUS 103 Introduction to Jazz
A survey of jazz from its inception to the present day. Involves a study of the origins and stylistic development of jazz. Open to all students. Cr 3.

MUS 109 Dynamic Posture and Alignment
Provides students with a practical understanding of anatomy, kinesiology, and biomechanics in order to improve ease and freedom of motion while in a stationary position. This course is designed for musicians, as well as other performers and creative artists, athletes, and computer users. Cr 2.

MUS 110 Fundamentals of Music
A background study of concepts and skills essential to an intelligent reading of music. The development of natural music abilities through
participating in singing, rhythmic activities, and instrumental work. An appreciation of music through awareness of basic structures. Open to all students. Cr 3.

**MUS 202 Music in America**
A survey of the important trends in music from colonial days to the present. Emphasis will be placed on the role of the Native American composer in the development of sacred music, concert music, jazz, musical comedy, and pop music. Open to all students. Cr 3.

**MUS 203 Music in the Twentieth Century**
A study of trends in European and American music from the beginning of the century to the present with emphasis on the literature of the major composers. Open to all students. Cr 3.

**Music Performance Groups**

**Major Ensembles**

**MUS 400 Southern Maine Symphony Orchestra**
A string, wind, and percussion ensemble open to all University students and community members through audition. The ensemble focuses on the fundamentals of ensemble performance, dealing with a variety of literature, and performs at least one major concert per semester. Prerequisite: audition. Cr 0.5.

**MUS 401 University Chorale**
A choral ensemble for mixed voices open to all University students through audition. The Chorale sings repertoire from all historical periods and performs locally and on a spring tour. The purposes of the ensemble are to develop musical expression and precision of intonation and rhythm and to promote the musical development necessary for excellence in ensemble singing. Prerequisite: audition. Cr 0.5.

**MUS 402 University Concert Band**
A wind and percussion ensemble open to all University students through audition. The ensemble focuses on the fundamentals of ensemble performance dealing with a variety of literature. The University Concert Band performs at least one major concert per semester and is active in presenting school assembly programs. Prerequisite: audition. Cr 0.5.

**MUS 405 Chamber Singers**
An ensemble of mixed voices selected by audition. The ensemble specializes in a cappella repertoire, notably of the Renaissance era and the 20th century. Prerequisite: audition. Cr 0.5.

**MUS 407 Jazz Ensemble**
An ensemble specializing in the study and performance of jazz for large and small groups. Open to all students by audition. Prerequisite: audition. Cr 0.5.

**MUS 408 Wind Ensemble**
The Wind Ensemble offers a unique musical experience to its members. The versatility of the Wind Ensemble, based upon the solo performer premise, has established a tradition of performing chamber and large instrumentations, traditional or experimental combinations, and early through contemporary literature. The membership of the Wind Ensemble is selected from Concert Band personnel. Prerequisite: audition. Corequisite: MUS 402. Cr 0.5.

**Small Ensemble**

**MUS 403 Percussion Ensemble**
A percussion ensemble open to all University students through audition. Prerequisite: audition. Cr 0.5.

**MUS 404 Opera Workshop**
This ensemble will focus on the union of musical ideas with dramatic situations and will explore the ways in which singers must convey the essence of a dramatic situation. Performances of scenes from operas, operettas, and musical theater. Prerequisite: audition. Cr 0.5

**MUS 406 Chamber Music**
A performance course open to all qualified students interested in forming chamber groups: duets, trios, quartets, quintets, etc., under faculty supervision. Cr 0.5.

**MUS 452 Accompanying**
A workshop course in applied accompanying under faculty supervision. One-half credit is awarded for each twenty hours of University-supervised accompanying, with a maximum of two credits in any academic year. Cr 0.5-2.

**Music Performance**

**MUP 201 Applied Music**
May be taken in piano, voice, organ, guitar, or any orchestra or band instrument. One half-hour lesson per week for twelve weeks in the minor
performance area in fulfillment of applied music requirements. Restricted to music majors and minors. May be repeated for credit. Special fee assessed. Cr 1.

**MUP 202 Applied Music**
May be taken in piano, voice, organ, guitar, or any orchestra or band instrument. One hour lesson per week for twelve weeks in the major performance area in fulfillment of applied music requirements. Restricted to music majors and minors. May be repeated for credit. Special fee assessed. Cr 2.

**MUP 203 Applied Music**
May be taken in piano, voice, organ, guitar, or any orchestra or band instrument. One hour lesson per week for twelve weeks in the major performance area in fulfillment of applied music requirements. Restricted to B.M. performance majors. May be repeated for credit. Special fee assessed. Cr 3.

**MUP 390 Recital**
Public performance in the area of applied study for junior performance majors. Graded pass/fail. Cr 0.

**MUP 490 Senior Recital / Seminar**
This seminar focuses on the final creative project in each student's applied area. Cr 3.

**MUP 491 Recital**
Public performance in the area of applied study for music education majors. Graded pass/fail. Cr 0.

**Music Education**

**MUE 110 ProSeminar I**
Provides a professional community for emerging music educators. Students will complete fieldwork, interact with field specialists and practitioners, study emerging topics and contemporary practices in music education. Student will begin to develop their professional portfolios. Corequisite: MUE 111 Professional Foundations for Music Education. Cr. 1.

**MUE 111 Professional Foundations for Music Education**
The course will survey the cultural and historical contexts of American music education and the philosophies that underpin its practice. Issues of arts advocacy will also be addressed. Cr. 2.

**MUE 112 Percussion Techniques**
Students will learn techniques and methods to provide instruction on percussion instruments to students in grades 4-12. Corequisite MUE 110 ProSeminar 1. Cr. 1.

**MUE 150 ProSeminar II**
Provides a professional community for emerging music educators. Students will explore the uses of technology in education through fieldwork and other experiences. Students will continue the development of their teaching portfolios. Prerequisite: MUE 110 ProSeminar I; MUE 111 Professional Foundation for Music Education. Cr. 1.

**MUE 210 ProSeminar III**
Provides a professional community for emerging music educators. Fieldwork will focus on the application of instructional strategies for guiding critical and creative music listening in a variety of educational contexts. Prerequisite: MUE 150 ProSeminar II. Corequisite: MUE 211 Teaching Creative and Critical Listening PK-12. Cr. 1.

**MUE 211 Teaching and Creative and Critical Listening PK-12**
Application of music education methods and contemporary learning theory to music education curricula. An investigation of standards, teaching for musical understanding and the design of lesson plans and assessment strategies will empower students to define and demonstrate a comprehensive pedagogical approach as music educators. Prerequisite: MUE 111; Corequisite: MUE 210. Cr. 2.

**MUE 250 ProSeminar IV**
Provides a professional community for emerging music educators. Fieldwork will focus on the application of classroom and rehearsal strategies for developing young vocal musicians. Prerequisite: MUE 210 ProSeminars III. Corequisite: MUE 251 Teaching Vocal Music PK-12. Cr. 1.

**MUE 251 Teaching Vocal Music PK-12**
Students will develop personal singing skills as they learn to engage PK-12 singers in the study of vocal music. Students will study vocal pedagogy and group vocal technique. Students will create PK-12 curriculum and assessment materials and learn how to organize and administer a school based vocal music program. Prerequisite: MUE 210 ProSeminar III. Corequisite: MUE 250 ProSeminar IV. Cr. 3.

**MUE 252 Choral Conducting**
Introduction to conducting gestures and development of non-verbal gestures through choral conducting, including score analysis and rehearsal techniques. Prerequisite MUT 200 (Music Theory and Aural Skills III) Cr. 2.
MUE 253 Brass Techniques
Students will learn brass instrumental techniques and methods to provide instruction on brass instruments to students in grades 4-12. The demonstration of proper performance techniques on trumpet, horn, trombone, and tuba will be required. Prerequisites: MUE 210 ProSeminar III. Cr 1.

MUE 310 ProSeminar V Teaching Internship
Provides students an opportunity for intensive study and internship in a specialized area of music education. Students will work with the music education faculty to determine an appropriate field placement and course of study. Prerequisite: MUE 250 ProSeminar IV. Corequisite: MUE 311 Research and Evaluation. Cr. 3.

MUE 311 Research and Evaluation in Music Education
The course will introduce philosophical, historical, descriptive, correlational, causal-comparative, experimental, and arts-based research methods as utilized in music education contexts. Students will develop skills to facilitate formalize inquiry including student assessment and program evaluation. Prerequisite: MUE 250 ProSeminar IV. Corequisite: MUE 310 ProSeminar V. Cr. 2.

MUE 312 Teaching Instrumental Music PK-12
The course will acquaint students with methods and procedures of teaching instrumental music in grades PK-12. Teaching techniques and methods, rehearsal techniques, ensemble literature, program administration and organization, recruiting, budgets, public relations, advocacy, ensemble literature, scheduling, and performance will be addressed. Prerequisite: MUE 250 ProSeminar IV. Corequisite MUE 310 ProSeminar V. Cr. 2.

MUE 313 Instrumental Conducting
Advanced development of non-verbal gestures through the art of instrumental conducting. Score reading analysis, rehearsal techniques and performance preparation. Prerequisite: MUT 244. Cr 2.

MUE 314 Guitar Techniques
An introduction to basic guitar skills. Emphasis is placed upon those skills that lead to playing effective accompaniments. Cr 1.

MUE 350 ProSeminar VI
Provides a professional community for emerging music educators. Fieldwork will include both the observation and leadership of improvisation activities in a variety of educational settings. Prerequisite: MUE 310 ProSeminar V. Co-requisite: MUE Teaching Improvisation in Music PK-12. Cr. 1.

MUE 351 Teaching Improvisation in Music PK-12
Students will investigate improvisation in various styles of music and learn how its application can foster creativity in students of all grade levels. Pedagogical methods, materials and standards incorporating jazz and various styles will be reviewed and applied to the music classroom. Prerequisite: MUE 310 ProSeminar V. Co-requisite: MUE 350 and a jazz ensemble (MUS 406 or 407 - by audition). Cr. 2.

MUE 352 String Techniques
Students will learn string techniques and methods to provide instruction on bowed instruments to school aged students. The demonstration of proper performance techniques on violin, viola, cello, and bass will be required. Prerequisite: MUE 310 ProSeminar VI. Cr. 1.

MUE 353 Woodwind Techniques
Students will learn instrumental techniques and methods to provide instruction on flute, single, and double reeds to students in grades 4-12. The demonstration of proper performance techniques will be required. Prerequisite: MUE 250 ProSeminar IV. Cr. 1.

MUE 410 ProSeminar VII
Provides a professional community for emerging music educators. Fieldwork will include both observation and leadership of composition activities in a variety of educational settings. Prerequisite: MUE 350 ProSeminar VI. Corequisite: MUE 411 Teaching Music Composition PK-12; Composer's Ensemble. Cr. 1.

MUE 411 Teaching Music Composition PK-12
Students will develop personal composition skills as they learn to engage young musicians in the study of music composition. Students will study composition pedagogy including individual and group techniques. Students will create PK-12 curriculum and assessment materials and learn how to organize and administer a school based music composition program. Prerequisite: MUE 350 ProSeminar VI. Corequisites: MUE 410 ProSeminar VII, MUS 406 Composers' Ensemble. Cr. 2.

MUE 450 Professional Internship
Full-time student teaching during the senior year is provided for one semester under direct supervision in off-campus situations for all who meet the requirements. Students will experience classroom and ensemble teaching experiences. Corequisite: MUE 451. Cr 8.

MUE 451 Professional Portfolio
Creation of an electronic portfolio aligned with the USM Teacher Certification Standards. The portfolio will contain evidence of preparation,

Music Courses

MUH 105 Multi-Cultural Perspectives of American Popular Music and Jazz
An overview of selected styles and traditions of jazz and American popular music, as well as World music that has influenced those styles. Developing critical thinking and writing skills, the course stresses close analysis and interpretation of selected works. Cr. 3.

MUH 222 Music History Survey 1
An historical study of the language and style of music from antiquity until 1800. Significant composers, major genres, and representative musical compositions are studied. Music majors only or permission of the instructor. Cr. 3.

MUH 223 Music History Survey 2
An historical study of the language and style of Western art music from 1800 to the present day. Significant composers, major genres, and representative musical compositions are studied. Music majors or permission of instructor. Cr. 3.

MUH 225 World Music
This course is designed to investigate music of various cultures. The course will explore the music of particular regions, for example, the Pacific Rim, India, and the Americas, with the intent of understanding the relationship of music to the culture in which it was created. Listening, analysis, independent research, and writing are required. Prerequisites: None Cr 3.

MUH 300 Topics in Music History Studies
An intensive study of a specific area of music history. This course may be repeated once for credit as topics vary. Limit 6 credits. Prerequisite: MUH 222, or permission of the instructor. Cr 1-3.

MUH 321 Classical and Romantic Music
This course covers the history of Western music from 1750 to 1900. The elements of musical language and style are traced through representative composers' works. Listening, analysis, independent research, and writing are required. Prerequisites: MUH 222, MUH 223, or permission of the instructor. Cr 3.

MUH 329 Devils, Dwarves and Dragons
This course will consider anti-Semitism in music from multiple perspective including that of the performer, composer and audience member. Students will analyze works from musical, cultural, and ethical perspective to understand how they were performed and perceived. Prerequisites: College Writing. Cr 3.

MUS 150 Piano Class 1
This is a piano class for MUE and MUP students not majoring in a keyboard instrument. Topics covered include sight-reading, basic technique, scales, chord progressions, harmonization, transposition and performance of elementary to intermediate piano literature. Prerequisite: music major status or permission of School director. Cr 1.

MUS 151 Piano Class 2
This is a continuation of MUS 150. Prerequisite: MUS 150 or permission of School director. Cr 1.

MUS 205 Music in Film
Exploration of how music interacts with images, dialogue, and other elements to create meaning in films. Readings introduce students to the field of film studies and to the analysis of film music. Assigned films, to be viewed before each class, cover a spectrum of genres. The ability to read music is not required. Prerequisites: EYE and College Writing. Cr 3.

MUS 206 Jazz History
This course provides an in-depth examination of the historical evolution of jazz, as well as a familiarity with the major and secondary figures in the idiom. Emphasis is placed on detailed listening assignments and class discussions. Prerequisite: MUS 103, music major status, or permission of instructor. Cr 3.

MUS 220 Twentieth-Century Music
This course covers the history of Western music from 1900 to the present. The elements of musical language and style are traced through representative composers' works. Listening, analysis, independent research, and writing are required. Music majors only or permission of the instructor. Cr 3.

MUS 244 Basic Conducting
Practical conducting experiences; score reading, basic beat patterns, gestures, and interpretation. Prerequisite: MUT 200. Cr 2.

MUS 250 Piano Class 3
This is a continuation of MUS 151. Prerequisite: MUS 151 or permission of School director. Cr 1.

**MUS 251 Piano Class 4**
This is a continuation of MUS 250. Prerequisite: MUS 250 or permission of School director. Cr 1.

**MUS 252 Jazz Piano Class 1**
This is a jazz piano class for MUP Jazz Studies Concentration students not majoring in a keyboard instrument, as well as non-jazz keyboard majors and other instrumentalists who meet the prerequisite. Topics covered include chord voicing for the ii-v-i progression, arrangements of standard tunes, jazz scales and modes, and accompaniment styles. Prerequisite: MUS 151 or permission of School director. Cr 1.

**MUS 253 Jazz Piano Class 2**
This is a continuation of MUS 252. Prerequisite: MUS 252 or permission of School director. Cr 1.

**MUS 255 Guitar**
An introduction to basic guitar skills. Emphasis is placed upon those skills that lead to playing effective accompaniments. Cr 1.

**MUS 256 Diction for Singers 1: Italian and French**
A study in the principles of Italian and French diction through the use of the International Phonetic Alphabet (IPA). An application of these basic principles to vocal literature through written, singing, and aural transcription exercises. Prerequisite: music major or instructor permission. Cr 2.

**MUS 257 Diction for Singers 2: French and German**
A continuation of study in the principles of French diction and the principles of German diction through the use of the International Phonetic Alphabet (IPA). An application of these basic principles to vocal literature through written, singing, and aural transcription exercises. Prerequisite: MUS 256 or permission of instructor. Cr 2.

**MUS 300 Topics in Performance**
An intensive study of a specific area of performance. This course may be repeated once for credit as topics vary. Limit 6 credits. Prerequisite: MUH 222, or permission of the instructor. Cr 1-3.

**MUS 301 Topics in General Music Studies**
An intensive study of a specific area in general music. This course may be repeated once for credit as topics vary. Limit 6 credits. Prerequisite: MUH 222, or permission of the instructor. Cr 1-3.

**MUS 302 Topics in Pedagogy**
An intensive study of a specific area in music pedagogy. This course may be repeated once for credit as topics vary. Limit 6 credits. Prerequisite: MUH 222, or permission of the instructor. Cr 1-3.

**MUS 310 Organ Improvisation 1**
This course will cover the basics of improvisation at the organ. The goal is to equip the student with the skills needed in church situations. Hymns, chorales, and plainsong melodies will form the basis for learning to improvise preludes, postludes, and interludes in a variety of styles. This course will be scheduled as an additional applied music time with an organ specialist. Prerequisite: MUT 101 or permission of instructor. Cr 1.

**MUS 311 Organ Improvisation 2**
This course is the continuation of MUS 310. It will be scheduled as an additional applied music time with an organ specialist. Prerequisites: MUT 101 and MUS 310, or permission of instructor. Cr 1.

**MUS 320 Seminar in Music History**
A concentrated study of selected topics in music history based on individual research. Prerequisites: MUH 105, 222, 223. For music majors or minors. Others only with permission of instructor. Cr 3.

**MUS 321 Literature of the Major Instrument**
A survey of the literature for voice or a specific instrument. Except for piano or voice, which are offered in class sessions when the number of registrants warrants it, this will be scheduled as private study. Normally the piano and voice sessions will be offered in alternate years. For performance majors. Other music majors only with permission of the School. Cr 2.

**MUS 322 Piano Literature 2**
A survey of keyboard literature from 1890 to the present. For piano majors only, others with permission of the School. Cr 2.

**MUS 323 Organ Literature 2**
A survey of organ literature from 1800 to present. For organ majors only, others with permission of School. Cr 2.

**MUS 325 The History of Musical Theatre in America**

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A study of the development of the musical and its relationship to American social history. Prerequisite: College Writing. Cr. 3.

**MUS 330 Form and Analysis**
Study and analysis of music of the classical, romantic, and contemporary periods with emphasis on homophonic forms and styles. Prerequisite: MUT 200. Cr 3.

**MUS 332 Counterpoint**
Analysis and writing of tonal counterpoint. Emphasis is given to the study of canon, invention, fugue, chorale prelude, and continuous variations, using eighteenth-century works as models for composition. Prerequisite: MUT 200. Cr 3.

**MUS 337 Jazz Arranging**
Study and analysis of music written for small and large jazz ensembles. Practice in writing for a variety of instrumental combinations in the jazz idiom. Prerequisite: MUT 200 or permission of instructor. Cr 3.

**MUS 360 Advanced Keyboard Skills 1**
This course provides practical instruction in the advanced keyboard skills of score reading, transposition, harmonization of melodies, and realization of continuo. These performance skills will be taught with emphasis on the preparation of examples outside the class as well as the active participation by students in class. Prerequisite: keyboard performance major and MUT 101, or permission of instructor. Cr 2.

**MUS 361 Advanced Keyboard Skills 2**
The second semester continuation of Advanced Keyboard Skills 1. Prerequisite: MUS 360. Cr 2.

**MUS 370 Topics in Music Technology**
An intensive study of one or more areas of music technology in the context of producing music compositions, creating pedagogical multimedia applications, performing music with interactive applications, or recording and editing digital audio/video. The area of study will be chosen by the instructor in accordance with his or her expertise and interests. The course may be repeated once for credit as topics vary (limit of 6 credits). Prerequisite: MUT 201 or permission of the instructor. Cr 3.

**MUS 372 Pedagogy of the Major Instrument**
A study of the teaching methods and materials for voice or instruments. Except for piano and voice, which are offered in class sessions when the number of registrants warrants it, this will be scheduled as additional applied music time with an instrumental specialist. Normally the piano and voice sessions will be offered in alternate years. For performance majors. Other music majors only with permission of the School. Cr 2.

**MUS 373 Piano Pedagogy 2**
This course is the second-semester continuation of MUS 372 in piano. The course focuses on the teaching of child beginners. Students observe a weekly group lesson, research and prepare repertoire and lesson plans, and evaluate their peers' teaching. Each student teaches at least one group lesson. Prerequisite: MUS 372 in piano, piano major, or permission of instructor. Cr 2.

**MUS 374 Jazz Pedagogy**
A study of the teaching methods and materials in the jazz performance area. Emphasis will be placed on large and small jazz ensemble literature and conducting techniques, jazz improvisation pedagogical techniques, and writing techniques. This course will also address the topic of securing and maintaining employment within the jazz field. Prerequisite: open to music majors of junior standing. Cr 2.

**MUS 376 Class Piano Teaching 1**
This course provides an overview of teaching group piano to adult beginners. Students spend the semester observing the teaching of Piano Class 1 (MUS150) and meet weekly with the teacher for discussion and additional instruction. Prerequisite: Two semesters of MUP 202 or 203, piano major, or permission of instructor. Cr 2.

**MUS 377 Class Piano Teaching 2**
This course is the second-semester continuation of Class Piano Teaching I. Students observe the teaching of Piano Class 2 (MUS 151) and meet with the teacher weekly for discussion and additional instruction. Students have the opportunity to teach the class under the instructor's supervision. Prerequisite: MUS 376. Restricted to piano majors. Cr 2.

**MUS 378 Practicum in Piano Pedagogy 1**
This course provides practical teaching experience in individual piano instruction. Under the supervision of piano pedagogy faculty, students teach private lessons to three or four child beginners. Students also observe piano lessons given by master teachers and do outside readings and research. Prerequisite: MUS 373, four semesters of MUP 202 or 203, piano major, or permission of instructor. Cr 3.

**MUS 379 Practicum in Piano Pedagogy 2**
This course is the second-semester continuation of MUS 378. Prerequisite: MUS 378. Cr 3.
MUS 380 Jazz Improvisation 1
A course designed to teach the student to improvise in the jazz idiom. Studies include jazz theory and standard jazz literature. Recommended for instrumental music majors. Prerequisite: MUT 101 or permission of the instructor. Cr 3.

MUS 381 Jazz Improvisation 2
A performance course designed to expand upon the improvisation principles presented in Jazz Improvisation 1. Students will learn advanced jazz theory and use that knowledge to perform in the jazz language both in class and in lab situations. Prerequisite: MUS 380 or the equivalent. Cr 3.

MUS 420 Orchestration
A study of the nature of the various instruments. Practice in scoring for instrumental combinations, orchestra, and band. Prerequisite: MUT 200. Cr 3.

MUS 442 Recital Class
Performance in major field, stage deportment, and evaluation of performances. May be repeated. Cr 0.

MUS 480 Bibliography and Research in Music
A study of music reference and research tools, use of library resources and networks, and bibliographic style and technique. Cr 3.

MUS 497 Directed Study in Composition
To provide juniors and seniors who have demonstrated creative capability an opportunity to compose utilizing twentieth-century techniques. Prerequisite: MUT 200 and permission of instructor. Cr 1-3.

MUS 498 Independent Study in Music
To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest within their major field. Music majors only. School permission required. Cr 1-3.

MUT 100 Music Theory and Aural Skills 1
This course covers music theory fundamentals, fundamentals of species counterpoint, principles of notation, instrumentation, solfege, music transcription, and sight singing. Cr. 4.

MUT 101 Music Theory and Aural Skills 2
This course covers the concepts of diatonic harmony, cadences, phrase level form and a brief introduction to chromaticism. This material will be explored through the analysis, transcription, composition, and sight singing of topical examples of music. Cr. 4.

MUT 200 Music Theory and Aural Skills 3
This course covers chromatic harmony and musical form. This material will be explored through the analysis, transcription, composition, sight singing, and performance of topical examples of music. Cr. 4.

MUT 201 Music Theory and Aural Skills 4
A grounding in the materials of 20th and 21st century music from analytical, compositional, and listening perspectives. Students will undertake analyses and model composition exercises involving: modes, synthetic scales, extended tertiary harmony, poly harmony, rhythm and meter, atonality, twelve-tone serialism, chance music, and minimalism. As students learn the abstract theoretical concepts, they will be guided to connect them to real music through copious listening, singing, and transcription exercises. Special attention will be paid to the historical contexts of the various techniques and styles covered during the semester, and students will also attend and critique in writing two performances of contemporary art music. Cr. 4.

MUT 300 Topics in Music Theory and Composition Studies
An intensive study of a specific area of music theory or composition. This course may be repeated once for credit as topics vary. Limit 6 credits. Prerequisite: MUH 222, or permission of the instructor. Cr 1-3.

MUE 595 Topics in Music Education
Course content will vary to represent the strengths of nationally recognized visiting guest faculty. Cr 3.

MUE 611 Introduction to Research in Music Education
Systematic research methods in music applied to individualized descriptive and experimental music research topics and critical evaluation of music research. Study of measurement theory, standardized tests, test construction and interpretation for music aptitude, achievement, performance, aesthetic response, preference, and appreciation. Cr 3.

MUE 612 Philosophical Bases of Music Education

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Investigation of historical and current views on the art of music, the role of music in society, and the role of music in human experience. Cr 3.

**MUE 613 Psychology of Music Teaching and Learning**
Detailed study of topics concerning differential music behavior and perception. This course includes the mechanics of hearing, music memory, learning, and response as well as an overview of researched teaching practices. Cr 3.

**MUE 614 Curriculum Development and Assessment**
Detailed study of catalysts for curricular change throughout all aspects of music education: reform, content and objectives, evaluation, human rights, multiculturalism, technology, and development of a systematic approach to curriculum design and implementation. Cr 3.

**MUE 615 The Professional Portfolio**
Oral examination in music education. The oral examination will be scheduled after the completion of all coursework for the MUE master's degree. The student will present the milestones and domain project portions of his/her professional portfolio to a master's examination committee. See details on page 66. Cr 2.

**MUE 621 Composing Together: Level I**
This course assumes no prior experience in composing music and is designed for teachers who would like to learn the basics of music composition and composition instruction. Participants will learn how to design and implement beginner-level composition activities for students of all ages participating in music in general classroom, computer laboratory, lessons, and rehearsal settings. Cr 3.

**MUE 622 Composing Together: Level II**
For those who have taken Level I (or want to repeat Level II and desire reinforcement in the principles of teaching the intermediate-level composer). Participants will learn how to design and implement composition activities for students who already have some compositional skills and who are participating in music in general classroom, laboratory, and rehearsal settings. The Level II course assumes prior experience in teaching music composition to students at the beginner level. This course will prepare teachers to introduce compositional techniques appropriate for students at the intermediate level. Participants will learn how to guide intermediate composers in the study of master composers through active analytical listening. Cr 3.

**MUE 623 Composing Together: Level III**
For those who have taken Level I and II (or want to repeat Level III and desire reinforcement in the principles of teaching the advanced-level composer). Participants will learn how to design and implement composition activities for students with advanced compositional skills who are participating in music in general classroom, laboratory, and rehearsal settings. The Level III course assumes prior experience in teaching music composition to beginner- and intermediate-level student composers. This course will prepare teachers to introduce compositional techniques appropriate for students at the advanced pre-college level. Participants will learn how to guide advanced composers in the creation of larger scale works. Cr 3.

**MUS 509 Dynamic Posture and Movement**
Provides students with theoretical and applied understandings of anatomy, kinesiology, and biomechanics in order to improve ease and freedom of motion while in a stationary position. This course is designed for musicians, as well as other performers and creative artists, athletes, and computer users. Cr 3.

**MUS 510 Bibliography and Research in Music**
A study of music reference and research tools, use of library resources and networks, and bibliographic style and technique. Cr 3.

**MUS 516 Organ Improvisation I**
This course will cover the basics of improvisation at the organ. The goal is to equip students with the skills needed in church situations. Hymns, chorales, and plainsong melodies will form the basis for learning to improvise preludes, postludes, and interludes in a variety of styles. This course will be scheduled as additional applied music time with an organ specialist. Cr 1.

**MUS 517 Organ Improvisation II**
This course is the continuation of MUS 516. It will be scheduled as additional applied music time with an organ specialist. Prerequisite: MUS 516. Cr 1.

**MUS 518 Music Literature: Organ I**
A survey of organ literature up to 1800. For organ majors only, others with permission of the School. Cr 2.

**MUS 519 Music Literature: Organ II**
A survey of organ literature from 1800 to present. For organ majors only, others with permission of the School. Prerequisite: MUS 518. Cr 2.

**MUS 520 Seminar in Music History**
In-depth study of one or more topics in music history. A substantial final project will be the culmination of both individual research and a synthesis and application of historical studies and approaches. Cr 3.
MUS 521 Literature of the Major Instrument
Advanced study of the literature for solo instrument. Chamber music will be considered when the performer is a featured soloist. Cr 2.

MUS 522 Music Literature: Voice I
Advanced in-depth study of vocal literature to be determined by the teacher in the areas of German, French, Italian, Russian, or Spanish repertory. For voice majors only or with permission of the instructor. Cr 2.

MUS 523 Music Literature: Voice II
Advanced in-depth study of vocal literature to be determined by the teacher in a contrasting area of study from Music Literature I. For voice majors only or with permission of the instructor. Cr 2.

MUS 524 Music Literature: Piano I
A survey of keyboard literature up to 1830. For piano majors only, others with permission of the School. Cr 2.

MUS 525 Music Literature: Piano II
A survey of keyboard literature from 1830 to the present. For piano majors only, others with permission of the School. Cr 2.

MUS 526 Composition (Twentieth Century Survey)
This survey will cover the major trends, movements, styles, and philosophies that influenced the creation of contemporary concert music in the last century with an overview of current fashion. Cr 3.

MUS 530 Seminar in Music Theory
Advanced study of one or more topics in music theory, including both a reading and an analytical component, and the pedagogy of music. A substantial final project is required. Cr 3.

MUS 532 Counterpoint
Analysis and writing of tonal counterpoint. Emphasis is given to the study of canon, invention, fugue, chorale prelude, and continuous variations, using eighteenth-century works as models for composition. Cr 3.

MUS 533 Advanced Analysis of Tonal Music
Advanced study of analytical approaches to tonal music: parametric analysis, the analysis of phrase rhythm and hypermeter, and Schenkerian analysis. Cr 3.

MUS 534 Instrumental Conducting
Stylistic study of scores from a variety of periods, advanced baton and left hand techniques, rehearsal techniques, and conducting experience with instrumental ensembles. Cr 3.

MUS 535 Advanced Aural Skills
Advanced development of aural skills and the pedagogy of aural skills through the use of contextual listening examples, performance drills, and other ear training and sight singing techniques. Cr 3.

MUS 536 Advanced Keyboard Skills I
This course provides practical instruction in the advanced keyboard skills of score reading, transposition, harmonization of melodies, and realization of continuo. These performance skills will be taught with emphasis on the preparation of examples outside the class as well as the active participation by students in class. Cr 2.

MUS 537 Jazz Composition/Arranging
Detailed study and analysis of music for small and large jazz ensembles including composing and arranging for a variety of instrumental combinations. Cr 3.

MUS 544 Diction for Singers 1: Italian and French
A study in the principles of Italian and French diction through the use of the International Phonetic Alphabet (IPA). An application of these basic principles to vocal literature through written, singing, and aural transcription exercises. Cr 2.

MUS 545 Choral Conducting
Advanced development of non-verbal gestures through the art of choral conducting. The course includes musical analysis of choral scores, rehearsal techniques, and performance preparation. A research paper is required. Cr 3.

MUS 556 Diction for Singers 2: French and German
A continuation of study in the principles of French diction and the principles of German diction through the use of the International Phonetic Alphabet (IPA). An application of these basic principles to vocal literature through written, singing, and aural transcription exercises. Cr 2.
The second semester continuation of Advanced Keyboard Skills I. Prerequisite: MUS 560. Cr 2.

**MUS 562 Topics in Brass Studies**
Critically and analytically pursue a topic of brass instrument study or performance either independently or in a group. Cr 3.

**MUS 563 Topics in Keyboard Studies**
Critically and analytically pursue a topic of keyboard study or performance either independently or in a group. Cr 3.

**MUS 564 Topics in String Studies**
Critically and analytically pursue a topic of string study or performance either independently or in a group. Cr 3.

**MUS 565 Topics in Vocal Studies**
Critically and analytically pursue a topic of vocal study or performance either independently or in a group. Cr 3.

**MUS 566 Topics in Woodwind Studies**
Critically and analytically pursue a topic of woodwind study or performance either independently or in a group. Cr 3.

**MUS 567 Topics in Percussion Studies**
Critically and analytically pursue a topic of percussion study or performance either independently or in a group. Cr 3.

**MUS 570 Topics in Contemporary Music Technology**
Intensive study of one or more areas of music technology in the context of producing music compositions, creating pedagogical multimedia applications, performing music with interactive applications, or recording and editing digital audio/video. A substantial final project is required. Cr 3.

**MUS 572 Vocal Pedagogy**
A study of the teaching methods and materials for voice. Normally the voice sessions will be offered in alternate years. For performance majors. Other music majors only with permission of the School. Cr 2.

**MUS 574 Jazz Pedagogy/Program Administration**
Pedagogical approaches to the analysis of jazz ensemble scores, rehearsal techniques, concert planning, public relations, recruiting, promotion, grant writing, and other aspects of the development of a Jazz Studies program. Cr 2.

**MUS 575 Pedagogy of the Major Instrument**
A study of the teaching methods and materials for instruments, excluding piano. This class will be scheduled as additional applied music time with an instrumental specialist. For performance majors only. Other music majors with permission of the School. Cr 2.

**MUS 576 Class Piano Teaching I**
This course provides an overview of teaching group piano to adult beginners. Students spend the semester observing the teaching of MUS 150 Piano Class I and meet with the teacher weekly for discussion and additional instruction. Piano majors or permission of the School. Cr 2.

**MUS 577 Class Piano Teaching II**
This course is the second semester continuation of MUS 576 Class Piano Teaching I. Students observe the teaching of MUS 151 Piano Class II and meet with the teacher weekly for discussion and additional instruction. Students have the opportunity to teach the class under the instructor's supervision. Piano majors or permission of the School. Cr 2.

**MUS 578 Pedagogy of the Major Instrument: Piano I**
A study of the teaching methods and materials for piano. This class will be scheduled as additional applied music time with an instrumental specialist. For performance majors only. Other music majors with permission of the School. Cr 2.

**MUS 579 Pedagogy of the Major Instrument: Piano II**
This course is the second semester continuation of MUS 578. Students will observe weekly lessons, research and prepare repertoire and lesson plans, and evaluate their peers' teaching. Each student teaches at least one group lesson. This class will be scheduled as additional applied music time with an instructor. For performance majors only. Other music majors with permission of the School. Cr 2.

**MUS 596 Topics in Jazz**
Critically and analytically pursue a topic of interest independently or in a group. Cr 3.

**MUS 598 Independent Study**
A project requiring directed research and readings, culminating in a final document. Consent of the instructor required. Cr 3.

**MUS 675 Jazz Chamber Music Coaching**
Pedagogical approaches to coaching a chamber jazz ensemble. The ensemble will be under the direct coaching responsibility of the student. Cr 3.
MUS 682 Chamber Jazz Ensemble Evolution and Analysis
Advanced analysis and examination of the historical evolution of the chamber jazz ensemble, including detailed listening and critical discussion. Cr 2.

MUS 683 Large Jazz Ensemble Evolution and Analysis
Advanced analysis and examination of the historical evolution of the large jazz ensemble, including detailed listening and critical discussion. Cr 2.

MUS 694 Internship
Afield application of theory and practice. The project will be jointly defined by student, professor, and employer. Graded CR/NC. Cr 3.

MUS 695 Thesis
Credit given on acceptance of thesis. Cr 0-3.

Ensembles

MUS 500 Orchestra
A full symphonic ensemble open to all University students and community members through audition. The ensemble focuses on the skills required for ensemble performance through a variety of literature. The orchestra performs at least one major concert per semester. Cr 0.5.

MUS 501 Chorale
A large choral ensemble of mixed voices open to all University students by audition. Cr 0.5.

MUS 502 Concert Band
A wind and percussion ensemble open to all University students through audition. The ensemble focuses on the fundamentals of ensemble performance dealing with a variety of literature. Prerequisite: audition. Cr 0.5.

MUS 503 Percussion Ensemble
A percussion ensemble open to all University students through audition. Prerequisite: audition. Cr 0.5.

MUS 504 Opera Workshop
This ensemble will focus on the union of musical ideas with dramatic situations and will explore the ways in which singers must convey the essence of a dramatic situation. Performances of scenes from operas, operettas, and musical theater. Prerequisite: audition. Cr 0.5.

MUS 505 Chamber Singers
A small choral ensemble of mixed voices, selected by audition, specializing in a cappella singing. Cr 0.5.

MUS 506 Chamber Music
A performance course open to all qualified students interested in forming chamber groups under faculty supervision. Cr 0.5.

MUS 507 Jazz Ensemble
An instrumental ensemble specializing in the study and performance of jazz for large and small groups from early jazz to the present. Open to all students by audition. Prerequisite: audition. Cr 0.5.

MUS 508 Wind Ensemble
The Wind Ensemble, based upon the solo performer premise, has established a tradition of performing chamber and large instrumentations, traditional or experimental combinations, and early through contemporary literature. Prerequisite: audition. Cr 0.5.

MUS 552 Accompanying
A workshop course in applied accompanying, either under faculty supervision or by applied faculty approval. A half credit is awarded for each twenty hours of University-approved accompanying with a maximum of two credits per semester. Cr 0.5-2.

Applied Music

MUP 603 Applied Music, Major Area
Private instruction in the major area of study. May be repeated for credit. Fee assessed. Cr 3.

MUP 604 Applied Music
Private instruction for Pedagogy concentration or in a secondary area of study. May be repeated for credit. Fee assessed. Cr 1-3.

MUP 690 Recital
Public performance in the area of applied study or final project presentation. May be repeated. Cr 0.
Philosophy Department

Philosophy Overview

Distinguished Professor: Robert Louden. Professors: William Gavin, Julien Murphy; Associate Professors: Jeremiah Conway, Kathleen Wininger, Jason Read; Professors of Emeriti: George Caffentzis, Joseph Grange, Francis Schwanauer

"Philosophy unties knots in our thinking; hence its results must be simple, but philosophizing has to be as complicated as the knots it unties."
–Ludwig Wittgenstein, Zettel #452

The place of philosophy at the center of any educational endeavor is as true today as it ever was. The perennial questions that philosophy addresses—"Who am I as a human being?" "How should I act?" "What can I know?" "What are my obligations to others?" "How should society be organized?"—are fundamental issues with which education must wrestle and into which it must provide insight. Philosophy is a reasoned pursuit of fundamental truths. It is a systematic investigation of the key assumptions that underlie our thinking and which ordinarily are taken for granted. Much of what is learned in philosophy can be applied in virtually any endeavor. This is both because philosophy touches upon so many subjects and, especially, because many of its methods and analyses are usable in any field. The study of philosophy is beneficial in terms of achieving the following:

General Problem-Solving Ability The study of philosophy enhances one's problem-solving capacities in a way no other activity does. It helps one to analyze concepts, definitions, arguments, and problems. It contributes to one's capacity to organize ideas and issues, to deal with questions of value, and to extract what is essential from masses of information.

Communication Skills Philosophy provides some of the basic tools of self-expression, namely, skills in presenting ideas through well-constructed, systematic arguments. One learns to build and defend one's own views, to appreciate competing positions.

Writing Skills Writing is an important part of most philosophy courses. Philosophy teaches interpretive writing through its examination of challenging texts, comparative writing through emphasis on fairness to alternative positions, argumentative writing through developing students' abilities to establish their own views, and descriptive writing through detailed portrayal of concrete examples, the anchors to which generalizations must be tied.

The Understanding of Other Disciplines Many important questions about a discipline, such as the nature of its concepts and its relation to other disciplines, do not belong to that discipline, are not usually pursued within a discipline, and are philosophical in nature. Philosophy of science, for instance, is needed to supplement the understanding of the natural and social sciences which one derives from scientific work itself. Philosophy of art, social and political philosophy, and the philosophy of religion are of similar value in understanding the respective fields of art, sociology, politics, and religion.

Additional Information

Career Applications

Philosophers know, of course, that the important question is not what you can do with a field of study but rather what a field of study does with you. Nevertheless, it has been a welcome surprise within recent years to witness how many professions—business, law, and nursing, for example—want and reward many of the capacities that the study of philosophy develops: the ability to solve problems, to communicate, to organize ideas and issues, to assess pros and cons, and to reduce complex data. These capacities represent transferable skills. For this reason, people trained in philosophy are not only prepared to do many kinds of tasks, they can also cope with change, or even move into new careers, more readily than others.

Student Involvement

Student participation in the philosophical activities of the philosophy program is strongly encouraged. Students have organized a philosophy majors and minors association, Philosophy Symposium, which provides a forum for students to discuss their philosophical work and facilitates communication between faculty and students. In recent years the Philosophy Symposium has invited guest lecturers on a variety of philosophical topics. This has enabled students to meet a broad range of philosophers including international guests.

BA in Philosophy
Description

See Program Requirements

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 36.

Each major in philosophy will arrange a program of courses in conference with the chair or a member of the department who is assigned as the student's advisor. The program will be designed in terms of the student's interests, needs, vocational plans, and the year in which the student declares a major. The major will require 36 hours of courses. Only one 100-level course may count toward the major.

All philosophy majors must take four history of philosophy courses. Two of these, which need not be taken in sequence, must be PHI 310 (Ancient Philosophy) and PHI 330 (Early Modern Philosophy). Thereafter, any two additional courses in the history of philosophy may be taken. These courses are PHI 312, PHI 315, PHI 320, PHI 340, PHI 350, PHI 360, PHI 370, PHI 380, PHI 390.

In order to graduate, all philosophy majors must complete two 400-level seminars in philosophy. Seminar major figures and topics rotate among faculty in the Department.

In the last year a senior thesis (PHI 410) is optional. The successful completion of PHI 400 is a prerequisite for taking PHI 410. This thesis consists of a major paper (minimum length: 50 pages) on a topic selected by the student and directed by one member of the Department. The student will meet with the mentor on a regular basis during the semester of the senior thesis. Upon completion of the paper, an oral examination will be conducted by the full Department.

Honors status in the major is granted if the student's GPA in philosophy is at least 3.33 or higher upon completion of all requirements for the major.

Students enrolled in the HONORS Program and who are also philosophy majors may substitute their Honors senior thesis course for the Philosophy Senior Thesis (PHI 410), if the thesis is mentored by a philosophy faculty member and if the thesis is on a philosophical topic.

Every major intending to pursue graduate study and teach in philosophy will be expected to take German, or French through the intermediate level. German is preferred to French, although ideally both sets of courses should be taken.

All majors are encouraged to take PHI 205 Symbolic Logic.

The gender-neutral language policy of the Department prohibits the use of sexist language in classes, course materials, and at Departmental events.

Minor in Philosophy

Description

See Program Requirements

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 15.

Students who wish to pursue a minor in philosophy are required to take five courses and four of them must be beyond the 100 level and two of them must be at the 300-level.

Course Descriptions
PHI 102 Introduction to Philosophy: The Quest for Certainty
Philosophy has often been defined as the attempt to become aware of the hidden assumptions we make in our everyday outlooks on life. The present course will deal with one of the most pervasive of these assumptions—the thesis that human beings should pursue certainty and objectivity at any price. The history of philosophy will be utilized to trace and to criticize the identification of all true knowledge with certainty. Questions will be raised as to whether the quest for certainty is either feasible or beneficial to the human person. An analysis of some 20th-century alternatives, such as existentialism and pragmatism, will be undertaken. Prerequisite: a college writing course. Cr 3.

PHI 103 Introduction to Philosophy: Human Alienation
Why do human beings picture themselves as being alienated from nature and others? How did the problem of alienation come about? What possibilities exist for overcoming it? This course will deal with these issues and attempt to suggest viable alternatives. Prerequisite: a college writing course. Cr. 3

PHI 105 Introduction to Philosophy: Philosophy Through Its History
An introduction to philosophy through its history and development, i.e., through an examination of central texts in the history of philosophy, up to and including contemporary works. Specific readings may vary from semester to semester, but will always include some canonical works by classic Western philosophers (e.g., Plato, Aristotle, Descartes, and Kant). Prerequisite: a college writing course. Cr 3.

PHI 106 Introduction to Philosophy: Why Philosophize?
The course centers about the exploration of a single question: what it means to think philosophically. In the context of this question, we will examine what are the sources of philosophical thought and whether philosophy can justify its claim to be the foundation of all reflective endeavor. Prerequisite: a college writing course. Cr 3.

PHI 107 Introduction to Philosophy: World Philosophy
This course presents the world views of philosophers from ancient to contemporary times. The thinkers will be chosen from a broad range of cultural and ethnic backgrounds. Emphasis will be placed on the wide diversity and historical background of philosophical positions. Prerequisite: a college writing course. Cr 3.

PHI 109 Introduction to Philosophy: Law, Politics, and Society
This course examines the traditional political questions that face every society: Who should rule? What should the rules be? Why should the rules be obeyed? The approach is largely historical, emphasizing the answers that major philosophical figures have offered to these questions. The relevance of these historical answers to current social issues is addressed using a number of contemporary topical readings. Prerequisite: a college writing course. Cr 3.

PHI 110 Introduction to Philosophy: Gender and Society
To what extent are social norms influenced by assumptions about sex and gender? The course examines philosophical arguments on topics such as masculinity, femininity, sexualities, war, religion, fatherhood, motherhood, abortion, gay marriage, and politics. Prerequisite: a college writing course. Cr 3.

PHI 111 Introduction to Philosophy: Philosophical Reading (and Writing)
This course aims to teach the student a particular skill: philosophical reading (and writing). On the most immediate level this will be a course in reading (and writing about) philosophical texts. The texts will give the student a sense of the immense history, wealth, and suggestibility of philosophical writing, its various genres, and its authors. On another level, the course will teach the skill of reading (and writing) philosophically. Any piece of writing can be read (and written about), with profit, philosophically. The second skill and its profit cannot be acquired without first studying the first, thus the bulk of the course will focus on reading (and writing about) philosophy texts philosophically. About one month will be devoted to the reading of each book. Prerequisite: a college writing course. Cr 3.

PHI 112 Introduction to Philosophy: Sex, Love, and Friendship
Sex, Love, and Friendship have all been explored by philosophers since Plato and Aristotle. Through a lively interaction with classical and modern works, we will examine what makes human affection challenging, whether social media have an impact on relationships, and whether the experience and understanding of these ideas change over time and across cultures. Prerequisite: a college writing course. Cr 3.

PHI 205 Symbolic Logic
Techniques of modern deductive logic; properties of formal systems; logical implications and paradoxes of language. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 210 Ethical Theories
Critical evaluation of major ethical theories and systems. Extensive reading in original texts. Analysis of contemporary ethical issues. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 211 Media Ethics
In the information age, media play an increasingly large role in our lives. Our notion of living in a global society is largely shaped by media. What is responsible journalism? Does violent programming contribute to violence in America? What are professional ethics and how should they
guide media practitioners? We will discuss these questions by examining key ethical values in media such as: privacy, confidentiality, truth telling, conflicts of interest, and social responsibility. We will also explore some fundamental issues in ethical theory such as: Why be ethical? What is ethics? How do ethical theories differ? What are the best ways to evaluate and apply ethical theories to media controversies today? The course is designed for majors in philosophy, media studies, and communication as well as other interested students. Prerequisite: PHI 100-level or EYE course. Cr 3.

**PHI 212 Environmental Ethics**
This course analyzes the relations between human beings and the environment in terms of the concepts of justice, the good, and human responsibilities. It attempts to provide a new cosmological model for adjudicating between conflicting rights and duties. Issues to be discussed include animal rights, environmental protection, and ecological harmony. Prerequisite: PHI 100-level or EYE course. Cr 3.

**PHI 215 Philosophy of Literature**
While many cultures accord a vital role to stories, myths, and poetry in the cultivation of wisdom, traditional European philosophy has tended to marginalize them. This course seeks to investigate the historical roots for this separation between philosophy and literature in European thought. It will then consider the perspectives of several contemporary thinkers (e.g., Robert Coles, Michael Ende, Martha Nussbaum, and Martin Heidegger) who are convinced that literature plays an indispensable role in the pursuit of wisdom. Prerequisite: PHI 100-level or EYE course. Cr 3.

**PHI 220 Philosophy of Art**
What makes a person creative? What do artists think about their art? How do critics evaluate a work? If art is created for a cultural ritual or healing, is it to be understood differently? How do the circumstances of a work's creation and reception influence its evaluation? How do a person's class, ethnicity, and gender influence the artwork and its reception. Philosophers in the field of Aesthetics attempt to answer questions which artists, art historians, anthropologists, and critics ask about art. The works of art and philosophy considered will be drawn from a wide variety of cultural contexts. Prerequisite: PHI 100-level or EYE course. Cr 3.

**PHI 221 Philosophy of Film**
This course concentrates on the construction of meaning in the context of cinema. Major emphasis is placed on cinema as a product of social construction. Issues to be discussed include perception, memory, images, and the use of social stereotypes. Prerequisite: PHI 100-level or EYE course. Cr 3.

**PHI 225 Philosophy of the Mind**
An analysis of the major philosophical issues facing the science of psychology: language and the unconscious, body-mind interaction, freedom and determinism. Major figures to be studied include Plato, Aristotle, Spinoza, Freud, Merleau-Ponty, Lacan, and Skinner. Thematic emphasis will be on the historic interaction between psychology and philosophy in the development of Western thought. Prerequisite: PHI 100-level or EYE course. Cr 3.

**PHI 230 Philosophy of Religion**
Analysis of the nature of religious experience, knowledge, and language. Special attention given to problems, classical and contemporary, exhibited in religious experience and relevant to areas of common concern in the sciences, humanities, and philosophy. Prerequisite: PHI 100-level or EYE course. Cr 3.

**PHI 235 Philosophy of Social Media**
The course examines the moral dimensions of communicative social interaction in a digital context. The focus is how social media transform traditional ethical issues such as: truth, trust, privacy, autonomy, sexual responsibility, civility and community. Students will learn moral and legal frameworks for evaluating the digital dimensions of social life. Prerequisites: PHI 100 level course or EYE course. Cr. 3.

**PHI 240 Political Philosophy**
Critical evaluation of political philosophies, classical and contemporary; extensive reading in original texts; analysis of contemporary political issues. Prerequisite: PHI 100-level or EYE course. Cr 3.

**PHI 241 Philosophy & the Politics of Work**
This course is an examination of work that is situated at the intersection of personal identity and social structure. Philosophical perspectives on work and labor from such writers as Plato, Aristotle, Locke, Smith, Hegel, Marx, and Arendt will be examined. Work in contemporary society will be examined through sociology, economics, and politics. Student will be expected to attend film screenings outside of class. Prerequisite: PHI 100 level course or EYE course.

**PHI 245 Africa, Social Justice, and Exile**
Why are people forced to leave Africa, where do they go, what makes it difficult to return? This course examines exile, its effect on men, women and children. Looking at theories of social justice, personal narratives, short stories, and visual culture, will help us consider moral issues in the post-colonial landscape of Africa. Prerequisites: EYE course. Cr. 3.

**PHI 250 Philosophy of Science**
An examination of two different models generally used in approaching scientific activity philosophically: the logical model and the historical
model. Questions to be raised include whether these two approaches are mutually exclusive or whether one can subsume the other, and at what cost. Issues to be covered include description vs. explanation; scientific vs. non-scientific explanation; the issue of whether to include pragmatic and psychological dimensions of meaning in scientific explanations; the question of whether all facts are "theory-laden"; and the relationship between facts, laws, and theories in science. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 260 Philosophy of Law
Critical evaluation of select issues in the philosophy of law. Possible topics include: the nature of law (positivism, natural law, legal realism); judicial decision making; constitutional adjudication; the justification of punishment; the legal enforcement of morality; legal responsibility; the judicial system. Readings are drawn from the disciplines of both philosophy and law, and include contemporary as well as historical selections. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 265 Philosophy and Gender
The course explores the contributions of feminist philosophers to gender analysis. It will examine the philosophical assumptions inherent in theories of gender difference that arise in sociobiology, biological determinism, physiology, and the social construction perspective. Assumptions about gender will be studied in some of the following areas: violence, war, religion, reproduction, family, sexualities, and sport. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 270 Problems in Philosophy
Consideration of selected problems or systems of philosophical significance, including general problems of metaphysics, epistemology, axiology, specialized areas, etc. May be repeated for credit. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 275 The Nature of Compassion
Whether and how we respond to the suffering of others defines, in many ways, who we are as persons and communities. This course is an investigation into the emotion and compassion and its social role. Drawing upon a wide variety of sources such as Greek Tragedy, Buddhist scriptures, classical and contemporary philosophical thought, it will address philosophical defenders of the need to cultivate compassion (Roussea, Schopenauer, and Adam Smith) as well as thinkers suspicious of this notion (Nietzsche, e.g.). The work of contemporary philosophers--Philip Hallie and Martha Nussbaum--will also receive close attention. Students will have a chance to think through some important philosophical issues, such as the role of emotions in moral deliberation, the extent to which compassion can be both aided and obstructed by the use of language, and whether there are appropriate limits to compassion. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 285 Genetics & Society
This course examines key ethical controversies in new and future genetic technologies including: reproductive cloning, embryonic stem cell research, genetic testing, enhancement, gene patenting and regenerative medicine. Students will learn about the history of genetics, basic concepts in genetics, and the philosophical debates about the relationship between genetics and society. Prerequisites: PHI 100-level or EYE course. Cr 3.

PHI 290 Death and Dying
Recent success in life-prolonging techniques has resulted in the creation of new disagreements over the proper definition of death. Which definition of death is the most adequate? Some have argued that dying, not death, is the vitally important topic. Has the term death changed its meaning from time to time and place to place in human history? This course will deal with these and similar epistemological issues. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 295 Medicine, Madness, and Disease
Recent advances in modern medicine and medical technology challenge traditional notions of health, sanity, and the social order. The course will examine some of the controversial ethical dilemmas that patients, families, and health care providers confront, such as informed consent, truth-telling, prenatal screening, abortion, involuntary commitment for the mentally ill, drug testing, and patient rights. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 300 History of Ancient Philosophy
Philosophic thought from the pre-Socratics to the late Hellenistic period, with major emphasis on Plato and Aristotle. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 301 History of Modern Philosophy
This course examines the major texts of the great Asiatic religions: Hinduism, Buddhism, Confucianism, Taoism, and Zen. Special emphasis is placed on the ethical and metaphysical dimensions of these traditions as well as their significance for contemporary theories of the person, social
PHI 320 History of Medieval and Renaissance Philosophy
This course critically examines the merger of philosophical with the religious stream of thought by examining the ideas and text of Augustine, Aquinas, Duns Scotus, Maimonides, Averroes, Dune, Ibn Khaldun, Erasmus and others. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 330 History of Early Modern Philosophy: Descartes to Kant
Main currents of rationalism and empiricism are explored, as developed in major writings from Descartes to Kant. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 340 History of Nineteenth-Century European Philosophy
Development of German idealism; emergence of social and scientific philosophies; contributions of Kant, Hegel, Marx, Schopenhauer, Nietzsche, Feuerbach, and others. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 350 American Philosophy
History and background of the origin of philosophical ideas in America; particular emphasis given to Peirce, James, Royce, Dewey. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 360 Existentialism
An examination of the historical development and basic themes of existentialism as found in the writings of its major representatives: Kierkegaard, Nietzsche, Heidegger, Sartre, Buber, Marcel, and others. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 370 Analytic Philosophy
An historical approach to twentieth-century linguistic philosophy. This course will begin with logical atomism, continue through the era of logical positivism, and end with ordinary language analysis. Extensive reading of primary sources and major commentators. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 380 Postmodernism and After
The course presents a survey of central movements within continental philosophy in the twentieth and twenty-first century: structuralism, post-structuralism, deconstruction, speculative realism, and new materialisms. Possible figures of study are: Deleuze, Foucault, Derrida, Lyotard, Badiou, Butler, Malabou, Negri and Virno. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 390 Language and Interpretation
How do we go about interpreting something that is foreign to us? What does it mean to understand a person or a text? Hermeneutics is a tradition of philosophical inquiry into the dynamics of interpretation and understanding. The course examines the historical roots of hermeneutics in the works of Friedrich Schleiermacher and Wilhelm Dilthey, and it proceeds with the close analysis of several twentieth-century thinkers—for example, Hans-Georg Gadamer and Martin Heidegger—whose works extend and develop the hermeneutical tradition. Prerequisite: PHI 100-level or EYE course. Cr 3.

PHI 398 Independent Study
This course provides students with an opportunity to design a set of readings and learning objectives concerning a topic in the history of philosophy or a specific issue in philosophy. Students must complete an independent study proposal, and obtain permission of a faculty mentor and the Department chair. Students must meet regularly with the faculty mentor. May be repeated for credit. Prerequisite: a minimum of two 300-level philosophy courses plus written permission of the instructor involved. Cr 3.

PHI 400 Philosophy Topics Seminar
This is a seminar course dealing with a specific topic, philosophical problem, or major question in the history of philosophy or a contemporary philosophical issue. Examples of possible topics include: free will and determinism, relativism and the meaning of life. Topics will change from year to year and the course may be repeated for credit when topics vary. The prerequisite for any 400-level seminar course is two (2) 300-level courses in philosophy, or permission of the instructor. Cr 3.

PHI 405 Major Figure Seminar in Philosophy
This is a seminar course on a major figure in the history of philosophy. Major figures may include: Plato, Kant, Nietzsche, James, and Beauvoir, among others. The course may be repeated for credit when figures vary. Prerequisite for any 400-level seminar course is two (2) 300-level courses in philosophy, or permission of the instructor. Cr 3.

PHI 409 Research Seminar
A research seminar designed to provide senior level students an opportunity to participate in the research efforts of individual faculty and collaborate with each other in the design, methodology and completion of their tutorials. Prerequisites: advanced standing as a philosophy major and permission of the Department. Cr 3.
PHI 410 Senior Thesis
Designed to furnish senior philosophy majors with extensive training, under tutorial supervision, in analysis of a philosophical problem or system or philosopher, with a view to producing and presenting a senior paper for oral defense. Prerequisites: advanced standing as a philosophy major, successful completion of PHI 400 and permission of the Department. Cr 3.
Political Science Major

Political Science Overview

Professors: Faksh, Associate Professors: Klotz, Kuzma, Rowe, Schmidt, Vassallo

With a synergy of two close disciplines, the History Program and the Political Science program have joined together into the same department to expand their curriculum and course offerings to their students. The department offers two distinct majors: a B.A. degree in History and a B.A. degree in Political Science. The two programs deliver a variety of courses, often interconnected, that are of interest to students in both majors.

Additionally, the faculties in the department offer a minor in History and a minor in Political Science. It is common for a student majoring in one program to be able to quickly add a minor in the other program, as there is a well-coordinated schedule of classes that allow students to maximize their studies and earn their degrees in a more effective manner.

BA in Political Science

Description

Political science is the systematic study of politics and government and is widely recognized as one of the core disciplines within the liberal arts curriculum. The political science major provides a substantive and analytic preparation that can lead to a variety of professions, giving the students access to a vast array of future careers. For instance, this discipline often serves those with an interest in entering politics and government. Yet, political science majors equally go on to become civic leaders, town managers, city planners, budget specialists, foreign service officers, CIA analysts, FBI agents, policy researchers, and to hold a variety of management positions in local, state, national, and international organizations.

Beyond government, a political science degree leads naturally to graduate training, including law school. Similarly, teaching has been a traditional career for many political science students, who have combined their interest for domestic and international issues with a call to service in the community. Many journalists and broadcasters were political science majors. Business has also recognized the analytic and management skills obtained through training in political science. Other rapidly developing fields such as polling, communications, campaign management, consulting, private and public interest group activity, and data analysis also value a political science degree when making hiring decisions. A political science degree, therefore, opens many doors in different professional directions.

The major administers an elaborate, carefully structured internship program, open to majors and non-majors alike. Political science majors are especially encouraged to take advantage of the variety of internship opportunities as part of their undergraduate program to help them establish a professional presence in the working community.

The Political Science faculty strongly urges its majors to take courses in economics, history, sociology, and business. All political science students are encouraged to undertake at least one year of university-level foreign language study. Additional language study is recommended for those majors with an interest in comparative or international politics and for those considering graduate school.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the Core curriculum requirements.

Political science courses are normally offered on the following schedule:

- Every semester: POS 101, 104, 203, 205, 290, and internships.
- Yearly: POS 280, 445 and 446.

The Honors Degree in Political Science
For a B.A. degree in political science with honors, a student must achieve a 3.7 GPA or higher in courses taken in the major.

**Program Requirements**

The Political Science Program offers students a choice of two tracks: Political Science Track and International Studies Track. Only one track must be completed to earn the B.A. in Political Science. Most majors complete the Political Science Track; however, students who have an especially strong interest in world affairs should consider the International Studies Track.

**Political Science Track**

The minimum number of credits (exclusive of the University’s Core curriculum) required for the Political Science Track: 39.

Students must complete POS 101, POS 104, POS 203, POS 205, and POS 290. Introducing ideas that are fundamental to the discipline, these required courses should be the first priority for students upon entering the major. Students may choose from any of the major’s other offerings to fulfill remaining credit hours, with the requirement that at least 12 hours be completed at or above the 300-level. A grade of C- or better is required to receive credit for POS courses in the Political Science Track.

**International Studies Track**

The minimum number of credits (exclusive of the University’s Core curriculum) required for the International Studies Track: 39 + foreign language requirement.

Students in the International Studies Track must attain an overall GPA at USM of 2.5 or better. A grade of C- or better is required to receive credit for any course that fulfills an International Studies Track requirement.

Students in the International Studies Track must complete the following:

**Required Courses (15 credits)**

HTY 101 Western Civilization I
ECO 104 The U.S. in the World Economy
POS 104 Introduction to International Relations
POS 203 Introduction to Political Science Research
POS 205 Introduction to Comparative Politics

**Political Science Electives (12 credits)**

Students must complete at least four internationally-related political science electives from the list below:

POS 245 French Politics and Government
POS 280 Issues Before the United Nations
POS 310 Internet and Politics
POS 333 Theories of Democratization
POS 335 Politics in Western Europe
POS 340 The Politics of Developing Nations
POS 342 Government and Politics of the Middle East
POS 345 British Politics
POS 347 The Politics of China
POS 349 The Middle East in International Politics
POS 360 Terrorism and the American Public
POS 374 United States Foreign Policy
POS 380 Topics in POS (dependent on topic)
POS 385 Conflict and Security in Contemporary World Politics
POS 399 Topics in Political Science (dependent on topic)
POS 405 The European Union
POS 406 Research in the European Union
POS 445 – MeMUNC Conference Planners
POS 446 – Global Educators
POS 480 International Affairs Internship

Electives in Other Programs (12 credits)

Students must complete at least four electives from the list of Approved Internationally-Focused Elective Courses, which is available on the Political Science website at usm.maine.edu/pos.

Foreign Language (variable credits)

In addition to the courses listed above, students in the International Studies Track must achieve proficiency in a foreign language through the intermediate level. This proficiency may be achieved through coursework at USM (i.e., successful completion through FRE202; GER202; SPA202), through transfer credits from another university, through study abroad, or through background (having lived abroad, being a foreign student, etc.)

In all cases of doubt, the final decision as to whether a student has completed the program’s language is determined by a proficiency exam administered by the appropriate faculty member. Students who can show that they have achieved at least intermediate-level proficiency in some language other than English need to take no foreign language courses at USM, although they may do so if they wish.

Minor in Political Science

Description

See Program Requirements

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 18.

Students who wish to complete a political science minor must take at least three of the following five courses: POS 101, POS 104, POS 203, POS 205, POS 290. Students may choose from any of the major's other offerings to fulfill remaining credit hours, with the requirement that at least 6 hours be completed at or above the 300-level. A grade of C- or better in POS courses is necessary to receive credit toward the minor.
Political Science Course Descriptions

POS 101 Introduction to American Government This course focuses on the political institutions, processes, behavior, and problems of government in the United States. The national government is emphasized. Key topics include: the Constitution, Supreme Court, Congress, Presidency, political parties, public opinion, and interest groups. Cr 3.

POS 102 People and Politics This course introduces the student to modern political analysis. It centers on basic questions in the study of political behavior: how people learn about politics, what kind of political system they adopt and support, who does and who does not participate in politics, how political conflict is expressed and resolved in various societies. The course aims at familiarizing the student with major approaches or methods that political scientists have found helpful for understanding real political behavior. Note: POS 101 is not a prerequisite for POS 102. Cr 3.

POS 104 Introduction to International Relations Examination of the relationships of nations in their efforts to deal with each other from differing political, economic, and cultural bases. Cr 3.

POS 120 Government and Politics of Maine This course concerns Maine State Government, including legislative, executive and judicial programs and powers as exercised within the system of Maine values, political parties, and interest groups. Open to political science majors and as an elective to the student who has an interest in the programs and politics of the state of Maine. Cr 3.

POS 203 Introduction to Political Science Research An introduction to the way political scientists conduct research. Students will learn how to formulate ideas, conduct a literature review, test hypotheses, measure political phenomenon, perform statistical analyses, draw conclusions, and present written results. Cr 3.

POS 205 Introduction to Comparative Politics An introduction to the field of comparative politics with a focus on political systems and political participation. The course will examine political institutions, electoral laws, comparative methodologies, political culture, and the problem of establishing and maintaining democratic government. Case studies will be used to highlight major themes. Cr 3.

POS 234 Race and Ethnicity in U.S. Politics Are American political institutions representative? This course provides students with the opportunity to examine this question by confronting the relationship between race, ethnicity, and representation in elections, court cases, urban politics, and political theory. Cr 3.

POS 245 French Politics and Government This course centers on the political, economic, and social structure of France over the last five decades. Students will learn the essential components of the French governmental system, the most typical economic policies, France's position in the EU, and the ongoing struggle about the defense of the French culture. Prerequisite: ENG 100, 104, or equivalent. Cr 3.

POS 256 Media and Politics The media play an increasingly powerful role in modern political systems. This course examines that power and explains how it came about, while noting those forces that restrict or restrain the media's influence. The symbiotic relationship between politicians and journalists is given special attention. Prerequisite: POS 101 or POS 102 or permission of the instructor. Cr 3.

POS 261 The American Congress The role of the national legislature in American politics is considered. The course undertakes a study of the men and women who reach Congress, the internal norms and procedures on national decision making. Among topics covered are the committee system, leadership patterns in the Senate and the House, the public's influence on Congress, Congress and the Presidency, and Congressional policy making in selected areas. Prerequisite: POS 101 or permission of the instructor. Cr 3.

POS 262 The American Presidency This course examines the development of the modern presidency; the scope and exercise of presidential decision making in domestic and foreign policy; and standards for assessing presidential performance. Prerequisite: POS 101 or permission of the instructor. Cr 3.

POS 280 Issues Before the United Nations An orientation to the activities of the United Nations. This course includes exposure to current events, exploration of pressing international issues, understanding the basics of international law, and mastery of the protocol and procedures of international diplomacy. Cr 3.

POS 290 Introduction to Political Theory A survey of political theory from ancient times to the present. Themes include the nature of democracy, freedom, equality, power, legitimacy, justice, and the use of lying in political life. Cr 3.

POS 310 Internet and Politics This course explores the politics of Internet communication. Topics include Internet development, communication techniques, access policy, citizenship, advocacy, government, journalism, and law. Cr 3.

POS 315 Media Law This course explores the legal context of communication through the mass media. Major issues include censorship, ownership regulation, remedies for people in the news, the right to receive and send communication in the media, and news media privilege. Prerequisite: POS 101 or CMS 103 or permission of the instructor. Cr 3.
POS 333 Theories of Democratization  As a general overview of democratization studies, the course goes beyond theoretical discussions about what elements are needed to create a democracy. Students study specific examples of political institutions, economic systems, political cultures and values, as key variables across multiple geographic areas to assess the establishment of democracy. Prerequisite: POS 205 or equivalent or permission of the instructor. Cr 3.

POS 335 European Politics  This course examines political processes and governmental structures in Europe. It focuses especially on the United Kingdom, France, Germany, Italy, Spain and Poland as specific case studies. Among the topics covered are: political parties, elections, voting systems, interest groups, legislative-executive relations, constitutional principles, political elites, leadership behavior, and bureaucracies. Prerequisite: POS 101 or permission of the instructor. Cr 3.

POS 340 The Politics of Developing Nations  An examination of the thrust towards modernization in the Third World. Economic development, relationships with the world community, the role of the military, and various theories about the nature of the relationship between the Third World and the Communist and non-Communist industrial worlds are considered. Prerequisite: POS 104 or permission of the instructor. Cr 3.

POS 342 Government and Politics of the Middle East  This course is designed to examine the political dynamics of the Arab countries of the Middle East and Israel. It will examine the social, ecological, historical, cultural, and political-ideological forces influencing political institutions and behavior in Egypt, Iraq, Syria, Israel, Jordan, and Lebanon. Cr 3.

POS 345 British Politics  A survey of the contemporary constitution of Great Britain, the workings of Parliament, the government, and the parties. Principal stress is on the main issues current in British politics. Prerequisite: POS 101 or permission of the instructor. Cr 3.

POS 347 The Politics of China  An introduction to the government of the People's Republic of China, 1949-present. Principal topics include: historical and cultural antecedents, Maoism, party and state institutions, socialization and communications, political participation, policy formation and implementation, and change over time. Cr 3.

POS 349 The Middle East in International Politics  The crucial issues of international politics, war, revolution, superpower intervention, economic development and terrorism converge in the Middle East on a regional basis. This course will examine the nature of Middle Eastern politics and the foreign policies of the major constituents of the area. The purpose will be to secure an understanding of the conflict between Arab and Israeli worlds, the foundations of tension among the Arab states themselves, and the role played by the superpowers in stabilizing or disrupting the uneasy relationships of the region. Prerequisite: POS 104 or permission of the instructor. Cr 3.

POS 360 Terrorism and the American Public  An exploration of the phenomenon of modern terrorism. The course defines terrorism, considers the motivations of terrorists, reviews the dangers associated with terrorist access to weapons of mass destruction, considers policy proposals that might be taken to reduce the likelihood of terrorism, and investigates the trade-off between liberty and security. Cr 3.

POS 361 Public Administration  An examination of national, state, and local bureaucracies, including their processes of decision making, communications, leadership, internal and external political relationships. A continuing question will be, "How can those institutions be made responsive to the public?" Prerequisite: POS 101 or permission of the instructor. Cr 3.

POS 374 United States Foreign Policy  A detailed evaluation of U.S. foreign policy focusing on such topics as: identification of U.S. policy; governmental agencies and personalities in the formulation and implementation of policy; and the role of non-governmental influences. The course is designed to evaluate current policy goals and practices within the context of long-range goals. Prerequisite: POS 101 or permission of the instructor. Cr 3.

POS 380 Topics  Specially developed occasional courses exploring a variety of theoretical and substantive areas of political science. May be repeated for credit as topics vary. Cr 1-3.

POS 385 Conflict and Security in Contemporary World Politics  Contemporary threats and challenges to human security and survival often go beyond traditional concepts of "national security." This course focuses on the multiple forms and sources of conflict and insecurity in the modern world system. It analyzes traditional approaches to war and peace in the context of debates over their current adequacy and also examines nontraditional challenges such as economic and environmental security. Prerequisite: POS 104 or permission of the instructor. Cr 3.

POS 390 Ancient and Medieval Political Theory  An intensive study of ancient and medieval political theory. Emphasis is on textual criticism of a variety of different works including those from philosophy, literature, and theology. Prerequisite: POS 290, or sophomore status, or permission of the instructor. Cr 3.

POS 391 Modern Political Theory  A study of modern political theory from the sixteenth century (Machiavelli) to the nineteenth (Nietzsche). Cr 3.

POS 392 American Political Thought I  An examination of central concepts and debates in American political history from the Puritan Era to the Dred Scott decision, with particular attention to debates on authority, liberty, revolution, slavery, and emerging ideas of American individualism. Prerequisites: POS 290 or PHI 109 or HTY 121 or HTY 122 or permission of the instructor. Cr 3.
POS 393  American Political Thought II  An examination of American political thought from the Civil War to the War on Terror, with particular attention to debates on authority, anarchism, race, and power. Cr 3.

POS 395  Independent Study I  A concentrated program of research or study on a particular subject of the student's selection. The topic will be chosen with the advice and under the direction of a faculty member. Admission by permission of the political science faculty. Cr 3.

POS 396  Independent Study II  A concentrated program of research or study on a particular subject of the student's selection. The topic will be chosen with the advice and under the direction of a faculty member. Admission by permission of the political science faculty. Cr 3.

POS 405  The European Union  An examination of a unique example of political, economic, and cultural integration. The course will emphasize the evolution, enlargement, international positioning, and political organization of the European Union. Prerequisite: POS 101 or POS 102 or POS 104 or POS 205, or permission of the instructor. Cr 3.

POS 406  Research in the European Union  Advanced course on the political, economic, and cultural aspects of the European Union, offered exclusively for students who enroll in the summer abroad program, "The European Union in Brussels." Participants will travel to Brussels and The Hague for presentations at the EU institutions, NATO, and the International Criminal Court. Prerequisite: recommended, but not required, POS 205 or any other course with an international content. Cr 3.

POS 445  MeMUNC Conference Planners  Students research international issues, produce a background guide for the Maine Model United Nations Conference (MeMUNC), organize the conference, and train in parliamentary procedure. University students lead a program that serves the local, state, and regional community by exposing high school students to the complexities of international relations. Prerequisite: Permission of the instructor. Cr 3.

POS 446  Global Educators  Students combine theory and practice, obtaining the skills to teach high/middle school students about global issues and peaceful conflict resolution through Model United Nations. Global Educators are placed in a school to lead weekly student preparation for the Maine Model United Nations Conference (MeMUNC) taking place every May. Prerequisite: Permission of the instructor. Cr 3.

POS 463  Supreme Court and Constitutional Law  The course examines how the Supreme Court interprets Constitutional provisions that affect the structure of government. Major topics include federalism, separation of powers, and economic rights. Both legal and extra-legal models of decision making are considered. Prerequisite: POS 101. Cr 3.

POS 464  American Civil Liberties  An analysis of judicial interpretations of Bill of Rights guarantees and their effects on political processes in the United States. Topics include church and state, freedom of speech and press, the rights of the accused and the convicted. Prerequisite: POS 101 or permission of the instructor. Cr 3.

POS 470  Electoral Politics Internship  Provision may be made to gain professional experience in political party organization, electoral or referendum campaign. Students will meet for a series of internship seminars, for which readings and reports will be required. Prerequisite: open to selected students from any major. Cr 6.

POS 471  Internship in Private and Semi-Public Organizations  Provision may be made to gain professional experience in administration and research. Students will meet for a series of internship seminars, for which readings and reports will be required. Prerequisite: open to selected students from any major. Cr 6.

POS 472  Not-for-Profit Internship  Provision may be made to gain professional experience in a civic, public interest or other not-for-profit organization. Students will meet for a series of internship seminars, for which readings and reports will be required. Prerequisite: open to selected students from any major. Cr 6.

POS 473  Municipal Administration Internship  Provision may be made to gain professional experience in a local government. Students will meet for a series of internship seminars. Readings and research reports are required, focusing on the management, financial control and administration of modern American cities, with emphasis on administration of personnel and finance, the city plan and line functions; public safety, transportation, health, welfare and housing. Prerequisite: open to selected students from any major. Cr 6.

POS 474  Federal Executive Internship  Provision may be made to gain professional experience in a department or agency of the federal government located outside of Washington, D.C. Participation in a seminar is required. Prerequisite: open to selected students from any major. Cr 6.

POS 475  Congressional Internship  Provision may be made to gain professional experience in the local offices of Maine's U.S. Representatives and Senators. Students will meet for a series of seminars, for which readings and research reports are required. Prerequisite: open to selected students from any major. Cr 6.

POS 476  Internship in Washington D.C.  Provision may be made to gain professional experience in a congressional office, an agency of the national government, or with a private or semi-public organization in Washington, D.C. Readings and research reports are required. Prerequisite: open to selected students from any major. Cr 9.
POS 477 State Internship Provision may be made to gain professional experience in a department or agency of state government. Students will meet for a series of internship seminars, for which readings and research reports are required. The state government internship is available under the Maine State Government Internship Program. Prerequisite: open to selected students from any major. Cr 6.

POS 478 State Judiciary Internship Provision may be made to gain professional experience in an administrative unit of the state court system. Students will meet for a series of internship seminars, for which readings and reports will be required. Prerequisite: open to selected students from any major. Cr 6.

POS 479 State Legislative Internship Provision may be made to gain professional experience in an office of the state legislature. Students will meet for a series of internship seminars, for which readings and reports will be required. Prerequisite: open to selected students from any major. Cr 6.

POS 480 International Affairs Internship Provision may be made to gain professional experience in an organization oriented toward international politics, trade or other trans-boundary affairs. Students will meet for a series of internship seminars, for which readings and reports will be required. Prerequisite: open to selected students from any major. Cr 6.

Department of Sociology

Sociology Overview

Professors: Chapkis, Collom, Deprez; Associate Professor: Baugher, Laz; Lecturer: Diamon

Sociology is the study of social life and the social origins and consequences of human behavior. Sociology's subject matter ranges from the intimate family to the hostile mob, from crime to religion, from the divisions of race and social class to the shared beliefs of a common culture, from the sociology of work to the sociology of sport. Sociology is a liberal arts major with particular emphasis on developing students' abilities to think critically about complex issues, to analyze social phenomena, to design and carry out research, and to write with clarity and economy. An undergraduate major in sociology offers valuable preparation for careers in social work, social research, politics, public administration, law, business, and education.

The major also provides an excellent basis for graduate study in sociology, law, criminology, social work, and education.

Additional Information

Alpha Kappa Delta

The Department of Sociology is affiliated with the international sociology honor society, Alpha Kappa Delta. Juniors and seniors who are officially declared majors or minors, or who have demonstrated an interest and involvement in sociology, have accumulated at least a 3.3 overall grade point average, have completed four or more sociology courses at USM with a sociology grade point average of at least 3.0 are eligible for nomination to Alpha Kappa Delta.

The Honors Degree in Sociology

For a B.A. degree in Sociology with Honors, a student must achieve a GPA of 3.6 or higher, calculated on the basis of a minimum of five USM Sociology courses taken prior to the last semester.

Internships

The Department of Sociology offers a strong and on-going internship program. The program helps place students in community agencies and organizations to bring together student academic work and community involvement. Students interested in an internship placement are encouraged to meet with the internship coordinator.

BA in Sociology
Description

Sociology is the study of social life and the social origins and consequences of human behavior. Sociology's subject matter ranges from the intimate family to the hostile mob, from crime to religion, from the divisions of race and social class to the shared beliefs of a common culture, from the sociology of work to the sociology of sport. Sociology is a liberal arts major with particular emphasis on developing students' abilities to think critically about complex issues, to analyze social phenomena, to design and carry out research, and to write with clarity and economy. An undergraduate major in sociology offers valuable preparation for careers in social work, social research, politics, public administration, law, business, and education.

The major also provides an excellent basis for graduate study in sociology, law, criminology, social work, and education.

Program Requirements

Requirements for the Baccalaureate Degree

All students are reminded that, in addition to meeting Departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the College of Arts, Humanities and Social Sciences, and the University's Core curriculum.

Major Credit and Grade Policy

The prerequisites for all 300-level sociology courses are SOC 100 and SOC 210 with grades of C or better. Courses to be taken for major credit at other institutions must be approved in advance. Grades of C or better must be achieved in all courses for major or minor credit. Courses taken pass/fail are not acceptable.

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 38.

Required Prerequisites for all advanced sociology courses (6 hours)

SOC 100 Introduction to Sociology
SOC 210 Critical Thinking About Social Issues

Required Courses (11 hours)

SOC 300 Sociological Theory
SOC 301 Qualitative Research Methods
SOC 307 Quantitative Research Methods

Required Courses in Class Processes–choose one course from the following (3 hours):

SOC 348 Sociology of Work
SOC 358 Sociology of Women's Work
SOC 359 Leisure and Consumption under Global Capitalism
SOC 392 Poverty: Policy, and Perspectives
SOC 393 Women, Welfare, and the State

Elective Courses–choose from among the following (18 hours)

SOC 315 Self and Society
SOC 316 Sociology of Gender
SOC 318 Childhood and Society
SOC 323 Sociology of Death and Dying
SOC 327 Social Movements
SOC 330 Sociology of the Family
SOC 331 School and Society
SOC 333 Medical Sociology
SOC 334 Sociology of Religion
SOC 343 Social Psychology
SOC 348 Sociology of Work
SOC 352 Demography
SOC 355 Politics and Society
SOC 357 Organization: Individual and Society
SOC 358 Sociology of Women's Work
SOC 359 Leisure and Consumption under Global Capitalism
SOC 363 Food, Culture and Society
Minor in Sociology

Description

The minor is intended for those students with a major other than sociology but who wish to broaden their educational experience in a formally designated program of study. The minor program may be of particular interest to students in Nursing and Health Professions, the School of Business, the School of Education and Human Development, the School of Social Work and non-social-science disciplines in the College of Arts, Humanities, and Social Sciences.

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 19.

Thirteen credit hours are required courses; the remainder are sociology electives.

Required courses: SOC 100, SOC 210, SOC 300, and SOC 301 or SOC 307.

Sociology electives: Each student minoring in sociology elects a minimum of two upper-division courses from those offered by the Department. These courses, chosen in consultation with the student's minor advisor, reflect the preprofessional or other interests of the student.

Supplementary information is published each semester by the Sociology Department Office to assist students in planning their course schedules. The information includes a summary of major courses, listings and descriptions of special courses, and general information for majors.

To obtain these publications, or for other information, write to: Chair, Sociology Department, University of Southern Maine, P.O. Box 9300, Portland, Maine 04104 or telephone: (207) 780-4100.

Course Descriptions

SOC 100 Introduction to Sociology
The fundamental concepts, principles, and methods of sociology; analyzes the influence of social and cultural factors upon human behavior; evaluates effect of group processes, social classes, stratification, and basic institutions on contemporary society. Offered each semester. Cr 3.

SOC 150 Social Networks and the Value of Diversity
Examines social networks and the causes, qualities, and consequences of those ties connecting us together. Students will be introduced to the major sociological theories of social networks and social capital. Issues of difference and diversity will be investigated in relation to social networks. Students will learn how status differences shape our access to resources, our mobilization of social capital, and future status attainment. Cr 3.

SOC 210 Critical Thinking about Social Issues
Designed to follow Introduction to Sociology, this course further develops students' skills of critical analysis through the application of sociological principles to current social issues. The course uses popular media as well as sociological materials. Examples of issues which may be examined are: poverty, health care, homelessness, aging, drugs, violence, bureaucracy, white collar crime, and changing gender roles.
SOC 300 Sociological Theory
Critical evaluation of selected classical models of the social world. Includes consideration of the foundations of sociological thought, the content of major classical theories and theory groups, and the socio-cultural settings within which they developed. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 301 Qualitative Research Methods
This course provides an overview of the process of social research utilizing qualitative methods. Topics include the logic and principles of the research process, as well as specific techniques in qualitative research (e.g., writing field notes, conducting interviews, analyzing qualitative data). A fieldwork/lab component allows students to apply research skills in settings outside the classroom. Prerequisite: SOC 210 with a grade of C or better or permission of instructor. Cr 4.

SOC 307 Quantitative Research Methods
This course provides an overview of the social scientific research process, utilizing quantitative methods. Students generate research questions and testable hypotheses and analyze a variety of secondary data sources. Specific statistical topics include: measures of central tendency, measures of dispersion, t-testing, analysis of variance, cross-tabulation, measures of association, linear regression, and multiple regression. The course includes a computer lab component. Prerequisites: SOC 210 with a grade of C or better and completion of mathematics proficiency, or permission of instructor. Cr 4.

SOC 315 Self and Society
This course explores the social construction of self as the result of both face-to-face and societal-level social processes such as language acquisition, identity development, and the effects of culture and social structure on individual and collective conceptions of selfhood. Readings and discussions focus on the relative contributions of individual self-determination and societal constraints on selfhood. Specific topics include childhood identity development, social stigma and societal definitions of normality, social structure and self-esteem, and cross-cultural differences in the concept of selfhood. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 4.

SOC 316 Sociology of Gender
This course examines gender as a social, cultural, and historical construction which occurs within and reinforces sex/gender stratification. With particular attention paid to education, the family, and work, we will explore sex/gender stratification–its sources and dynamics; historical and contemporary forms; and implications for human lives, history, and society. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 318 Childhood and Society
This advanced course examines the social construction of childhood. Topics include but are not limited to socio-historical study of the evolution of childhood, the child in art and literature, socialization and gender as process, structured inequality and children's life chances, cross-cultural comparisons of childhood, and U.S. family policies for the welfare of children. An applied component allows students to integrate theory and observations of the day to day life of children. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 323 Sociology of Death and Dying
This course focuses on some of the central issues in the sociology of death and dying: the social construction of grief and loss, the experience and meaning of death and dying in the late modern world, the politics of meaning making in the face of collective trauma, and the relation of pain and death and their representation to the making and unmaking of social order. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 327 Social Movements
This course is divided into two sections: social movement theory and social movement cases. First, students will explore the three dominant theoretical approaches covering the micro, meso, and macro context of social movements. These include framing and interpretive processes, mobilizing structures, and political opportunities. The "classic" U.S. social movement of the 1960s (civil rights, women's liberation, anti-war, and free speech) and 1970s-80s (environmental and peace) will be utilized as historical cases to comprehend social movement theory. The second section of the course will address contemporary movements including (but not limited to) labor, anti-globalization, local alternatives, and the new peace movements. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 330 Sociology of the Family
A sociological approach to the study of the family, including the structure of social relationships, the modern American family as a social institution, the cultural background of the family, and the impact of social change. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 331 School and Society
This course examines the social organization of schooling and its social and political context in contemporary American society. Topics include the emergence of public education, role of state and community in shaping its nature, problems of access and equality, the organizational nature of schools, teaching as a profession, and alternatives to public education. Attention is given to public debates concerning the conditions, limits, and possibilities of schooling. Comparisons with educational systems of other countries are included when appropriate. Prerequisite: SOC 210
with C or better or permission of instructor. Cr 3.

SOC 333 Medical Sociology
Analysis of socio-cultural influences on health and illness, with an emphasis on health, illness, and sickness as social identities. Particular attention is given to the organization of health-related occupations and health services in cross-cultural perspective, and to the ethical and policy-related issues raised by different models of organization. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 334 Sociology of Religion
Review and critique of classical and contemporary sociological interpretations of religion, with emphasis on the changing character of religious expression in the twentieth century. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 335 Politics and Society
This course will focus on power relationships in U.S. society, with some cross-national comparisons. Specific topics to be covered include the nature and distribution of power among social groups and organizations, theories of the state, social class and political participation, policy formation, and the interactions between democracy as a political system and capitalism as an economic system. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 343 Social Psychology
This course provides an overview of sociological theory and research in social psychology on the central topics of social perception, social communication, and social interaction. The course focuses on the impact of sociological factors such as gender, race, and class on face-to-face behavior and on how face-to-face interaction contributes to the creation and maintenance of social structure. Specific topics include social psychological methods; causes and consequences of stereotyping; gender, power, and conversation; status structures in small groups; distributive justice; and social dilemmas. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 348 Sociology of Work
This course surveys three strands of the literature: the nature of work under capitalism, the consequences emerging from such labor, and alternatives to capitalist relations in production. Specific topics include work in the global economy, Fordism and flexible capitalism, the division of labor, labor markets, control in the workplace, corporate dominance, jobs and the class structure, alienation, and workplace democracy. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 349 Social Psychology
This course provides an overview of sociological theory and research in social psychology on the central topics of social perception, social communication, and social interaction. The course focuses on the impact of sociological factors such as gender, race, and class on face-to-face behavior and on how face-to-face interaction contributes to the creation and maintenance of social structure. Specific topics include social psychological methods; causes and consequences of stereotyping; gender, power, and conversation; status structures in small groups; distributive justice; and social dilemmas. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 357 Organizations, Individuals, and Society
This course examines the nature of modern organizations and their impact on individuals and society. Several theoretical perspectives on organization will be examined to gain an understanding of organizational life and organizations' role in modern society. In addition, we will consider dilemmas faced by individuals interacting with organizations as functionaries (for example, workers, government employees, teachers, police) and as clients. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 358 Sociology of Women's Work
This course will introduce students to theoretical and empirical literature on women's work in the paid labor force, on their unpaid labor in the home, and on the relationship between these two kinds of "women's work." The course emphasizes the diversity of women's work and the interconnections among race, ethnicity, class, and gender through a detailed examination of professional women, blue-collar women, and "pink-collar" employees. Additional topics include occupational segregation, earnings differentials, poverty, law and public policy, and labor militancy. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 359 Leisure and Consumption under Global Capitalism
This course will use sociological concepts, paradigms, and research methods to engage students in a critical examination of leisure and consumption preferences and practices among the working, middle, and upper classes in the developed nations, especially the United States. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 363 Food, Culture, and Society
This course views food production, processing, distribution, and consumption as social and cultural phenomena. The course develops a sociological framework for understanding and connecting the diverse food stories in the headlines: GMOs, obesity, agricultural subsidies, food safety, organics. Students will also gain a better understanding of their own food choices and opportunities for changing our food system. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 365 Sociology of the Body
This course examines the body as a text marked by, and rendered meaningful through, social categories of race, gender, class, sexuality,
disability, and disease. This writing- and reading-intensive course discusses both social constructionist and biological determinist perspectives on embodied difference. Prerequisites: SOC 210 with C or better and one or more of SOC 300, SOC 316, WST 380, WST 390. Cr 3.

SOC 370 Sociology of the Environment
Sociology of the Environment is the study of the complex relations between the social world and the natural environment. The sociologist is particularly interested in the role played by popular culture, economic systems, urbanization, rationalization, globalization, race, and gender relations (environmental justice) in the creation and continuation of various environmental problems. Thus the course refers to efforts to understand and illuminate the societal dynamics in terms of social practices citizens engage in as they go about their lives. Cumulatively these social practices produce particular consumption and use patterns that have significantly altered the natural world. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 371 Sociology of Race and Ethnicity
Considers the factors that produce and maintain structured social inequality based on minority status, and the social consequences of such inequality. Includes analysis of selected minorities both in the U.S. and cross-culturally. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 374 Mental Health and Mental Illness
An examination of theories of the "causes" of "madness" and the treatment of the mentally ill. Particular attention on the influence of culture on the definition of illnesses, the relationship between social factors and illness, and the social context of treatment. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 380 Topics in Sociology
Specially developed occasional courses exploring a variety of theoretical and substantive areas within the field. Offered as resources permit. These courses may be counted as electives toward completion of the major. Prerequisite: SOC 210 with C or better or permission of instructor. Cr 3.

SOC 390 Individualized Instruction I
Independent reading and/or research for juniors and seniors. Apply to Department chair. Prerequisite: 15 hours in sociology. Cr var.

SOC 391 Individualized Instruction II
Continuation of independent reading and/or research for juniors and seniors. Apply to Department chair. Prerequisite: SOC 390. Cr var.

SOC 392 Poverty: Policy and Perspectives
This course will analyze the causes of and responses to poverty in the United States. Relying on multidisciplinary literature, this course examines measures and theories of poverty; public, political, and policy debates; and the role of government in income distribution/redistribution. Particular attention will focus on issues of power, wealth, gender, and race as well as education, health, housing, and place as factors inextricably linked to poverty. Prerequisites: SOC 210 with a C or better, SOC 301 and SOC 307 recommended, or permission of instructor. Cr 3.

SOC 393 Women, Welfare, and the State
The course explores the gender bias of social welfare policy in the U.S., revealing a welfare state whose adherence to central elements such as the Protestant work ethic, "family values," and a laissez-faire economy excludes over half the population. From both historical and theoretical perspectives, the course examines the development of the American welfare state, compares it to Western and Eastern European states, and assesses its impact on women's lives. Prerequisites: SOC 210 with a grade of C or better, SOC 301 and SOC 307 recommended, or permission of instructor. Cr 3.

SOC 395 Internship
The course is designed to provide work/action experience and insight into professional roles in a variety of community agencies and organizations. The primary objective of the internship is the application of the perspectives, substantive knowledge, and methods of social science to a particular organizational setting. Thus, the internship can be understood as a participant observation experience within the context of social science research. It is primarily designed as a field experience/reflection opportunity for upper-level social science majors with substantive background/coursework in the area of internship placement. In addition to field placement, students are expected to meet for a series of internship seminars, for which readings and reports will be required. Contact Departmental internship coordinator for details. Cr 4 to 6.

SOC 450 Undergraduate Teaching Assistantship
In working closely with faculty, undergraduate teaching assistants will gain insight into course materials and into all aspects of college teaching. This experience will be especially valuable for students who plan to do graduate work in sociology and for students exploring a career in teaching. Teaching assistants also provide an additional resource for assistance, advice, and modeling. Undergraduate teaching assistants generally assist faculty in course preparation and delivery including locating and reviewing materials for course use; assisting with the design of course schedule, exercises, assignments, and class presentations; lecturing and supervision of student groups; and providing feedback to students on their work. In addition, teaching assistants hold regular office hours. Enrollment in SOC 450 will depend on Departmental needs and course offerings. Selection is made by the faculty. Students should contact the Department chair for details. Prerequisite: SOC majors by permission only. Cr 3.
Theatre Overview

Professors: Kading, Kilroy, Power, Steele; Associate Professor: Kent; Assistant Professors: Brodie, Mather, Zura; Technical Director: Fertig; Professors Emeriti: Rootes, Stump

The Department of Theatre offers a four-year program leading to a B.A. degree in Theatre. An undergraduate degree in Theatre offers valuable preparation for careers in educational or professional theatre as well as other nonrelated disciplines.

All students are reminded that in addition to meeting departmental requirements for the major, they must also meet the requirements of the College of Arts, Humanities, and Social Sciences as well as the Core Curriculum requirements.

Additional Information

Theatre Department Production Requirements

The Department of Theatre requires each major to participate in Theatre Department functions by completing Theatre Workshop courses and Department projects. Credit for these may be earned separately or concurrently according to Department guidelines. Each Theatre major must enroll in 1 credit of Theatre Workshop each semester the student is a Theatre major. Theatre Workshop courses require, in part, participation in an approved Department project. These projects must be completed in a variety of discipline areas. All cast and crew members of Department productions are required to participate in the closing night clean-up (strike) for that show.

Student Participation

Theatre succeeds in direct proportion to the quantity and quality of the group effort, and so it is not surprising that the USM Theatre program thrives on the participation of all majors, minors, and other interested students.

Theatre is a strict and demanding discipline; the time dedicated to production and rehearsal is extensive. Therefore, the Department of Theatre urges students to select non-Departmental theatre activities prudently and with consideration for their overall academic and production commitments. The Department also strongly recommends that Theatre majors consult their advisors in order to integrate outside projects into their overall program.

Fees

Materials and/or admission fees may be required for some Theatre courses. Please contact the Theatre office at 780-5480 for specific requirements.

Enrollment Waivers

Students who believe they are qualified to enroll in a Theatre course, but have not completed the prerequisites for that course, may request the instructor's permission to enroll. In addition to Theatre prerequisites, all Theatre classes are also subject to Core Curriculum requirements.

BA in Theatre

Description

The Department of Theatre offers a four-year program leading to a B.A. degree in Theatre. An undergraduate degree in Theatre offers valuable preparation for careers in educational or professional theatrical activities, as well as other nonrelated disciplines.

All students are reminded that, in addition to meeting departmental requirements for the major, they must also meet the requirements of the College of Arts, Humanities and Social Sciences as well as the Core Curriculum requirements.

Program Requirements
The minimum number of credits (exclusive of the University's Core Curriculum) required for the major: 64.5-71.5.

Students with the intent to major must complete the following courses during their first four semesters:

THE 101 Introduction to Theatre
THE 104 Practicum in Costuming
THE 105 Practicum in Stage Lighting
THE 106 Practicum in Stagecraft
THE 120 Acting: Stage Movement / Voice
THE 134 Production Management
THE 135 Stagecraft
THE 141 Theatre Workshop I
THE 142 Theatre Workshop II
THE 150 Text Analysis
THE 230 Designing for the Performer

All majors or intended majors are required to take 1 credit of Theatre Workshop (THE 141, 142, 143, 144) per semester. THE 141, 142, 143, and 144 may be repeated only once for credit. Please see a Theatre advisor for information on exceptions to this Theatre Workshop policy.

Theatre students who fail to maintain a 2.5 GPA in Theatre courses and a 2.0 overall GPA may not be allowed to participate in Department productions in either an acting or technical capacity (except for lab duties or requirements related to coursework).

The above GPA standards are required for graduation and a grade of C– or better is required in all Theatre courses.

Students are encouraged to meet with the faculty or staff whenever questions arise or problems occur.

The following courses are required:

THE 101 Introduction to Theatre
THE 104 Practicum in Costuming
THE 105 Practicum in Stage Lighting
THE 106 Practicum in Stagecraft
THE 120 Acting: Stage Movement/Voice
THE 134 Production Management
THE 135 Stagecraft
THE 141 Theatre Workshop I (to be repeated once)
THE 142 Theatre Workshop II (to be repeated once)
THE 143 Theatre Workshop III (to be repeated once)
THE 144 Theatre Workshop IV (to be repeated once)
THE 150 Text Analysis
THE 170 Public Speaking
THE 220 Acting: Scene Study
THE 230 Designing for the Performer
THE 325 Directing
THE 351 Dramatic Literature and Theatre History I
THE 352 Dramatic Literature and Theatre History II
THE 353 Dramatic Literature and Theatre History III
THE 495 Theatre Capstone

Take three courses:

A. Take any two design courses:  
THE 331 Scene Design  
THE 334 Costuming I  
THE 335 Stage Lighting or THE 337 Sound Design

B. Take either THE 221 Acting: Stage Voice or an additional design course from the above choices (for a total of three design courses).

Theatre Electives (12 credits total)

A. Take any two 100/200 level Theatre courses (6 credits total)

B. Take any two 300/400 level Theatre courses (6 credits total)

Electives from other departments may be taken in lieu of Theatre courses if approved by Theatre Department vote.

Each Theatre major must enroll in 1 credit of Theatre Workshop each semester the student is a Theatre major (maximum of 8 credits required).
Suggested areas of emphasis include: Performance, Design, Technical Theatre, and Dramatic Literature & Theatre History.

**BM in Performance - Musical Theatre**

**Description**

The study of musical theatre performance at the University of Southern Maine is offered as a collaboration between the School of Music and the Department of Theatre. It is designed for those individuals who wish to pursue a career in musical theatre performance. Private lessons in voice, solo, and ensemble performance as well as theatrical dance training are emphasized. This degree concentration complies with NASM guidelines for a degree in Music Performance with an emphasis in Musical Theatre.

**Program Requirements**

The Musical Theatre degree is granted by the School of Music as a Bachelor of Music in Performance-Musical Theatre (MUP). For additional information regarding specific School of Music required courses, please refer to the School of Music section of the catalog.

**Minor in Theatre**

**Description**

Please see Program Requirements.

**Program Requirements**

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 18.

The courses required are THE 101, THE 134, THE 150, and either THE 120 or THE 220 with permission of instructor. The student must take two other courses chosen in consultation with a Theatre Department advisor in accordance with the interests of the student.

**Course Descriptions**

In the event that students believe they are qualified to enroll in a Theatre course, but have not completed the USM prerequisites for that course, they may contact the Department to request permission to enroll.

**THE 101 Introduction to Theatre**

This course provides a general introduction to all facets of theatre including dramatic literature, theatre history, acting, directing, playwriting, design, management, and theatre spaces, among others. Cr. 3.

**THE 102 Acting for Non-Majors**

This course will introduce students to theatre through the eyes of the performer. Students will gain a basic understanding of theatre as a performing art through lecture, discussion, and performance of scenes. Improvisational exercises, relaxation techniques, and character analysis strategies will be included. Students will also attend campus and area theatrical productions and be required to write critical reviews of the performances. Cr. 3.

**THE 103 Contemporary Dance I**

This course is designed to teach basic contemporary dance skills and vocabulary. The class is divided into two areas of study. Physical and technical development are learned through strengthening and stretching exercises. Proper body alignment is stressed for the most efficient and
injury-free movement. Dance phrases are taught to enhance rhythmic and locomotor skills. Equal time will be devoted to improvisational skills and the study of choreographic techniques. Students will be required to attend contemporary dance performances. Course may be repeated once for credit. Cr. 3.

**THE 104 Practicum in Costuming**
This course is a laboratory session that allows practical application of theory discussed in THE 334 Costuming, by teaching sewing skills and allowing students to construct costumes for a University theatre production. Practicum is required for Theatre majors and recommended for all costuming students, but need not be taken concurrently with THE 334. Cr. 1.

**THE 105 Practicum in Stage Lighting**
A course focusing on the practical application of contemporary stage lighting technology and on the implementation of a lighting plot. Cr. 1.5.

**THE 106 Practicum in Stagecraft**
A practicum allowing the application of theory discussed in THE 135 to the construction, painting, and mounting of sets for University theatre productions. Practicum is required for Theatre majors and recommended for all stagecraft students, but need not be taken concurrently with THE 135 Stagecraft. Cr. 1.

**THE 120 Acting: Stage Movement/Voice**
This is a practicum course designed to introduce students to basic elements of the creative process of acting. Topics include kinesthetic awareness, techniques of acting theorists ranging from Michael Chekhov to Rudolph Laban, methods of character creation, elementary stage combat, improvisation, and voice and diction for the stage. Course culminates with student presentation of an original performance piece. Cr. 3.

**THE 130 Musical Theatre Workshop I**
A course designed to give students practical application of theatre practices in the fields of acting, design, scene construction, costuming, properties, lighting, management, and directing. A laboratory course. Prerequisite: restricted to Musical Performance majors with an emphasis in musical theatre. The course may be repeated for credit. Cr. 1.

**THE 131 Musical Theatre Workshop II**
A continuation of THE 130. Prerequisite: THE 130, restricted to Musical Performance majors with an emphasis in musical theatre. The course may be repeated for credit. Cr. 1.

**THE 132 Musical Theatre Workshop III**
A continuation of THE 131. Prerequisite: THE 131, restricted to Musical Performance majors with an emphasis in musical theatre. The course may be repeated for credit. Cr. 1.

**THE 133 Musical Theatre Workshop IV**
A continuation of THE 132. Prerequisite: THE 132, restricted to Musical Performance majors with an emphasis in musical theatre. The course may be repeated for credit. Cr. 1.

**THE 134 Production Management**
A survey/lab course designed to familiarize students with the organizational procedures of the theatre production process. Major areas of study include stage management and theatre production management with some reference to video and film production management. Additional topics include the running of crews in properties and wardrobe, operation of sound and lighting equipment, and production scheduling. This course includes a crew requirement for a University production. Cr. 3.

**THE 135 Stagecraft**
A lecture course in technical theatre and related topics relevant to technical direction. Specific areas of emphasis will include: theatre/stage terminology and organization, scene shop practices, and basic methods of construction as well as methods of rigging and moving scenery for the stage. Cr. 3.

**THE 139 Theatrical Make-up**
A practicum course in the fundamentals of design and application of theatrical make-up. Specific areas of study will include: character analysis to make-up; techniques of highlight and shadow; and make-up for youth, middle, and old age. Additional exercises introduce historical styles, creating a likeness, and nonrealistic make-up. Students will frequently apply theatrical make-up to their own faces in class. Cr. 3.

**THE 141 Theatre Workshop I**
A course designed to give students practical application of theatre practices in the fields of acting, design, scene construction, costuming, properties, lighting, management, and directing. A laboratory course. The course may be repeated for credit. Cr. 1.

**THE 142 Theatre Workshop II**
A continuation of THE 141. Prerequisite: THE 141. The course may be repeated for credit. Cr. 1.

**THE 143 Theatre Workshop III**
A continuation of THE 142. Prerequisite: THE 142. The course may be repeated for credit. Cr. 1.

THE 144 Theatre Workshop IV
A continuation of THE 143. Prerequisite: THE 143. The course may be repeated for credit. Cr. 1.

THE 150 Text Analysis
Text Analysis teaches students myriad ways of approaching, interpreting, and synthesizing texts (written, visual, and aural), especially scripts. Students will learn the skills necessary for actors, directors, designers, dramaturgs, and scholars to explore and deconstruct texts in search of meaning, clues for staging possibilities, and cultural context. Cr. 3.

THE 170 Public Speaking
An introductory course in the art of public discourse. Primarily a lecture-performance course, students will learn the basics of informative, persuasive, and argumentative speaking, as well as the processes of problem-solving and informative discussion. Cr. 3.

THE 175 Oral Interpretation of Texts
A course in the analysis and performance of texts (poetry, prose, drama) with emphasis on the techniques used in reading written material aloud to an audience. Designed to stimulate an understanding and responsiveness to literature and to develop the ability to convey to others, through oral reading, an appreciation of that literature. Cr. 3.

THE 201 Cultural History of Theatre
A course designed to provide students with a cultural history survey of theatre—from ancient Sumeria, Greece, and Rome through traditional Asian, Medieval, and Renaissance European and other historical styles/periods into the twenty-first century. Prerequisite: College Writing. Cr. 3.

THE 203 Musical Theatre Dance
This course will build upon basic movement skills with an emphasis on the dance styles required for musical theatre. Techniques offered will include jazz, ballet, and tap. In addition to skill training, class projects will include the staging and choreography of musical theatre selections. Cr. 3.

THE 204 Dress and Self Image
This course examines clothing from social, psychological, and aesthetic perspectives. Students will learn how people make sense of their lives and their world the cultural production of meaning represented by attire, appearance, and presentation. Prerequisite: College Writing. Cr. 3.

THE 220 Acting: Scene Study
This is a practicum course designed to introduce students to basic skills of stage movement and characterization through the use of scene work. The course evolves from simple storytelling through monologues to scenes. The emphasis is on internal preparation through developing a role as well as on external techniques for projecting that role. Prerequisite: THE 120. Cr. 3.

THE 221 Acting: Stage Voice
This course emphasizes the development of the actor's voice, providing a progression of exercises to free and strengthen the voice as a tool of creative expression. The elements of vocal projection, range, diction, placement, and characterization will be explored. Prerequisite: THE 120. Cr. 3.

THE 224 Screen Acting
This course focuses on acting for film, television, industrials, commercials, and the web, among others. The course will emphasize the difference between stage and screen acting techniques. Cr. 3.

THE 226 Professional Audition and Marketing Techniques
This course will give students practical experience in and information related to seeking employment as an actor. The audition section will include simulations of stage and related film and video situations. The marketing section will provide strategies in the professional actor's most time-consuming endeavor: looking for work. Prerequisite: THE 220. Cr. 3.

THE 230 Designing for the Performer
This course offers the student an opportunity to explore the process of creating an environment for the performer, incorporating elements of scenic, costume, lighting, and audio design. Coursework includes the presentation of multimedia design projects. Cr. 3.

THE 234 Performance Business
Investigation of performance business best practices including business plans in the performing arts, theatre company creation budgeting, marketing, promotions and electronic media, performance health, and educational/professional theatre management roles. This course includes a promotions practicum. Cr. 3.

THE 235 Theatrical Drafting
A lecture/discussion/lab course in basic theatrical drafting/graphic practices relating to theatrical construction and design techniques. Concurrent
THE 236 Practicum in Design
A course focusing on the practical application of theory relevant to scenic, costume, lighting, and other theatre-related design topics. Cr. 1.

THE 250 Playwriting
A lecture-practicum course designed to acquaint the student with playwriting principles. Emphasis is placed on the one-act play form. Students will be required to complete a series of creative exercises culminating with writing of a one-act play. Prerequisite: THE 150. Cr. 3.

THE 271 Creative Drama
Study of methods for introducing young people to theatre as a total art form. Course to include the development of children's plays through improvisation as well as traditional children's literature. Work with children in various community settings will provide practical experience for the student. Cr. 3.

THE 275 Readers Theatre
This course teaches the process involved in arranging literature and other materials for performance or for use as a teaching tool. Elements of scripting, directing, and acting for simple, staged, chamber, and story theatre will be analyzed. Prerequisite: THE 150. Cr. 3.

THE 283 Aerial Dance
This course is designed to provide an introduction to aerial dance techniques. Aerial dance is composed of Feldenkrais Pilates, yoga, theatre, and trapeze work. In addition to these components, students will study training and injury prevention techniques, improvisation, and physical theatre. Cr. 3.

THE 303 Musical Theatre Performance
This course will provide students the opportunity to combine the skills of singing, acting, and dance as demanded by the art of musical theatre. In addition to vocal coaching, acting exercises, and choreography, students will be exposed to a variety of musical theatre genres and will be performing throughout the semester. The class will culminate with a public presentation. Prerequisites: THE 203 and THE 220. Cr. 4.

THE 321 Acting: Advanced Scene Study: Playwright Focus
This is a practicum for advanced actors, providing an in-depth scene study focusing on one or more playwrights. Emphasis will also be given to preparation for auditions. Prerequisite: THE 220. Cr. 3.

THE 322 Acting: Contemporary Methods
This course will introduce a variety of acting techniques developed by master artists, beginning with an overview of the Stanislavski System and advancing to the work of Lee Strasberg, Sanford Meisner, Uta Hagen, Augusto Boal, and others. These techniques will be applied to exercises, scenes, and monologues performed throughout the semester. Prerequisite: THE 220. Cr. 3.

THE 325 Directing
This course is designed to train students in theatrical organization and rehearsed techniques. It encompasses composition, picturization, movement, and rhythm. Some practicum is involved. Prerequisites: THE 150, and THE 230, or instructor permission. Cr. 3.

THE 331 Scene Design
Lecture and practicum in stage scenic design. Emphasis on the visual art and drafting of designs. Prerequisites: THE 150 and THE 230. Cr. 3.

THE 334 Costuming
This course introduces students to costume history and design, emphasizing the rendering and visual presentation of costume designs. Students learn by using the elements and principles of design, script and character analysis, and costume history research. Prerequisites: THE 150 and THE 230; THE 230 may be taken concurrently. Enrollment in THE 104 Costume Practicum is not required, but recommended. Cr. 3.

THE 335 Stage Lighting
Introduction to stage lighting design, elements of electricity, color, light sources, instrumentation, and control systems. Students will participate in lighting projects in practicum. Prerequisites: THE 150 and THE 230; THE 230 may be taken concurrently. Cr. 3.

THE 337 Sound Design
An introduction to the art and techniques of sound design. The class examines the creation of audio for a production environment, with emphasis on industry-standard recording techniques and communication tools, script and environmental analysis, and equipment and delivery systems. Prerequisites: THE 150 and THE 230; THE 230 may be taken concurrently. Cr. 3.

THE 350 Advanced Playwriting
A course for those who have taken THE 250 or have already written several plays. Emphasis will be placed on writing a full-length play for possible production by the University. A better-than-average competence in writing dialogue is imperative. Prerequisite: THE 250, or instructor permission. Cr. 3.
THE 351 Dramatic Literature and Theatre History I: Origins to 1500
This course examines Greek, Roman, and Medieval theatre history and dramatic literature. THE 351 asks students to think about theatre and dramatic literature in a broad array of cultural contexts. This class focuses on sharpening students' written and oral communication and critical thinking skills. Prerequisites: College Writing, THE 150; THE 150 may be taken concurrently. Cr. 3.

THE 352 Dramatic Literature and Theatre History II: 1500-1800
This course examines the dramatic literature and history of traditional Asian, Renaissance, Restoration, and Enlightenment theatres. THE 352 asks students to think about theatre and dramatic literature in a broad array of cultural contexts. This class focuses on sharpening students' written and oral communication and critical thinking skills. Prerequisites: College Writing, THE 150; THE 150 may be taken concurrently. Cr. 3.

THE 353 Dramatic Literature and Theatre History III: 1800-present
This course examines the dramatic literature and history of Romanticism, Realism, Naturalism, Expressionism, Epic Theatre, Absurdism, and Contemporary Theatre. THE 353 asks students to think about theatre in a broad array of cultural contexts. This class focuses on sharpening students' written and oral communication and critical thinking skills. Prerequisites: College Writing, THE 150; THE 150 may be taken concurrently. Cr. 3.

THE 355 Journalistic Drama Criticism
This course will provide the student with a comprehensive analysis of the role of the writing critic in professional, community, educational, and amateur theatre. Stress will be placed upon development of a workable writing style. A minimum of five plays will be seen from which reviews will be generated. Prerequisite: THE 150. Cr. 3.

THE 360 Butches, Bitches & Buggers: An Exploration of Modern Queer Drama
This course explores provocative portraits of queer life in modern drama including the evolution, reclamation, and employment of gender- and sexuality-specific language and stereotypes within and outside the LGBTQ communities. Prerequisites: College Writing & THE 150, or instructor permission. Cr. 3.

THE 372 Speaking to the Camera
This is an advanced public speaking and performance course introducing the student to the most common types of video presentations. Student performances of scripted speeches will be videotaped and evaluated based on content, delivery, and style. Prerequisite: THE 170. Cr. 3.

THE 375 Performance Art
This theory and practice course allows students to balance ethics and creativity in image-making, while experimenting with the aesthetic interpretation of texts. Visual/performative projects focus on extra-textual elements such as sound and low-tech light, visual symbols/ images, found environments, and/or installations. Theoretical and practical readings accompany black box exercises and one public performance. Cr. 3.

THE 420 Acting: Styles
This course will examine the styles of acting found in the Classical (Greek and Roman), Elizabethan, and eighteenth- and nineteenth-century dramas. Prerequisite: THE 220. Cr. 3.

THE 421 Topics in Acting and Performance
An intensive study of a particular acting or performance technique chosen at the discretion of the instructor in accordance with his or her expertise and interests. May be repeated as topics vary, for a maximum of 9 credits. Prerequisite: THE 220, or instructor permission. Cr. 3.

THE 430 Topics in Design
A seminar in advanced design practices, the course will stress improving design and presentation skills by developing and presenting design projects. The design project will involve theatrical drafting, perspective sketching, rendering and model making techniques as required in the areas of specialty. Students will be required to work in two of the three areas of theatrical design: costume design, lighting design, or scenery design. In addition, historical styles will be surveyed in a lecture/discussion format. This discussion will include the impact of social and political attitudes as well as physical style and how these aspects may be applied to contemporary design. Prerequisite: instructor permission only. Cr. 3.

THE 434 Advanced Costuming
This course will continue the study of costume design begun in THE 334. The focus of class work and projects will be on specific problems encountered in costuming for the theatre. Lecture material and design assignments will be drawn principally from the twentieth century, though other time periods may occasionally be used. Students will work to improve rendering techniques as well as analytical skills. Concurrent enrollment in Theatre Workshop will provide a laboratory component to classroom study. Prerequisite: THE 334. Cr. 3.

THE 451 Topics in Dramatic Literature and Theatre History
An intensive study of a particular playwright, group, movement, or historical period chosen at the discretion of the instructor in accordance with his/her expertise and interests. May be repeated as topics vary for a maximum of nine credits. Prerequisites: College Writing, THE 150; THE 150 may be taken concurrently. Cr. 3.

THE 480 Adaptation: Text/Theatricality
This capstone course explores the theory and practice of adaptation. Students will investigate a politics of adaptation by studying texts, their
re/presentation, and their reception through an historiographical lens. Students will both create and critique dramatic adaptations. Prerequisites: College Writing & THE 150, or instructor permission. Cr. 3.

THE 490 Independent Study
Students should contact the Department regarding information for independent study. Prerequisite: permission of the Theatre Department. May be repeated for credit. Credit hours arranged.

THE 491 Project
Investigation of special topics, or execution of special projects that fall within the purview of theatre. Students may select an interior intradepartmental committee of three professors to approve, assist, and oversee the project. Students must obtain rules and guidelines for this course from the department chair. May be repeated for credit. Prerequisite: junior or senior standing and permission of the Theatre Department. Credit hours arranged.

THE 492 Theatre Internship
Students will assume a full one-semester internship with a professional theatre or Readers Theatre Company. Students will be involved in management, acting, directing, or technical theatre as a member of the company. Each student will be assigned a faculty advisor who will make a biweekly evaluation of ongoing work. Participants will be required to keep a diary and/or portfolio to be reviewed by the faculty of the Theatre Department at the conclusion of the internship. All creative work done by the student will be evaluated by the advisor and at least one other, or if possible, all members of the department. Prerequisite: permission of the Theatre Department. May be repeated for credit. Credit hours to be arranged. Cr. 3-15.

THE 493 International Tour
Students in this course will rehearse an original or scripted production which will be performed at USM and then transported for presentation to an international venue determined by the instructor. Prerequisite: instructor permission only. Cr. 3.

THE 494 Theatre Institute: Techniques of Michael Chekhov
This course provides an intensive overview of the acting techniques created by Michael Chekhov. Areas of focus will include characterization, scene study, stage movement and voice, and teaching methods. The course will conclude with a works-in-progress performance. Typically offered summer only. May be repeated for a maximum of nine credits. Cr. 3.

THE 495 Theatre Capstone
This capstone course provides students with opportunities to investigate their areas of interest in Theatre in depth and create the performance pieces, designs, stage management documents, dramaturgy, etc. necessary for professional portfolios to represent themselves in the workplace. Students will also develop a career plan in order to map out a path for employment or further training upon leaving USM. Prerequisites: College Writing & THE 150. Cr. 3.
Self-Designed Major Programs Overview

Coordinator: Pamela V. Edwards

The self-designed major program allows students to receive a bachelor of arts (B.A.) degree. This program offers many opportunities for students to study traditional subjects as well as new fields of inquiry that the University does not offer through existing departments. The multidisciplinary format of self-designed majors allows students the flexibility of pursuing their educational interests in a topical or thematic context rather than through an established discipline.

There are two types of self-designed major programs: (a) individual contract and (b) group contract programs. Students may work for a self-designed major degree through either type of program. All programs are approved and administered by the Self-Designed Major Committee.

A. Individual Contract Programs

The individual self-designed major allows the student to design a multidisciplinary program not available through a department major or a group contract program. The Self-Designed Major Committee reviews student proposals at its regularly scheduled meetings throughout the academic year. Proposals should be approved normally during the student's sophomore year. The deadline for completion of all self-designed major-related requirements coincides with expiration of the catalog in effect at the time of the student's original matriculation. Failure to complete the self-designed major within this time span will require reevaluation or reapplication of the self-designed major proposal and approved courses.

Application forms and guidelines may be obtained from the Office of the Dean of the College of Arts, Humanities, and Social Sciences (CAHS).

B. Group Contract Programs

Group contract programs are coherent multidisciplinary studies representing fields of interest that have developed over the years at USM. Additional group contract programs will be considered by the Self-designed Major Committee as they are required for enhancing the quality of the CAHS curriculum. USM currently offers the following group contract programs:

- Classical Languages
- Latin for Teachers, k - 12
- Social Science

Students interested in any of the above programs should contact the coordinator of that group contract program for more information.

BA in Self-Designed Major - Social Science

Description

Coordinator: Dana McDaniel, 65 Exeter Street, Portland

Steering Committee: Bjelic (Criminology), Hillard (Economics), McDaniel (Linguistics), Savage (Geography)

The self-designed group contract major in social science is a multidisciplinary program consisting of the following eight disciplines: criminology, economics, geography-anthropology, history, linguistics, political science, sociology, and women and gender studies.

Program Requirements

In order to declare a self-designed major in social science, students must have met the University's College Writing and Quantitative Reasoning Core requirements and must have a GPA of at least 2.5. Students who wish to declare a major in social science must submit a completed application form (available from the coordinator's office) to a member of the steering committee. Each student must take a minimum of 51 credits to complete the major. Students must receive a grade of C- or higher in courses taken to fulfill the major.

Students choose between Options I and II below. The following three requirements apply to all students, regardless of option: 1) Every student's
social science curriculum must include at least one of the following social science methods courses: CRM 220, ECO 305, GYA 202, HTY 200, LIN 490, POS 203, SOC 301; 2) All students must take a 3-credit capstone course, SDM 401, in addition to the requirements specified under their option; and 3) All students majoring in social science must demonstrate an intermediate competence in one foreign language as part of the departmental requirements for graduation. This requirement can be fulfilled by achieving a grade of at least C- in the second semester of an intermediate level course (and any necessary prerequisites) or by examination.

Option I

Students select one of the eight disciplines as a concentration. They must complete 21-23 credits (usually seven courses) in that discipline, as specified below.

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Requirements for Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criminology</strong></td>
<td>CRM 100, CRM 216, CRM 220, CRM 301, CRM 317, CRM 334, and one 3-credit CRM course that is 300-level or above</td>
</tr>
<tr>
<td><strong>Economics</strong></td>
<td>ECO 101, ECO 102, ECO 301, and four 3-credit courses that are 300-level or above</td>
</tr>
<tr>
<td><strong>Geography-Anthropology</strong></td>
<td>GEO 101 or GEO 102; two courses from ANT 101, ANT 102, GYA 202; any two 3-credit GEO, ANT, or GYA courses that are 200-level or above; and any two 3-credit GEO, ANT, or GYA courses that are 300-level or above</td>
</tr>
<tr>
<td><strong>History</strong></td>
<td>seven 3-credit HTY courses, at least four of which are 200-level or above</td>
</tr>
<tr>
<td><strong>Linguistics</strong></td>
<td>LIN 185, LIN 201, and five 3-credit LIN courses that are 300-level or above</td>
</tr>
<tr>
<td><strong>Political Science</strong></td>
<td>POS 101, POS 102, and five 3-credit POS courses, at least three of which are 300-level or above</td>
</tr>
<tr>
<td><strong>Sociology</strong></td>
<td>SOC 100, SOC 210, SOC 300, SOC 301, SOC 312, and two additional 3-credit SOC courses</td>
</tr>
<tr>
<td><strong>Women and Gender Studies</strong></td>
<td>WST, 201, WST 380, WST 390, WST 235, WST 245, WST 255, WST 265; if any of the latter four courses are not offered, they may be replaced by WST 220, WST 320</td>
</tr>
</tbody>
</table>

Option II

Students choosing Option I also take 27 credits outside of their concentration. The 27 credits must be divided equally among three of the remaining seven disciplines (three courses in each), and at least 9 of the 27 credits must be upper division level (200 or above). Note that these courses are not restricted to the courses listed above as requirements for the concentrations.

Students select one interdisciplinary topic within the social sciences as a concentration. In consultation with their advisor, they design a curriculum that consists of at least 30 credits (10 courses) on their topic from at least two (but no more than six) of the eight disciplines. At least 18 of the 30 credits must be above the introductory level.

Students choosing Option II also take 18 credits in two disciplines not included in their concentration–three courses in each discipline. At least 6 of the 18 credits must be upper division level (200 or above).

Capstone Course

All social science majors (regardless of option) must take SDM 401 in their senior year or during the second semester of their junior year. The purpose of this course is to bring together the knowledge and experience students have acquired through the major, and to allow them to apply that knowledge.

Notes:

- Students who intend to teach social studies at the secondary level should consult with their advisor to design a curriculum that includes the specific social science courses required by the state of Maine for certification.
- Students who have already taken more than nine credits of 100-level courses in the social sciences and who, due to prerequisites, are required to take more 100-level courses should consider consulting with their advisor about possible alternative arrangements.

SDM 401 Senior Seminar in Social Science

The capstone to the major and required for the degree, this seminar explores the nature and the craft of social science. The topic will vary but will always be a particular theme or set of issues that span various social science disciplines, such as competing methodologies in social science, ethnohistory, United States studies, etc. Students are expected, through discussion and writing, to apply the knowledge and skills acquired in previous social science courses. Prerequisite: The course is open only to social science majors or students majoring in one of the eight disciplines.
that make up the social science major. Students must also be seniors or second semester juniors. Cr 3.
LAC Overview

Dean: Joyce T. Gibson; Associate Dean of the College: Blake Whitaker; Chair: Caron, Cleary; Professors: Black, Hitchcock, Levine, Nemeroff, ; Associate Professors: Caron, Cleary, Coste, Hammer, Mundhenk, Robinson, Rodrigue, Stasko, Turesky, Vazquez-Jacobus,Whitaker; Assistant Professors: Davenport, Jenkins, Peabody, Silber, Spear; Instructors: Nowinski; Lecturers: Bickmore, Petruccelli, Timberlake

Lewiston-Auburn College (LAC) has several distinguishing characteristics: interdisciplinary majors, student-centered learning, a community atmosphere, and a deep sense of responsibility about its role in meeting regional needs. Faculty and staff are dedicated to engaging students in a transformative process in which self-awareness, content knowledge, relevant skills, and career development are merged in such a way that lifelong learning is an expectation.

The curriculum is marked by integration not only among the various disciplines within the liberal arts, but also between the liberal arts and the professional concentrations, between professional concentrations and the workplace, and between the College and the community. The faculty is dedicated to learning as a shared experience between students and faculty. The interdisciplinary focus combines communication, teamwork, writing, fieldwork, critical thinking, civic engagement, and leadership; and uses service learning, career seminars, and internships to help students apply, synthesize, and integrate their learning.

Lewiston-Auburn College's interdisciplinary majors include:

- B.A. degree in Arts and Humanities
- B.A degree in Natural and Applied Sciences
- B.A. degree in Social and Behavioral Sciences
- B.S. degree in Leadership and Organizational Studies

In addition, the College offers:

- B.A. degrees which lead to secondary teacher certification in English, Social Studies, English, and Social Studies, and Life Sciences.
- B.S. degree in Nursing aligned with USM's Portland-based School of Nursing is offered in its entirety at the Lewiston campus*

The College also offers master's degrees in:

- Occupational Therapy
- Leadership Studies

A Master of Science in Education degree in literacy education is offered by the School of Education and Human Development.

A minor in Women and Gender Studies and a graduate certificate program in English as a Second Language (ESL) are also extended from the other USM campuses in Portland and Gorham.*

*Graduation requirements for extended degree programs can be found under their respective academic colleges.

Transfer Policies

USM's Lewiston-Auburn College works with all University of Maine System campuses and Maine Community Colleges, and Central Maine Medical Center (CMMC) to enable students who have received associate's degrees from these institutions to continue their education toward a baccalaureate degree from the University of Southern Maine. In most cases, credits transfer directly into the baccalaureate programs.

Students matriculated into USM's baccalaureate programs will receive transfer credit for all undergraduate courses successfully completed with a grade of C- or better at another University of Maine System institution. Transfer credits also may be awarded for courses completed at other regionally accredited institutions.

It is important for students to be aware of the transfer policy that applies to their particular situations.

Graduation Requirements

To be eligible for graduation with a baccalaureate degree and major, students must successfully complete all of the following:
120 credit hours including all Core and major requirements
at least 30 credit hours in 300- to 400-level USM courses offered by Lewiston-Auburn College, and have
obtained a minimum overall grade point average of 2.0
per USM's residency requirement: the last 30 credits taken must be completed at USM

Academic Support Services

The University offers students a wide range of academic support services to facilitate and enhance their education. The breadth of these services is designed to accommodate the needs of a diverse student population. For a description of all available programs turn to the Academic Support Services section at the front of this catalog.

Academic Advising and Career Development

The Student Success Centers offer USM students an integrated approach to academic advising and career development.

Student Success Advisors provide academic advising and career planning assistance to support the development and achievement of students educational and career goals.

- Following orientation and initial registration, students are assigned a permanent Student Success and faculty advisor within their respective academic departments. Students are encouraged to maintain close contact with their advisors once this assignment has been made.
- Students who have not declared a major are provided academic advising by professional Student Success Advisors. Student Success Advisors assist students in the development of educational and career goals as well as the selection of an appropriate major. Students should declare a major before completing 60 credits of coursework at the University.
- Non-matriculated students are students who are enrolled in courses at the University on a space available basis and who have not applied for admission. They are advised by the advisors in the Student Success Centers.
- The USM Early Study–Aspirations Program offers opportunities for high school students to take college courses to enrich their high school experience. The program is designed to help students supplement, not supplant, the academic program of the high school. Academic requirements must be met, and permission from the student's high school and guardian(s) is expected. Financial assistance is available. For more information visit http://usm.maine.edu/success/earlystudy or call (207) 753-6025.

Students who have questions regarding general academic policies and procedures, as well as about other aspects of University programs, are encouraged to contact one of USM's Student Success Centers in 119 Payson Smith Hall on the Portland campus (780-4040), 119 Bailey Hall on the Gorham campus (780-5652), and 119 Lewiston-Auburn College in Lewiston (753-6536). The Internship and Career Placement office is located in 122 Payson Smith Hall on the Portland campus.

Support for Students with Disabilities

The Office of Support for Students with Disabilities (OSSD) provides a wide range of services to qualified students with sensory, mobility, physical, psychological, cognitive, learning and attention disabilities enrolled in USM credit and noncredit bearing courses and programs. Contact OSSD for information regarding particular needs. Documentation may be required. The office is located in 242 Luther Bonney Hall, Portland; 207-780-4706 or TTY 207-780-4395 or visit our Web site: http://usm.maine.edu/oassd.

B.S. in Nursing

The entry-level baccalaureate program in nursing is offered at Lewiston-Auburn College through the USM School of Nursing. Students admitted to this program at LAC will be able to complete all their coursework in Lewiston. The program is open to traditional first-year students and to adult learners. Full- and part-time options are available. For more information about this program, contact (207) 753-6624. Refer also to the School of Nursing section of this catalog for specific program information.

RN to B.S. Option

In recognition of the need for many registered nurses to earn a baccalaureate degree, the School of Nursing offers the RN to B.S. option at LAC. All courses required in this program are offered at LAC, and most classes meet once a week. Most students are part-time. For more information about this program, contact (207) 753-6624. Refer also to the School of Nursing section of this catalog for specific program information.

Graduation requirements for extended degree programs can be found under their respective academic colleges.

MOT Jump Start Option

Students may complete their undergraduate and graduate education in five (5) years by selecting this option. Students (WHO IDENTIFY AS MOT JUMPSTARTERS AND) who are matriculated into an LAC undergraduate program (OR THE HEALTH SCIENCE UNDERGRADUATE PROGRAM IN GORHAM) must apply to the MOT program in fall of their junior year. They must complete the following by August of the year
they plan to enter the program:

- USM Core curriculum requirements;
- Academic major requirements; and
- MOT prerequisite requirements.

Please refer to the graduate catalog for more information.

**The Lewiston Common Core**

**The Lewiston Common Core**

Students matriculated in a major offered at Lewiston-Auburn College will complete the Lewiston Common Core curriculum requirements.

**Vision and Goals**

The Lewiston Common Core Curriculum (LCC) provides a coherent, integrative, and rigorous liberal education that enables our graduates to be world-minded, intentional, life-long learners. It systematically fosters the values and dispositions, knowledge, and skills that prepare students for successful citizenship in a complex and dynamic world.

The Lewiston Common Core curriculum is centered upon the question, “How, then, shall we live?” Set within the context of our 21st-century lives, this common course of study provides students opportunities to strengthen their abilities to speak and write thoughtfully and clearly. Students learn to find, evaluate, and utilize information and to think through complex questions in light of their social, cultural, and historical contexts. The curriculum also helps students articulate their values and aspirations, connect their academic study to their personal lives and career choices, and cultivates the habits of mind and heart needed to live lives guided by a sense of social responsibility and ethical citizenship.

Students consider the themes of justice, difference, sustainability, and democracy in a number of ways and in a variety of contexts over their entire course of study at LAC. The curriculum integrates the learning experiences in the majors with liberal arts learning in the Common Core. Students practice skills and abilities in critical thinking, communicating, and information literacy that build upon and relate to each other in a cumulative and sequential manner.

The curriculum is organized into a three-phased sequence, with each successive phase focused upon the development and refinement of the student abilities mentioned above. Required courses in writing instruction, for example, occur at successive phases of the curriculum rather than only at the beginning phase. To help students become intentional about their learning, they are required to participate in and reflect upon co-curricular as well as curricular experiences. Courses in the Lewiston Common Core are equivalent to those in the USM Core.

**Lewiston Common Core Course Sequencing**

Lewiston Common Core requirements are sequenced. Students should pay attention to the associated course pre- and co-requisites in planning their course of study, particularly with regard to the following:

**LCC 123: College and Community I & LCC 345: College and Community II**

All new, entering students with fewer than 24 transfer credit hours must complete LCC 123 in their first semester. All new transfer students with 24 transfer credits or more must complete LCC 345 in their first or second semester. Pre- or co-requisite: College Writing.

**LCC 110/111: College Writing**

All students must complete a College Writing course, either at USM LAC or in transfer. College writing is a pre or co-requisite for the LCC 123, LCC 345, other LCC courses and courses in the majors.

**LCC 150: Statistics for Informed Decision Making**

Students must meet USM’s mathematics readiness requirement before registering for LCC 150. LCC 150 is a prerequisite for LCC 130 The Biology of Human Health and/or LCC 230 Environmental Science, Policy and Sustainability.

**Diversity & International**

Students must complete two distinct courses to satisfy the Diversity and International requirements. Courses that satisfy the Diversity and International requirements may also satisfy major requirements. Study abroad involving an academic experience may be used to satisfy the International requirement.

**Thematic Clusters**

Thematic Clusters in the Lewiston Common Core provide students opportunities to explore the concepts and concerns of professions that
integrate different disciplinary knowledge and perspectives. Prerequisites for courses in the Thematic Clusters vary by course. Please check the individual course listing in Maine Street for course-specific prerequisites. Satisfying the thematic cluster requirement involves successfully completing any three courses in the cluster, from at least two different prefixes. Only one of these courses may overlap with the student’s major requirements. A minor may substitute for a cluster if it requires at least fifteen (15) credit hours. Only one-third (1/3) of the credits in the student’s minor may be courses that can be applied to the student’s major. Students taking a double major for which they have to earn at least 15 credits outside their first major will, by completing both majors, fulfill their Thematic Cluster requirement.

**LCC 480: Senior Seminar**
Prerequisites include LCC 370: Toward a Global Ethics.

**Lewiston Common Core**

<table>
<thead>
<tr>
<th>Entry Phase</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>LCC 110 College Writing: Language and Literacies</td>
<td>3</td>
</tr>
<tr>
<td>or LCC 111 College Writing: Language and Literacies:</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enrichment</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCC 123 College and Community I*</td>
<td>3</td>
</tr>
<tr>
<td>LCC 130 The Biology of Human Health w/Lab**</td>
<td>4</td>
</tr>
<tr>
<td>or LCC 230 Environmental Science, Policy, and Sustainability w/Lab</td>
<td></td>
</tr>
<tr>
<td>LCC 150 Statistics for Informed Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>LCC 200 Creative Critical Inquiry into Modern Life</td>
<td>4</td>
</tr>
<tr>
<td>LCC 220 U.S. Democracy: Origins and Development</td>
<td>3</td>
</tr>
<tr>
<td>or LCC 320 Sustaining Democracy</td>
<td></td>
</tr>
<tr>
<td>LCC 250 Thinking About The Arts, Thinking Through The Arts</td>
<td>3</td>
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<table>
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<tr>
<th>Middle Phase</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thematic Cluster (below) or any Minor offered at USM***</td>
<td>9</td>
</tr>
<tr>
<td>Public Health</td>
<td></td>
</tr>
<tr>
<td>Expressive Arts/Healing Arts</td>
<td></td>
</tr>
<tr>
<td>The Environment: Sustainability and Education</td>
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<tr>
<td>Leadership</td>
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<tr>
<td>Leadership and Innovation</td>
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<tr>
<td>Early Childhood Education and Studies</td>
<td></td>
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<tr>
<td>Resilience and Vulnerability</td>
<td></td>
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<tr>
<td>A History of the Universe: From the Big Bang to Globalization</td>
<td></td>
</tr>
<tr>
<td>LCC 345 College and Community II*</td>
<td>3</td>
</tr>
<tr>
<td>LCC 370 Toward a Global Ethics (writing instruction)</td>
<td>4</td>
</tr>
<tr>
<td>Diversity &amp; International Courses</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capstone Phase</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCC 480 Senior Seminar (writing instruction)</td>
<td>3</td>
</tr>
</tbody>
</table>

* LCC 123 is required for entering students with less than 24 credits while LCC 345 is required only of students who were not required to take LCC 123.

** LCC 130 is not required for Natural and Applied Sciences majors.

*** Requirement may be met with any Thematic Cluster, or with any USM minor or double major.

**Lewiston-Auburn College: Common Core Courses**

**LCC 110 College Writing: Language and Literacies**
This first-tier writing instruction course introduces students to one or more themes of the Core curriculum. It emphasizes the connections between reading and writing, and students learn how thinking and the language that conveys it develop and change through the process of drafting, revising, editing, and proofreading. The course introduces students to the conventions of expository academic writing and links to co-curricular activities of the Core. (Note that some students are also required to concurrently take the 1-credit companion course, LCC 111) This course has been approved by the State Department of Education for content area in secondary English. Offered fall, spring, summer. Cr 3.

**LCC 111 College Writing: Language and Literacies: Enrichment**
This course is required for those students identified as needing extra support to improve their writing skills. The course provides additional instruction and extended opportunities for applying pre-writing, drafting/developing, revising, and editing strategies related to the same essays assigned in LCC 110. The course focus includes attention to basic elements of effective writing, such as unity, coherence, and emphasis. Class time will also be devoted to addressing topics that represent the most common error patterns in college-level academic writing, such as weak
LCC 123 College and Community I
This course is required of all entering students with less than 24 credit hours. The course introduces students to the promise and possibilities of USM LAC's interdisciplinary, writing-intensive, and student-centered culture. Students will consider the relevance the four themes of the Lewiston Common Core (justice, sustainability, democracy and difference) have to their future lives. Students link their own "stories" -- what has brought them to this point in their personal, academic, and professional lives -- with the habits of mind needed for success in college, career, and global citizenship. Cr. 3.

LCC 130 The Biology of Human Health with Lab
This course introduces basic concepts of biology and explores how these concepts relate to human health. It also explores natural scientific methods of inquiry and applies these methods to complex issues involving the creation and maintenance of human health. Further, the course explores the importance of societal factors in health maintenance. Prerequisite: College Writing. Offered fall, spring, summer. Cr 4.

LCC 150 Statistics for Informed Decision Making
This course introduces and applies quantitative analyses to address real world questions. It applies descriptive statistics, sampling and significance testing, correlation, and regression analysis to issues related to the four themes of the Common Core. The course provides the opportunity to interpret and analyze statistical decision making, and identifies data misconceptions and misuses. Prerequisite: QR. Offered fall, spring, summer. Cr 4.

LCC 200 Creative Critical Inquiry into Modern Life
This writing instruction course introduces students to criteria for identifying and constructing well-reasoned arguments, fosters the discovery and the use of students' critical/analytical voice in their writing, and develops skills for incorporating, interpreting and integrating the views of others. It provides the opportunity to refine critical thinking abilities by analyzing everyday life experience, including how culture shapes our sense of reality and ourselves. The course highlights the importance of generating good questions and tolerating ambiguity when seeking to understand complex issues. Prerequisite: College Writing. Offered fall, spring, summer. Cr 4.

LCC 220 U.S. Democracy: Origins and Development
In this course, students consider the convergence of cultures, events, and ideas that led to the founding of the United States as a republic up to 1877. The course explores the basic structure of the U.S. system of government, the primary political philosophies that undergird it, and past efforts made to remedy injustices that ran counter to the ideals of democracy. This course has been approved by the State Department of Education for content area in secondary Social Studies. Offered fall. Cr 3.

LCC 230 Environmental Science, Policy, and Sustainability with Lab
This course presents a multidisciplinary survey of the scientific principles underlying energy utilization, nutrient cycles, global warming, population, and natural resource policy and management. The lectures will be comprised of Socratic interactions and group discussions relating regional, national, and global components that encompass ecology, economics, politics, and social endeavors. This course includes a laboratory involving field and lab work and service learning efforts. Prerequisite: QR. Offered spring. Cr 4.

LCC 250 Thinking about the Arts, Thinking through the Arts
This course explores the tools and strategies important in the interpretation of literature and the arts and encourages an appreciation of the role of literature and the arts in social, political, and cultural life. It promotes an understanding of and an appreciation for the creative expression of shared cultural beliefs in various historical periods of cultures around the world and examines literature and the arts as potential critiques of culture. Co-curricular opportunities are included, especially in connection with the Atrium Gallery. Offered fall, spring, summer. Cr 3.

LCC 320 Sustaining Democracy
This course focuses primarily on the United States from 1877 to the present, exploring the various ways that U.S. democracy has become more inclusive since the late nineteenth century and the ways in which it has failed to live up to its ideals. The course also explores past and current obstacles to the creation and maintenance of a healthier democracy. This course has been approved by the State Department of Education for content area in secondary Social Studies. Offered spring. Cr 3.

LCC 345 College and Community II
This middle phase course serves as the point of entry for students transferring into USM LAC with greater than 24 credit hours and is not required of students who have taken LCC 123. This course introduces students to the promise and possibilities of USM LAC's interdisciplinary, writing-intensive, and student-centered culture. The course orients students to the four themes of the Lewiston Common Core (justice, sustainability, democracy and difference). In addition, the course captures LAC's commitment to the study and enhancement of the Lewiston-Auburn community. Cr. 3.

LCC 370 Toward a Global Ethics
This writing instruction course assists students in articulating and assessing their own values. It examines the range of ethical theories and positions and explores the influence of particular cultural ideologies on ethical beliefs. The course considers the ethical principles implied by democracy, sustainability, justice, and difference. It examines ethical issues and dilemmas faced by individuals, organizations, and nations while exploring personal and collective decision-making processes in a global context. Prerequisite: College Writing. Offered fall, spring, summer. Cr
LCC 480 Senior Seminar
This course provides writing instruction experience for students from LAC’s four degree programs. Students complete a major research and writing project addressing one of the four themes of the Common Core from an interdisciplinary approach. Prerequisite: ENG 100 or LCC 110; LCC 200 or LCC 370; HUM 300, or LOS 300, or SBS 300, or SCI 315. Offered every semester. Cr 3.

Lewiston Common Core Thematic Clusters
Thematic Clusters in the Lewiston Common Core provide students opportunities to explore the concepts and concerns of professions that integrate different disciplinary knowledge and perspectives. The clusters encourage students to integrate their learning by juxtaposing competing and complementary ways of framing complex issues and problems at an advanced level. Satisfying the thematic cluster requirement involves successfully completing any three courses in the cluster, from at least two different prefixes. Only one of these courses may overlap with your major requirements.

In completing their thematic cluster, students will

- develop a broader and more comprehensive knowledge of the concepts and concerns of a profession;
- understand and articulate orally and in writing how subjects are approached and framed from different disciplinary perspectives;
- gather, interpret and use information at a level appropriate to the courses in the cluster.

Public Health Cluster
The Public Health cluster provides students with an introduction to the multitude of public health concerns facing Maine and the world and increases their ability to apply pertinent theoretical and practical knowledge to contribute to a safe and functioning society. Professions that utilize knowledge of public health include medical and allied health and human services, mental health, gerontology, and child and family support. Public health approaches address the full spectrum of services, planning and evaluation. The cluster will also strengthen the pursuit of graduate study in Public Health and Policy.

One course required of all students:

- SBS or SCI 336 Introduction to Public Health (offered every Fall)

Choice of two from following list:

- SBS 304 Food, Culture and Eating
- SBS 308 Health, Illness, and Culture
- SBS 335 Legal Issues in Health and Human Services (offered every Fall)
- SBS or SCI 337 Introduction to Epidemiology (offered every Spring)
- LOS or SBS 436 Risk, Public Policy, and Society
- SCI 315 Environmental Health
- One or two Public Health-Relevant Nursing course based at LAC – pending

Expressive Arts/Healing Arts Cluster
The Expressive Arts/Arts of Healing cluster provides students with an introduction to the arts and how they can be used therapeutically in clinical, educational and community settings. Students learn how use creative writing, the visual arts, music and other forms of art as healing modalities and/or how to incorporate the creative arts into classroom work with children. This cluster can be taken by students interested in pursuing graduate study in counseling, education, expressive therapy, clinical social work, rehabilitation services, and occupational therapy to enhance their skills and understanding of the role of the expressive arts in therapy and healing.

One course required of all students:

- SBS 364 – Exploring Expressive Therapies

Choice of two from following list:

- HUM 105 – Photography
- HUM 201 – Creative Writing
- HUM 230-Digital Photography
- HUM 295 - Creative Expression Is Drawing
- HUM 290 - Thinking and Writing; Writing and Healing
- HUM/SBS 349 - Trauma and Narrative
The Environment: Sustainability and Education
The Environment: Sustainability and Education Cluster introduces students to the skills and policy development approaches needed by professionals working in the field of environmental education. Sustainability is an emerging goal for the 21st century that impacts all human activities and is a key tenet of a responsible approach to the environment. This cluster is intended primarily for students interested in assuming educational and leadership roles in society's pursuit of sustainability. SCI 360 Environmental Issues/Sustainability

- SCI 421 Natural Resource Policy
- LOS 322 Public Leadership
- LOS 440 Organizational Change and Development
- SCI 240 Applied Botany
- SCI 355 Ecology
- SCI 399 Zoology
- SCI 450 Methods of Teaching Science
- LAE 320 Applied Skills

Leadership
The Leadership cluster is an interdisciplinary introduction geared toward anyone interested in developing and expanding their leadership knowledge, skills, and practice, meeting head-on the challenges of our dramatically changing world, and improving the quality and diversity of leadership in organizations and communities -- regionally, nationally and internationally. Theories, research and techniques of group and organizational leadership are examined with an emphasis in linking theory and practice. As a socially constructed phenomenon, leadership will be explored as an activity and process, not a position.

Two courses required of all students:
1. LOS 300 - Organizational Theory
2. LOS 350 – Leadership

Choice of one from the following list:
- SBS 300 - Deviance & Social Control
- SBS 311 - Theories of Personality
- SBS 303 – Abnormal Psychology
- HUM 330 - Labor, Literature & the Arts

Leadership and Innovation
In today's rapidly changing world, leaders must be effective and innovative problems solvers able to strategically negotiate increasingly complex environments. The Leadership and Innovation cluster provides students with an introduction to important factors influencing organizational innovation and the skills one may hone to optimize creative potential. The unique interdisciplinary approach in this cluster will guide students through an examination of how knowledge of relevant theory and best practices can help them develop a better grasp on creative thinking, acceptability finding, and innovation implementation.

Two courses required of all students:
1. LOS 350 - Leadership
2. LOS 360 Innovation and Organizations

Choice of one from the following list:
- HUM 316 – New Digital Media Literacies
- HUM 317 - New media & Social Networking
- HUM 260 - Media Literacy and Theories of Popular Culture
- SBS 366 - Transforming Words: Poetry and Psychologies of Change
- EYE 180 - Exploring Innovation
- EYE 282 - Communicate: Innovation Engineering II
- EYE 392 - Commercialize: Innovation Engineering III
- INV 392 - Commercialize: Innovation Engineering III

Early Childhood Education and Studies
The Early Childhood Education and Studies Cluster introduces the skills needed by professionals working with young children and their families in various settings including education and childcare. These settings include schools and educational institutions such as preschools, as well as in
the Birth-Five field of childcare and education.

One of the following:

- SBS/HRD 200 Multicultural Human Development
- SBS 305 Child Development

Two of the following:

- SBS 309 - Attachment
- SBS 310 - Childhood and Society
- SBS 375 - Infant Mental Health
- SBS 399 - Resilience in Early Childhood and Across the Lifespan
- SBS 450 - Assessing Individual Differences in Children
- EDU 336 - Children's Literature
- SBS 341 - The Family
- ECE/SBS 199 - Introduction to Early Childhood Education
- HUM 304 - Writing Children’s Literature
- HUM 370 - Literacy Studies
- LAC/SBS 340 – Language Acquisition and Literacy development

**Resilience and Vulnerability Cluster**

The Resilience and Vulnerability cluster provides students with an introduction to the concept of human resilience, i.e., the ability to survive and thrive in adverse circumstances, and its contrasting concept, vulnerability. This cluster is intended primarily for students outside of the Social and Behavioral Sciences Counseling Concentration, who nevertheless have an interest in understanding the nature of, and contributing factors to, human function and dysfunction. Students can learn about mental health and illness, and how to build strengths through creative, therapeutic, or community-level interventions. This cluster has broad relevance to anyone whose career goals involve working with people but especially for human services and policy-oriented fields such as psychology, nursing or medicine, emergency medical response/first responders, public health and policy, and education.

*Choose one course from each of the following 3 categories:*

**Mental health and illness**

- SBS 309 Attachment (can substitute SBS 375 Infant Mental Health)
- SBS 303 Abnormal Psychology (can substitute PSY 233 Psychopathology)
- HUM 349 Trauma Narratives
- SBS 343 Substance Abuse
- SBS 344 Violence: Causes and Control

**Cultural contributors to resilience and vulnerability**

- SBS 308 Health, Illness, and Culture (can substitute SBS 360 Culture, Behavior, and Personality)
- HUM Ethnicity, Immigration, and Identity
- SBS 348 Responding to Mental Health Crisis in the Community

**Building resilience**

- HUM 290 Thinking and Writing/Writing and Healing
- SBS 311 Theories of Personality
- SBS 367 Healthy Learners
- SBS 430 Applied Social Policy
- SBS 364 Introduction to Expressive Arts

**Lewiston Auburn College: Career Development Courses**

**HUM/LOS/SBS/SCI 369 Exploring Careers, Choosing Life Roles**

In this mid-level course in the career development series, students relate self-knowledge to career and life roles, with an emphasis on gaining and managing career information; learning various career and life decision-making strategies; and communicating formative academic, co-curricular, and professional experiences in such formats as accomplishment statements and informal interviews. Prerequisite: LCC 123 or LCC 345. Offered fall, spring, summer. Cr 1.5.

**HUM/LOS/SBS/SCI 413 Job Search Skills for the 21st Century**
In this final course in the career development series, students assume active agency in career planning through learning how to market themselves to prospective employers. They learn to create and use the tools needed for career placement, such as cover letters, resumes, and interviews. Prerequisite: HUM/LOS/SBS/SCI 369. Offered fall, spring, summer. Cr 1.5.

HUM/LOS/SBS/SCI 447 Internship
This online course provides students the opportunity to work in their chosen field to evaluate their interest and acquire basic skills needed. This course attunes students to the beauty and power of language and to the way all knowledge is mediated in and through language. It explores how language shapes reality, experience, and identity. It examines ongoing tensions between language as a political tool and language as a form of art. Cr 3.

Course Descriptions

- Lewiston-Auburn College Course Schedule and Registration Information

Lewiston-Auburn College: Learning Assistance and Tutoring

The University's learning assistance program includes developmental coursework in mathematics, learning strategy courses, and the Learning (tutoring) Centers. The developmental course (MAT 9) provides students with instruction to help them achieve college level readiness in mathematics. The Learning Center offers tutoring in writing, and mathematics. Programs for English for Speakers of Other Languages are offered on USM's Portland campus. The Academic Self-Management course (LAC 180) offers learning strategies to assist students with study skills and the transition into higher education and the information course (LAC 197) offers students the opportunity to go beyond Google.

LAC 180 Academic Self Management
This learning strategy course explores the six major control components that usually contribute to high academic achievement: motivation, methods of learning, use of time, monitoring of performance factors, and relationships to both physical and social environment. Presentations and readings involving learning research and theory are interconnected to student participation, assessment, and self-monitoring activities. Students will engage in the self-management and self-prescriptive process to determine what specific academic behaviors will best assist individual academic performance. Students must be registered in at least one other college course in order to provide an application-practice field. Cr 3.

LAC 197 Information Power Unleashed
This course unleashes the power of information, channeling students into a veiled world in which they will explore how to recognize when information is needed and how to locate, evaluate, and effectively use the needed information. Topics will include basic computing skills, Web evaluation, locating and using books, articles and other media, critical thinking, plagiarism, citation style, primary and secondary sources, Boolean searching, and basic considerations in the writing process. Students will use USM library resources and those of other U.S. libraries and will be given a glimpse into the shadowy world of librarianship. Cr 1.

LAC 200 Community Learning Groups: Planning for Academic Success
This specially designed course for TRiO Student Support Services participants serves as the first module in a series which will enhance the learning experience at USM and prepare the student to focus on personal and academic goals. Topics will vary, but will include self-assessments for career and learning, study strategies, making the most of academic advising, taking full advantage of university offerings, financial literacy, leadership and diversity development, and planning for careers or graduate school. The instructor’s role will be to serve as advisor and guide, and in addition, there will be guest speaker experts in some classes. Students will normally take this course in their first semester of SSS participation as it is an important anchor to the program. Cr 1.

MAT 9 Developmental Mathematics
A review of fundamental topics of arithmetic needed for a study of algebra. This course will cover the following topics: addition, subtraction, multiplication, and division of fractions; use of decimals and percent; estimation; addition, subtraction, multiplication, and division of real numbers; exponents; order of arithmetic operations; distributive property; combining like terms; substitution to evaluate expressions and formulas; grouping symbols; addition and multiplication principle; formulas; sets; solving equations with fractions; translating English phrases into algebraic expressions; and solving word problems using geometric formulas. Successful completion of the course and the course exit exam at a C level (75%) or higher is required. Credit earned in MAT 009 does not apply or accumulate toward any degree program nor contribute to the GPA at the University of Southern Maine. After successful completion of MAT 9, students must then complete MAT 101B (College Readiness Mathematics) to fully meet college readiness in mathematics or place out of the math college readiness courses via a retake of the math placement exam. Cr 3.

Lewiston Auburn College: Career Development Courses

HUM/LOS/SBS/SCI 369 Exploring Careers, Choosing Life Roles
In this mid-level course in the career development series, students relate self-knowledge to career and life roles, with an emphasis on gaining and managing career information; learning various career and life decision-making strategies; and communicating formative academic, co-curricular,
and professional experiences in such formats as accomplishment statements and informal interviews. Prerequisite: LCC 123 or LCC 345. Offered fall, spring, summer. Cr 1.5.

**HUM/LOS/SBS/SCI 413 Job Search Skills for the 21st Century**

In this final course in the career development series, students assume active agency in career planning through learning how to market themselves to prospective employers. They learn to create and use the tools needed for career placement, such as cover letters, resumes, and interviews. Prerequisite: HUM/LOS/SBS/SCI 369. Offered fall, spring, summer. Cr 1.5.

**HUM/LOS/SBS/SCI 447 Internship**

This online course provides students the opportunity to work in their chosen field to evaluate their interest and acquire basic skills needed to market themselves effectively. Students participate in an online seminar in which they learn about and reflect on workplace issues. Students wishing to take more than 3 credit hours must have permission from their faculty advisors. Prerequisite: HUM/LOS/SBS/SCI 413. Offered fall, spring, summer. Cr 3-6.

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**Lewiston-Auburn College: General Courses**

**LAC 112 Microsoft Excel**

This course uses a problem-solving approach to electronic spreadsheets. It satisfies the LOS major's requirement and should follow the LAC 150 introductory course. Students will learn advanced data analysis, formulas, and create graphs to interpret the data. This course should be completed prior to taking a financial management, economics, or budgeting course. Prerequisite: LAC 150 or equivalent. Cr 1.

**LAC 114 PowerPoint**

This computer program allows users an electronic means of giving presentations to groups of people. Students will learn how to create electronic slides using written, graphic, and sound materials. The slides can then be formatted in several different ways: 35 mm slides, overhead transparencies, and handouts. Students who have to give presentations to classes or who are considering careers in teaching, marketing, or public relations fields should consider this course. Cr 1.

**LAC 150 Microcomputers and Applications**

An introductory lecture and laboratory course designed to introduce students to basic microcomputer concepts and their application to education, business, and home management. This course will cover: Windows, e-mail, Internet, and Microsoft Office: Word, Excel, PowerPoint, and Access. Cr 3.

**LAC/LOS 305 Programming with Visual Basics**

This course is an introduction to modern structured programming on a microcomputer using a state-of-the-art object-oriented programming language. It covers all standard control and logic structures, arrays, functions, sub-routines, and data files. Major emphasis is given to an ongoing consideration of problem-solving techniques as they apply to simple and complex programming situations. Programming objects are studied extensively, along with events, properties, and methods. Prerequisite: ABU 190, or permission of instructor. Cr 3.

**LAC/LOS 307 Web Design**

This course will present in-depth Web page design for non-programmers. This will be accomplished primarily through learning a full-featured Web design application. The course also includes an exploration of HTML, DHTML, and some experience with Web scripting languages. Finally, server-side Web strategies will be studied. Students will be expected to design and implement Web pages containing many of the features learned in class. Prerequisites: ABU 180/181 and/or ABU 190, LAC 150, or significant Windows and Windows application experience, along with experience on the Internet using a Web browser. Cr 3.

**LAC/LOS 318 Database Management**

This course introduces skills and builds proficiency in database management. It is taught on PC computers using the latest version of Microsoft Access and is designed to help students develop competencies in a variety of database processing functions. Students become proficient in setting up databases, managing data, creating reports, using report enhancements, and manipulating data. Prerequisite: LAC 150 or equivalent. Cr 3.

**LAC/LOS 319 Networks I**

This course is an introduction to the installation, maintenance, and repair of personal computer networks. It provides students with an elementary understanding of network systems including communication components, LAN protocols, standards (de facto/de juri), system architecture, network software, and the fundamentals of network installation and repair. Offered at Central Maine Community College (CMCC). Cr 3.

**LAC/LOS 320 Networks II**

This advanced course addresses the installation, maintenance, and repair of personal computer networks. It provides students with an advanced understanding of network systems including software configuration, troubleshooting, security, tools, design strategies, and employee training. Offered at Central Maine Community College (CMCC). Cr 3.

**LAC/LOS 321 Introduction to Personal Computer Repair/Operating Systems**

This course is an introduction to the installation, maintenance, and repair of personal computers and related equipment. It provides students with an elementary understanding of PC environments including system components, peripherals, operating systems, component/card interface, and the fundamentals of repair. Offered at Central Maine Community College (CMCC). Cr 3.
LAE 410 Internship in Science in Grades 7-12
Prerequisites: Open to matriculated students in USM's teacher education programs. Cr 3.

This course has an interactive laboratory and field-based approach that models the depth, breadth, and sophistication in the teaching and learning of science at the secondary level. The emphasis is on content, process, and methodology needed to become a 7-12 science teacher. The course framework is built on the CCSSO's Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards, the National Educational Technology Standards for Teachers (NETS-T), and the next Generation Science Standards with specific attention to the 7-12 grade level strands. Students will know how to promote diverse learners' proficiency in state and national standards by implementing multiple strategies to support scientific understanding of patterns, systems and cause and effect events in the natural and designed world. Prerequisites: Open to matriculated students in USM's teacher education programs. Cr 3.

LAE 401 Teaching Science in Grades 7-12
This course introduces students to current research in the field of learning theory and practice and presents various ways of knowing and teaching including neurological brain based learning theories, multiple intelligence theory, perceptual perspectives, emotional and social intelligence theories, and differentiated instruction. Students will learn how to motivate students and structure learning experiences with best practices. A major focus is how students develop concepts and build knowledge through exemplary lesson and unit planning and delivery, including the curricular, instructional, and assessment choices educators make. Other foci will include classroom management and teacher-student interactions. The overall goal of the course is to help create educational leaders with a basic knowledge of educational theory and related best practices, who have the potential to transform educational practice in the field of learning and teaching. Cr. 4.

LAE 402 Teaching English in Grades 7-12
This course focuses on ways to organize and teach English classes at the middle school and high school levels based upon current research in literacy and national and state standards in English Language Arts. Various strategies involved in designing and managing a student centered literacy program will be presented. Different theories for teaching English will serve as a backdrop for creating classroom activities that connect the literature to the students' lives. The writing process and the reading-writing connection will be emphasized to assess and enhance both literacy and learning. Prerequisites: Open to matriculated students in USM’s teacher education programs. Cr 3.

LAE 403 Teaching Mathematics in Grades K-8
This course, intended for those preparing to be K-8 teachers, provides experiences to develop, critique, and apply knowledge, skills, and research findings in mathematics, pedagogy, and mathematical learning theory in elementary and middle school classrooms. Major areas of focus include learning and assessment of all children, instruction to support all students' mathematical understanding, reasoning, communication, and collaboration; standards (national, state, and local); content integration; resources; issues; and the discipline’s philosophical framework. Prerequisites: Open to matriculated students in USM’s teacher education programs. Cr 3.

LAE 404 Teaching Social Studies in Grades 7-12
This course is designed to prepare students for best practices in 7-12 social studies instruction. Students will understand the goals of secondary social studies education, as well as the guiding principles and strands of the discipline. The course framework is built on the CCSSO’s Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards and the 7-12 strands of the Maine Learning Results for Social Studies. Students will learn how to promote diverse children’s proficiency in state standards by implementing multiple strategies. Prerequisites: Open to matriculated students in USM’s teacher education programs. Cr 3.

LAE 405 Teaching Mathematics in Grades K-8
This course, intended for those preparing to be K-8 teachers, provides experiences to develop, critique, and apply knowledge, skills, and research findings in mathematics, pedagogy, and mathematical learning theory in elementary and middle school classrooms. Major areas of focus include learning and assessment of all children, instruction to support all students' mathematical understanding, reasoning, communication, and collaboration; standards (national, state, and local); content integration; resources; issues; and the discipline’s philosophical framework. Prerequisites: Open to matriculated students in USM’s teacher education programs. Cr 3.
This internship is in conjunction with LAE 401 and allows the student to complete assignments graded in class. These include: videotaped teaching and reflection lessons, professional stance, and final exhibition review: portfolio development. Cr. 3.

**LAE 411 Internship in English in Grades 7-12**
This internship is in conjunction with LAE 402 and allows the student to complete assignments graded in class. These include: videotaped teaching and reflection lessons, professional stance, and final exhibition review: portfolio development. Cr. 3.

**LAE 412 Internship in Social Studies in Grades 7-12**
This internship is in conjunction with LAE 404 and allows the student to complete assignments graded in class. These include: videotaped teaching and reflection lessons, professional stance, and final exhibition review: portfolio development. Cr. 3.

**LAE 412 Internship in Social Studies in Grades K-8**
This course is designed to prepare students for best practices in K-8 social studies instruction. Students will understand the goals of elementary and middle level social studies education, as well as the guiding principles and strands of the discipline. The course framework is built on the CCSSO’s Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards and the K-8 strands of the Maine Learning Results for Social Studies. Students will learn how to promote diverse children’s proficiency in state standards by implementing multiple strategies. Prerequisites: Open to matriculated students in USM’s teacher education programs. Cr 3.

**LAE 451 Teaching Social Studies in Grades K-8**
This course is designed to prepare students for best practices in K-8 social studies instruction. Students will understand the goals of elementary and middle level social studies education, as well as the guiding principles and strands of the discipline. The course framework is built on the CCSSO’s Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards and the K-8 strands of the Maine Learning Results for Social Studies. Students will learn how to promote diverse children’s proficiency in state standards by implementing multiple strategies. Prerequisites: Open to matriculated students in USM’s teacher education programs. Cr 3.

**LAE 452 Teaching Science in Grades K-8**
In this course students will learn to use evidence-based instruction to teach science in grades K-8. Students will examine theories and current research on science development and process in order to effectively instruct and assess all students, including students with special needs and from culturally and linguistically diverse backgrounds. Students will learn how to implement multiple strategies to support science development and promote children’s proficiency in state standards. Additionally, digital literacies, reading across the curriculum, and ways to engage and motivate readers will be emphasized. Prerequisites: Open to matriculated students in USM’s teacher education programs. Cr 3.

**LAE 456 Teaching Reading in Grades K-8**
This course is designed to integrate content area study, educational pedagogy, and school field experiences. This course builds upon the principles of learning to teach all subjects and supports students in reflecting upon the related internship, curriculum design and developing appropriate portfolio exhibits. LAE 480 is an intensive supervised internship experience in applying knowledge and skills to the practice of teaching. This course is taught in conjunction with LAE 490, Student Teaching. Prerequisites: Open to matriculated students in USM’s teacher education programs. Cr 3.

**LAE 466 Teaching Writing in Grades K-8**
In this course students will learn to use evidence-based instruction to teach writing in grades K-8. Students will examine theories and current research on writing development and process in order to effectively instruct and assess all writers, including students with special needs and from culturally and linguistically diverse backgrounds. Students will learn how to implement multiple writing strategies across various genres to support writing development and promote children’s proficiency in state standards. Additionally, students will explore the use of technology and participate in writing sessions to develop as writers and teachers of writing. Cr. 3.

**LAE 480 Portfolio Seminar**
This course is designed to integrate content area study, educational pedagogy, and school field experiences. This course builds upon the principles of learning to teach all subjects and supports students in reflecting upon the related internship, curriculum design and developing appropriate portfolio exhibits. LAE 480 is an intensive supervised internship experience in applying knowledge and skills to the practice of teaching. This course is taught in conjunction with LAE 490, Student Teaching. Prerequisites: Open to matriculated students in USM’s teacher education programs. Cr 3.

**LAE 490 Student Teaching**
This internship experience is supported by a 3-credit co-requirement (LAE 480: Portfolio Seminar) and activities completed in the internship placements allow the student to complete assignments graded in seminar. Prerequisites: Successful completion of Praxis I and II and completion of applicable methods courses with at least a B average. Prerequisites: Open to matriculated students in USM’s teacher education programs. Cr. 3

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**Arts and Humanities**

**Arts and Humanities Overview**
The Arts and Humanities program cultivates students’ creative and critical thinking and expression, engages them in a rigorous liberal arts education, enables them to be effective agents in their personal and professional lives, and encourages them to contribute to the cultural life of their communities.

The major enables students to be agents of change in a rapidly shifting world and prepares them for careers as diverse as education, print and broadcast journalism, advertising, creative writing, government and politics, social services, and arts management, as well as for further study in a range of graduate programs and professional schools, from law and history to business and labor studies.

The major includes areas of concentrations that lead to teacher certification in either: K-8 General Elementary, Secondary English, Secondary Social Studies, and Dual Secondary English and Social Studies. For more information on these concentrations, click here. You may also contact Jim Bradley at (207) 753-6618 or jbradley@usm.maine.edu

Arts and Humanities is structured to allow students to minor in Writing Studies (with an emphasis in either professional or creative writing), French North American Studies, Leadership Studies, Public Health, Early Childhood Studies, and it includes the opportunity to work in fields of interest to individual students through career development and internship courses.

Classes feature small group work, discussions, and written work designed to encourage critical thinking, communication, and leadership skills necessary to advance professionally and contribute meaningfully as members of our multicultural society.

BA in Arts and Humanities

Description

The Arts and Humanities program is a versatile and flexible degree program available for students who want both a solid liberal arts education and strong preparation for a wide range of career options.

The major encourages students to be agents of change in a rapidly shifting world and prepares students for careers as diverse as education, print and broadcast journalism, advertising, creative writing, government and politics, social services, and arts management, as well as for further study in a range of graduate programs and professional schools, from law and history to business and labor studies.

Courses examine a variety of contemporary and historical issues, and do so in ways that make the past more relevant and the present more understandable.

Courses integrate such fields as writing, history, photography, geography, Franco-American society, popular culture, native and indigenous issues, critical theory, and ethnic studies.

Certain threads run through all courses, from local, regional, and global issues to philosophy and creative thought. Classes feature small group work, discussions, and written work designed to encourage critical thinking, communication, and leadership skills necessary to advance professionally and contribute meaningfully as members of our multicultural society.

We engage students with information literacy, offering courses in blended, online, and hyper-flexible formats.

Our focus is to prepare students to be active, productive citizens of the world.

Program Requirements

Total credits necessary for the degree: 120.

Students in this Major are required to complete the Lewiston Common Core Curriculum.
### Prerequisite Courses* (10-11 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCC 110/111 College Writing*</td>
<td>3/4</td>
</tr>
<tr>
<td>HUM/ENG 120 Introduction to Literature*</td>
<td>3</td>
</tr>
<tr>
<td>LCC 200 Creative Critical Inquiry*</td>
<td>4</td>
</tr>
</tbody>
</table>

* Students must achieve a grade of C or better in these classes.

### Program Requirements (31 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCC 250 Thinking About Art, Thinking Through Art</td>
<td>3</td>
</tr>
<tr>
<td>HUM 298: Applied Arts &amp; Humanities: Focus on Lewiston-Auburn and the</td>
<td>3</td>
</tr>
<tr>
<td>Androscoggin River Valley Communities</td>
<td></td>
</tr>
<tr>
<td>HUM 300 Introduction to Literary and Cultural Theory</td>
<td>3</td>
</tr>
<tr>
<td>HUM 316: New Digital Media Literacies:</td>
<td>3</td>
</tr>
<tr>
<td>Self-Fashioning and Critiquing Information</td>
<td></td>
</tr>
<tr>
<td>HUM 325 World History and Geography I</td>
<td>3</td>
</tr>
<tr>
<td>HUM 350 Cultural Fieldwork</td>
<td>3</td>
</tr>
<tr>
<td>LCC 370 Toward a Global Ethics</td>
<td>4</td>
</tr>
<tr>
<td>HUM 369 Exploring Careers &amp; Choosing Life Roles</td>
<td>1.5</td>
</tr>
<tr>
<td>HUM 413 Job Search Skills for the 21st Century</td>
<td>1.5</td>
</tr>
<tr>
<td>HUM 447 Internship</td>
<td>3</td>
</tr>
<tr>
<td>HUM 478 Community Research Projects</td>
<td>3</td>
</tr>
</tbody>
</table>

### Electives (15 credits)

There are three categories of elective course offerings. Students are required to choose at least two courses from two of the categories. No more than two courses (6 credits) lacking the HUM prefix can be counted as electives within the major.

#### Regional and Ethnic Studies

- HUM 275: Discovering the Past: History Close to Home
- HUM 301: French North American Studies
- HUM 310: French Settlement in the Northeast
- HUM 326: World History and Geography II
- HUM/SBS 339: Ethnicity, Immigration and Identity
- HUM 340: World Indigenous and Native Societies
- HUM 460: Franco-American Community and Archive Work

#### Literature and Life

- HUM 213 Metaphor in Literature, Science, and Religion
- HUM 250 Song as Literature
HUM 348 Reading Nature: Landscapes and Literature
HUM/SBS 349 Trauma and Narrative
HUM/SBS 358 Representations of Motherhood
HUM/SBS 366 Transforming Words: Poetry and Psychologies of Change
HUM 370 Literacy Studies
HUM 420 Speculative Fictions
HUM 440 Narrating the Human: Topics in Auto/Biography Studies
EDU 336: Children’s Literature

*Arts and Communication*

HUM 105 Basic Photography
HUM 201 Creative Writing: Cultivating Your Inner Muse
HUM 230 Digital Photography
HUM 290 Thinking and Writing: Writing and Healing
HUM 295 Creative Expression in Drawing
HUM 304 Writing Children’s Literature
HUM 305 Creative Writing: Poetry
HUM 306 Creative Writing: Fiction
HUM 307 Writing Creative Nonfiction
HUM 322 Professional Communication
HUM 335 Working with Writers
HUM 317 New Media and Social Networking: Identity and Expression Online
HUM 330 International Labor, Literature and the Arts
HUM 355 Introduction to Journalism
HUM 400 Argument and Persuasion
HUM 465 Writing for Social Change
LOS 307 Web Design
LOS 323 Media and Politics

**Career Applications Pathways (CAP, 18 – 24 credits)**

Arts and Humanities students are required to complete one of the following pre-professional minors offered at USM LAC.

Leadership Studies Minor 18 – 19 cr.

Secondary Teaching Certificate (English, Social Studies or Dual English and Social Studies) 24 cr.
K-8 Teaching Certificate            24 cr.

Early Childhood Studies Minor 18 cr.

Public Health Minor 18 cr.

Writing Studies Minor (either Professional or Creative Writing Track)** 18 cr.

French North American Studies** 18-21 cr.

* If the CAP requirement is waived, for example, when a student is already working in a field of their choosing, students will need to complete a Thematic Cluster plus 3 additional A&H electives.

**Arts & Humanities students completing a minor in Writing Studies or French North American Studies will need extra electives beyond the requirements of minor to complete their degree. This will include at least two other courses from one of the other A&H elective categories.

Lewiston Common Core (39 or 40 credits)
Descriptions of LCC classes and clusters may be found in the introductory portion of the Lewiston-Auburn College section of this catalog.

<table>
<thead>
<tr>
<th>Entry Phase</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCC 110 College Writing: Language and Literacies 3 or LCC 111 College Writing: Language and Literacies:4</td>
<td></td>
</tr>
<tr>
<td>Enrichment</td>
<td></td>
</tr>
<tr>
<td>LCC 123 College and Community I* 3</td>
<td></td>
</tr>
<tr>
<td>LCC 130 The Biology of Human Health w/Lab** 4 or LCC 230 Environmental Science, Policy, and Sustainability w/Lab</td>
<td></td>
</tr>
<tr>
<td>LCC 150 Statistics for Informed Decision Making 3</td>
<td></td>
</tr>
<tr>
<td>LCC 200 Creative Critical Inquiry into Modern Life 4</td>
<td></td>
</tr>
<tr>
<td>LCC 220 U.S. Democracy: Origins and Development 3 Or LCC 320 Sustaining Democracy</td>
<td></td>
</tr>
<tr>
<td>LCC 250 Thinking About The Arts, Thinking Through The Arts (CE)3</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Middle Phase</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thematic Cluster or any Minor offered at USM*** 9</td>
<td></td>
</tr>
<tr>
<td>Public Health</td>
<td></td>
</tr>
<tr>
<td>Expressive Arts/Healing Arts</td>
<td></td>
</tr>
<tr>
<td>The Environment: Sustainability and Education</td>
<td></td>
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<tr>
<td>Leadership</td>
<td></td>
</tr>
<tr>
<td>Leadership and Innovation</td>
<td></td>
</tr>
<tr>
<td>Early Childhood Education and Studies</td>
<td></td>
</tr>
<tr>
<td>Resilience and Vulnerability</td>
<td></td>
</tr>
<tr>
<td>LCC 345 College and Community II* 3</td>
<td></td>
</tr>
<tr>
<td>LCC 370 Toward a Global Ethics (writing instruction) (EISRC) 4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capstone Phase</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCC 480 Senior Seminar (writing instruction) 3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>39 or 40</td>
</tr>
</tbody>
</table>

* LCC 123 is required for entering students with less than 24 credits while LCC 345 is required only of students who were not required to take LCC 123.

** LCC 130 is not required for Natural and Applied Sciences majors.

*** Requirement may be met with any Thematic Cluster, or with any USM minor or double major.

General Electives (23-24 credits)
Arts and Humanities students may choose to use their general electives to sample other disciplines or to focus on a particular area of interest or they may choose to declare one of the minors or concentrations in the Arts and Humanities or other disciplines. General electives, for example, may be used to pursue a minor in counseling, early childhood studies, or information systems. One of the greatest strengths of the Arts and Humanities degree is the flexibility and range of career and graduate study options that it offers.
Liberal Studies–Degree Completion (45 credits)

Some students may choose this track, which is designed to assist transfer students and those with professional training or life experiences to achieve their degree. Depending on transcripts and other forms of accreditation, courses and experiences will be assessed for transfer into the major. Entry into this track requires prior approval by the arts and humanities faculty.

Certificate in French North American Studies

Description

This interdisciplinary certificate focuses on the diversity of French society in North America. Weaving together geography, history, literature, films, and current events, it involves students in field based experiences and research projects such as trips to historical and cultural sites, projects designed with community organizations and research using oral histories and archeological investigations. Any student who wants to fulfill the certificate in global studies should complete the necessary paperwork so the certificate appears on their transcript.

Program Requirements

Required courses for the certificate [non-degree students only]:
- HUM 301: French North America
- HUM 310: French Settlement in the Northeast
- HUM 460: Franco-American Community and Archival Work

Concentration in Elementary Education, Arts and Humanities major

Description

This innovative program is available to students majoring in Arts & Humanities or Natural & Applied Sciences. Upon successful completion of this 120 credit hour program students earn their bachelor's degree as well as certification to teach K-8 General Elementary in the State of Maine. For more information on the K-8 Natural and Applied Sciences track consult that portion of this catalog.

Program Requirements

Arts & Humanities/K-8 General Elementary

Education Courses: 50 credit hours
- EDU 305 Foundations of Cultural & Linguistic Diversity 3
- LAE 200 Education in the U.S. 4
- LAE 320 Applied Skills 4
- LAE 405 Teaching Math K-8 3
- LAE 451 Teaching Social Studies K-8 3
- LAE 452 Teaching Science K-8 3
- LAE 465 Teaching Reading K-8 3
- LAE 466 Teaching Writing in Grades K-8 3
- LAE 480 Portfolio Seminar 3
- LAE 490 Student Teaching 9
MAT 242 Applied Problem Solving 3
HRD 200 Human Growth and Development 3
SED 335 Students with Exceptionalities in General Education 3
SED 420 Multi-tiered Systems of Educational Support 3

**Lewiston Common Core:** 24-25 credit hours
LCC 110/111 College Writing 3-4
LCC 130 Biology of Human Health 4
  or LCC 230 Environmental Science
LCC 150 Statistics for Informed Decisions 3
LCC 200 Creative Critical Inquiry 4
LCC 220 U.S. Democracy 3
  or LCC 320 Sustaining Democracy
LCC 250 Thinking About the Arts 3
LCC 370 Toward Global Ethics 4

**Thematic Cluster Courses:** (Already counted in total above)
EDU 305 Foundations of Cultural & Linguistic Diversity
SED 335 Students with Exceptionalities in General Education
SED 420 Multi-tiered Systems of Educational Support

**HUM Requirements:** 18 credit hours
HUM 298 Applied Arts & Humanities 3
HUM 300 Literacy and Cultural Theory 3
HUM 316 New Digital Media Literacies 3
HUM 325 World History & Geography I 3
HUM 350 Cultural Fieldwork 3
HUM 478 Community Research Projects 3

**HUM Electives:** Any 3 credit hour HUM course. 3

**Science Content Electives:** 3 credit hours
Any course that meets State of Maine Science content requirements.
Recommended course is SCI 150 Physics and Biomechanics.

**General Electives:** 21-22 credit hours 21-22

**Additional Program Requirements:**

- **Before Beginning Year Two:**
  - Passing Praxis I: Reading, Writing, Mathematics
  - Submit formal application to teacher education program
  - TK20 activation
  - Complete NETS-S Assessment
  - Have a minimum GPA of 3.0 and maintain minimum GPA of 3.0 through rest of program.
  - Must pass fingerprinting and background check.

- **Before Beginning Year Four:**
  - Passing Praxis II: Elementary Content Knowledge
  - Demonstrate NETS-S Standards
  - Successful completion of LAE 200, LAE 320, EDU 305, SED 335, and SED 420 with a B or better.
  - Complete candidacy application process

- **Program Completion:**
  - Cumulative minimum GPA of 3.0 Core and major coursework require a grade of C or better. Professional education coursework require a grade of B or better.
  - Demonstration of NETS-T standards and InTASC standards, successful completion of program and major requirements.

**Tk20 Subscription:**
All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: http://usm.maine.edu/educatorpreparation

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed with in the context of the Unit’s data management system (i.e., Tk20).

Concentration in Secondary Education, Arts and Humanities major

Description

This innovative program is available to students majoring in Arts & Humanities or Natural & Applied Sciences. Upon successful completion of this 120 credit hour program students earn their bachelor's degree as well as certification to teach Secondary Education in the State of Maine for the following content areas: English, Social Studies or Life Science. For more information on the Secondary Life Science track consult the Natural and Applied Sciences portion of this catalog.

Program Requirements

Arts & Humanities/Secondary English

The bachelor of arts major in humanities offers the required courses to obtain secondary teacher certification (Grades 7-12) in English in the State of Maine. Students study humanities, common core, and education courses, and complete a semester of student teaching in their final year. The program enables HUM students to matriculate in a four-year undergraduate program that awards them a bachelor's degree in Arts and Humanities and qualify for a State of Maine teaching certificate. (Total credits 120).

Education Courses: 35 credit hours
EDU 305 Foundations of Cultural & Linguistic Diversity 3
LAE 200 Education in the U.S. 4
LAE 320 Applied Skills 4
LAE 402 Teaching English in Grades 7-12 3
LAE 411 Internship in English in Grades 7-12 3
LAE 480 Portfolio Seminar 3
LAE 490 Student Teaching 9
SED 335 Students with Exceptionalities in General Education 3
SED 420 Multi-tiered Systems of Educational Support 3

Lewiston Common Core: 24-25 credit hours
LCC 110/111* College Writing 3-4
LCC 130 Biology of Human Health 4
or LCC 230 Environmental Science
LCC 150 Statistics 3
LCC 200 Creative Critical Inquiry 4
LCC 220 U.S. Democracy 3
or LCC 320 Sustaining Democracy
LCC 250 Thinking About the Arts 3
LCC 370 Global Ethics 4

Thematic Cluster Courses: Credits Already Counted Above
EDU 305 Foundations of Cultural & Linguistic Diversity
SED 335 Students with Exceptionalities in General Education
**HUM Requirements:** 18 Credit Hours
- HUM 298 Applied Arts & Humanities 3
- HUM 300 Literacy and Cultural Theory 3
- HUM 316 New Digital Media Literacies 3
- HUM 325 World History & Geography I 3
- HUM 350 Cultural Fieldwork 3
- HUM 478 Community Research Projects 3

**Content Elective Courses:** 27 credit hours*
- English Content Electives 12
- HUM English Content Electives 15

**General Elective Courses:** 16 credit hours

*English endorsement is obtained by earning at least 24 approved content hours. Students intending to teach at the high school level are strongly encouraged to earn a total of 36 content hours. If a student doesn't want/need the additional 12 content hours they may be replaced with general electives.

**See note at end of this section on additional requirements of all teacher education students.**

**Arts & Humanities/Secondary Social Studies**

The bachelor of arts major in humanities offers the required courses to obtain secondary teacher certification (Grades 7-12) in Social Studies in the State of Maine. Students study humanities, common core, and education courses, and complete a semester of student teaching in their final year. The program enables HUM students to matriculate in a four-year undergraduate program that awards them a bachelor's degree in Arts and Humanities and qualify for a State of Maine teaching certificate. (Total credits 120).

**Education Courses:** 35 credit hours
- EDU 305 Foundations of Cultural & Linguistic Diversity 3
- LAE 200 Education in the U.S. 4
- LAE 320 Applied Skills 4
- LAE 404 Teaching Social Studies in Grades 7-12 3
- LAE 412 Internship in Social Studies in Grades 7-12 3
- LAE 480 Portfolio Seminar 3
- LAE 490 Student Teaching 9
- SED 335 Students with Exceptionalities in General Education 3
- SED 420 Multi-tiered Systems of Educational Support 3

**Lewiston Common Core:** 27-28 credit hours
- LCC 110/111 College Writing 3-4
- LCC 150 Statistics 3
- LCC 130 Biology of Human Health 4
  - or LCC 230 Environmental Science
- LCC 200 Creative Critical Inquiry 4
- LCC 220 U.S. Democracy 3
- LCC 250 Thinking About the Arts 3
- LCC 320 Sustaining Democracy 3
- LCC 370 Global Ethics 4

**Thematic Cluster Courses: Credits Already Counted Above**
- EDU 305 Foundations of Cultural & Linguistic Diversity
- SED 335 Students with Exceptionalities in General Education
- SED 420 Multi-tiered Systems of Educational Support

**HUM Requirements:** 18 Credit Hours
- HUM 298 Applied Arts & Humanities 3
- HUM 300 Literacy and Cultural Theory 3
- HUM 316 New Digital Media Literacies 3
- HUM 325 World History & Geography I 3
- HUM 350 Cultural Fieldwork 3

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HUM 478 Community Research Projects 3

Content Elective Courses: 21 credit hours*
Social Studies Content Electives 9
HUM Social Studies Content Electives 12

General Elective Courses: 15-16 credit hours 15-16

Economics Elective: 3 credit hours* 3

* Social Studies endorsement obtained by earning at least 24 approved content hours. Students intending to teach at the high school level are strongly encouraged to earn a total of 36 content hours. If a student doesn't want/need the additional 12 content hours they may be replaced with general electives.

Additional Requirements For All Teacher Education Programs:

- **Before Beginning Year Two:**
  - Passing Praxis I: Reading, Writing, Mathematics
  - Submit formal application to teacher education program
  - TK20 activation
  - Complete NETS-S Assessment
  - Have a minimum GPA of 3.0 and maintain minimum GPA of 3.0 through rest of program.
  - Must pass fingerprinting and background check.

- **Before Beginning Year Four:**
  - Passing Praxis II: Elementary Content Knowledge
  - Demonstrate NETS-S Standards
  - Successful completion of LAE 200, LAE 320, EDU 305, SED 335, and SED 420 with a B or better.
  - Complete candidacy application process

- **Program Completion:**
  - Cumulative minimum GPA of 3.0 Core and major coursework require a grade of C or better. Professional education coursework require a grade of B or better.
  - Demonstration of NETS-T standards and InTASC standards, successful completion of program and major requirements.

Tk20 Subscription:

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation)

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**Minor in French North American Studies**

**Description**

This interdisciplinary minor focuses on the diversity of French society in North America. Weaving together geography, history, literature, films, and current events, it involves students in field based experiences and research projects such as trips to historical and cultural sites, projects designed with community organizations and research using oral histories and archeological investigations. Any student who wants to fulfill the minor in global studies should complete the necessary paperwork so the minor appears on their transcript.
Program Requirements

Prerequisites:
- HUM 326: World History and Geography II
- or -
- HTY 102: Western Civilization II

Required courses:
- HUM 301: French North America
- HUM 310: French Settlement in the Northeast
- HUM 460: Franco-American Community and Archival Work

Three supporting courses:
Recommended:
- HUM 125: French Language and Maine Society
- HUM 478: Community Research and Writing
- HUM 498: Independent Study

Minor in Global Studies

Description

This minor investigates the rich varieties of trans-border development and migration, nation states, and world cultural communities. Modern situations are the result of historical events, and decisions made today around the world are not made in an historical vacuum. Globalization issues are ever more vital as we reshape our local, regional, and global networks. Core issues include the different points of view embodied in concepts such as globalization and internationalization, as well as the challenges of sustainability, diversity, and justice. The dynamic between local and global issues is a central aspect of modern society, crucial to our region and important to us in developing a personal rapport with our evolving heritages and economies. Any student who wants to fulfill the minor in global studies should complete the necessary paperwork so the minor appears on their transcript.

Program Requirements

The global studies minor consists of 21 required credit hours. A maximum of six credits from a student's academic major may be applied toward the minor.

Requirements

Introductory Courses (both required)
- SBS/LOS 381 Introduction to Globalization
- HUM 326 World History and Geography II

Context Course (select one)
- GEO 101 Human Geography
- ANT 101 Anthropology: The Cultural View

Methods Course (select one)
- GEO 108 GIS Applications
- HUM 350 Cultural Fieldwork
Subject or Regional Studies Course (select two)
HUM 301 French North America
HUM 310 French Settlement in the Northeast
HUM 325 World History and Geography I
HUM 330 International Labor, Literature, and Arts
HUM 340 World Indigenous and Native Societies
LOS 330 Leadership in Different Cultures
SBS 360 Culture, Behavior, and Personality

SBS 308 Health, Illness, and Culture

Capstone Courses
LCC 480 Senior Seminar (final paper on a global theme)

Study Abroad Course (optional, choose one)

- HUM 490 Overseas Investigations and Comparisons
- LOS 470 Leadership Study Abroad
- SBS 470 Study Abroad

Minor in Writing Studies (Tracks: Creative Writing or Professional Communications)

Description

The Writing Studies minor introduces students to the professional and applied possibilities of writing, allowing them to sharpen their writing skills, obtain a firm grounding in theory which they then apply in practice, consider the social and cultural subtexts of words on the page, and experience first-hand how writing is used in the community. Any student who wants to fulfill the minor in writing studies should complete the necessary paperwork so the minor appears on their transcript.

Program Requirements

HUM 300 Literary and Cultural Theory into Practice
HUM 400 Argument and Persuasion

Creative Writing track

(Required):
HUM 201 Creative Writing

(choose three of the following):
HUM 290 Thinking and Writing; Writing and Healing
HUM 304 Writing Children’s Literature
HUM 305 Creative Writing: Poetry
HUM 306 Creative Writing: Fiction
HUM 307 Writing Creative Nonfiction
HUM 316 New Digital Media Literacies
HUM 465 Writing for Social Change
LOS 307 Web Design

**Professional Communications track**

(Required):

HUM 322 Professional Communications

(choose three of the following):

HUM 290 Thinking and Writing; Writing and Healing
HUM 307 Writing Creative Nonfiction
HUM: 335 Working with Writers (1 credit x3)
HUM 465 Writing for Social Change
LOS 307 Web Design
LOS 323 Media and Politics

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**Arts and Humanities Course Descriptions**

For **Upcoming Course Offerings** click here.

*Note: Satisfactory completion of both a 100-level college writing course (LCC 110/111) and a course on critical thinking (LCC 200) are prerequisites to all 300 level courses in this major.*

**HUM 105 Basic Photography**
This course is an introduction to black and white photography, designed to help students gain understanding through "hands-on" photographic work. Lectures include classroom discussions concerning the history and aesthetics of photography, and techniques include camera and lens functions, exposure methods, basic black and white film processing, printmaking, print finishing, and presentation techniques. Cr. 3

**HUM 120 / ENG 120 Introduction to Literature**
This course is designed to introduce students to four basic literary genres: poetry, fiction, nonfiction, and drama. Through a combination of lectures, small group discussions, exercises, readings, and weekly writing assignments, students will work toward mastering a basic
Understanding of literature. Students will learn how to improve their writing, as well as their ability to read and analyze literature. Cr. 3

HUM 125 French Language and Maine Society
This is an introductory course for the French language. Students will also learn about the cultural and linguistic context of French society in Maine and eastern North America. Students will use the French language they are studying to work with the Franco-American Collection and Maine Franco-American communities. Cr. 3

HUM 201 Creative Writing: Cultivating Your Inner Muse
This course is designed to help students hone their creative strategies and inspire them to commit to the practice of writing. We will explore the practical implications of creative expression. In addition to investigating the genres of fiction, creative non-fiction, and poetry, students will identify and devise an approach to writing that works for them. This course is appropriate for novices and experienced writers alike and will include discussions of readings and traditional workshop response to students' writing. This course has been approved by the State Department of Education for content area in secondary English. Cr. 3

HUM 213 Metaphor in Literature, Science, and Religion
This course is a comparative study of literature, science, and religion, focusing on aims, methods, and values, and on the nature of truth and creativity in each discipline. Readings in fiction, poetry, religion, and modern physical and biological science provide a basis for discussion of the metaphorical nature of literary, religious, and scientific discourse. Our goal is to demonstrate that all three areas of human endeavor rely heavily on the metaphorical nature of language in their search for meaning and truth. This course consists of careful reading of texts, active class discussion, and out of class essays. No college science background required. This course has been approved by the State Department of Education for content area in secondary English. Cr. 3

HUM 230 Digital Photography
Working with digital cameras, students will learn to see photographically in color. They will gain a better understanding of color relationships using color as design elements and the overall artistic and aesthetic uses of color photography. Students will learn controls of their camera's software. Adobe Photoshop software will be the primary tool used for image control and manipulation. Cr. 3

HUM 250 Song as Literature
This course is designed to introduce students to the role of the song in our cultural heritage as a fundamental literary genre and a remarkably democratic and influential art form. The course traces the evolution of the story song from the epic ballads of Europe and North America through the development of songs for religious, political, nationalistic and purely entertainment purposes. This course has been approved by the State Department of Education for content area in secondary English. Cr. 3

HUM 260 Media Literacy and Theories of Popular Culture
In order to foster a critical approach to modern media, this course applies theory and analysis to popular culture texts. What do we learn about our modern industrial consumerist society from the texts it produces? What makes something popular, and how do we detect a text's projected world view? We will study TV, film, photography, graphic novels, the Internet, and music. Framing popular culture as a mass-media driven phenomenon, we will explain the deeper significance of our society using a selection of critical and theoretical commentary. This course has been approved by the State Department of Education for content area in secondary Social Studies. Cr. 3

HUM 275 Discovering the Past: History Close to Home
Students will delve into the study of the past through a variety of historiographical techniques, within the context of the history of Lewiston. Students will develop a variety of research skills, including discovering and interpreting public and genealogical records, archaeological field reports, physical artifacts and architecture, as well as primary and secondary texts. Students will also encounter a variety of hands-on techniques, including fieldwalking and conducting oral-history interviews. The course offers an entry-point into the study of history while giving students valuable research and analytical skills that are readily transferable to other academic disciplines or professional life. Cr. 3

HUM 290 Thinking and Writing/Writing and Healing
Writing can be an experiential and subjective process that influences identity, births thought, and facilitates healing. Students will learn and practice exploratory writing in class as a form of self-analysis as well as investigate the research on how writing about chronic illnesses or traumatic events can reduce symptoms. Cr. 3

HUM 295 Creative Expression in Drawing
In this course, students will study drawing as a means to enhance powers of observation, imagination and expression. The elements of line, shape, composition, value and texture will be explored in classroom drawing exercises and assignments and out of class drawing experiences. Basic drawing techniques will be introduced in a variety of media. Assignments will be geared to develop each individual's ability to make drawings of objects from the natural world and drawings based on the expression of ideas. Cr. 3

HUM 298 Applied Arts & Humanities: Focus on Lewiston-Auburn and the Androscoggin River Valley Communities
Intersecting art, literature, history, and philosophy and using a project-based, community-centered approach, this foundational course in the major addresses the field itself. Emphasis is placed on the significant contribution of Arts & Humanities study to life-long learning as well as to expanded, digitally informed, mastery of reading and writing, critical thinking and analysis, and the principles of design—all desired by a broad range of employers.
HUM 300 Literary and Cultural Theory and Practice
This course explores the relationships among writers, texts, and readers, each shaping and shaped by the others. The aim of this course is to introduce key concepts and critical terms of contemporary literary and cultural theory. Students learn to put these theories into practice. This course has been approved by the State Department of Education for content area in secondary English. Cr. 3

HUM 301 French North America
Students will gain a broad understanding of the history and culture of French-speaking peoples in North America, from the colonial period to the modern era. Students will encounter not just the well-known communities in French Canada and Haiti, but other smaller communities in North America. Students will discover a variety of French cultural arts, including cuisine, music, art, theater and literature. In particular, students will appreciate the relationship between Franco-Americans in New England and Maine, and the wider community of American Francophones. Cr. 3

HUM 303 Cross Cultural Perspectives on Non-western Art
This course surveys the visual arts of non-western cultures, most especially from Africa, Asia, and Australia. It evaluates numerous theories trying to make sense of non-western forms of visual, symbolic, and political expression; unpacks the term “primitive Art;” delves into the history of western interest in these media; and debates whether they are “art” in a Western sense. Prerequisites: College Writing (LCC 110/111) and Critical Thinking (LCC 200) with a C or better. This course has been approved by the State Department of Education for content area in secondary Social Studies. Cr. 3

HUM 304 Writing Children's Literature: How to Craft Compelling Stories
An exploration of how real life stories, details, characters, and voices combine with images to create compelling children's stories. This course includes lecture, class discussion and writing workshops. Cr 3

HUM 305 Creative Writing: Poetry
This course is designed to introduce students to the art and practice of writing poetry. Organized as a workshop, it features close examination of the student's own writing as well as the work of outstanding contemporary poets. Prerequisite: HUM 201. This course has been approved by the State Department of Education for content area in secondary English. Cr. 3

HUM 306 Creative Writing: Fiction
This course is designed to introduce students to the art and practice of writing fiction. Organized as a workshop, it features close examination of the student's own writing as well as the work of outstanding contemporary fiction writers. Prerequisite: HUM 201. This course has been approved by the State Department of Education for content area in secondary English. Cr. 3

HUM 307 Writing Creative Nonfiction
This course explores the literary terrain between imaginative literature and journalism. Students study the fictional techniques employed by journalists and examine the questions their work poses about the uneasy boundaries between fact and fiction. Students will produce their own extended non-fiction essay. This course has been approved by the State Department of Education for content area in secondary English. Cr. 3

HUM 310 French Settlement in the North-East
Students will develop an appreciation for the unique culture of Francophones in the North East - including New England, Quebec and the Canadian Maritimes - through an understanding of the history of the region from its foundations to the present day. Particular attention will be paid to the immigration of more than one million French Canadians to New England in the 19th century, and the resulting Franco-American society which developed in Maine and other states. Students will appreciate the complex nature of Franco-American identity, the historical realities which have shaped it, and its future potential. This course builds on themes encountered in HUM 301 French North America, though this is not a pre-requisite. This course has been approved by the State Department of Education for content area in secondary Social Studies. Cr. 3

HUM 316 New Digital Media Literacies: Self-Fashioning and Critiquing Information
Students investigate, critique, and engage in a range of experiments to discover how new media radically change both thinking and language, as visual material, writing, and technology interplay online to form new, hybridic modes of reading and writing, teaching and learning. Drawing from such diverse fields as literature, geography, and education, areas covered include digital Shakespeare, the internet as a utopia, and a video game field study to explore multi-modal thinking. Prerequisites: College Writing (LCC 110/111) and Critical Thinking (LCC 200) with a C or better. Cr. 3

HUM 317 New Media and Social Networking: Identity and Expression Online
How are private and public identities established online? Are political and social movements built, organized, even undermined by social networking and online culture? Do online communities impact real world communication, language, and thought? Read critical theory on new media and explore technological and cultural associations with this nascent but pervasive phenomenon. Cr 3.

HUM 322 Professional Communications
This hands-on course will explore the types of writing and other forms of communication we use in a professional setting. By studying examples...
of writing in context and by creating original work, we will examine how get the point across in clear, concise and compelling language. We will also address creating strong and effective visual and verbal communication. Cr. 3

HUM 325 World History and Geography I
This is the first in a series of two courses that are designed to help students develop an understanding of and an appreciation for world history and geography. The course's goal is to provide students with a humanistic background from which to better comprehend global complexities. This course will cover the period from prehistory to the age of modern expansion, from about 50,000 to 500 years ago. Prerequisite: Only students with more than 45 credits are permitted to take this course. This course has been approved by the State Department of Education for content area in secondary Social Studies. Cr. 3

HUM 326 World History and Geography II
This is the second in a series of two courses that are designed to help students become more knowledgeable participants in today's rapidly changing world. Its goal is to make links between global history and modern world situations, as well as find the locations on a map. In other words, it is a primer in "global citizenship." This course covers the period from the Age of Modern Exploration (ca. 1500) to the present. Prerequisite: Only students with more than 45 credits are permitted to take this course. This course has been approved by the State Department of Education for content area in secondary Social Studies. Cr. 3

HUM 330 International Labor, Literature, and the Arts
This course is designed to develop an appreciation for the diverse forms of work and labor-organizing around the world and their expression through literature and the arts. We will look at songs, films, murals, magazines, poetry, cartoons, novels, short stories, biographies, and more. Although we will consider work historically, our primary goal is to develop an international view of labor in the modern world. This course has been approved by the State Department of Education for content area in secondary English. Cr. 3

HUM 335 Working with Writers
This one-credit course provides training for Writing Assistants who work at the LAC Writing Center. Topics covered include basic composition theory, the Writing Center as a workplace, tutoring in digital formats, helping writers across the curriculum, and communication skills. The course prepares Writing Assistants for CRLA (College Reading and Learning Association) certification. The course may be taken three times (to align with the three levels of CRLA certification). Permission of instructor required. Cr. 1 HUM 335 to be offered as a seminar every Fall and Spring semester.

HUM/SBS 339 Ethnicity, Immigration and Identity: A focus on Lewiston, Maine
This course will focus on concepts of ethnicity, immigration, and identity through an investigation of the history of immigration in the city of Lewiston, Maine. We will explore how ethnic identity is defined, and why people emigrate. Through historical and contemporary readings and films, oral histories and personal interviews, the course examines the challenges immigrants face as they attempt to assimilate within the U.S. while trying to maintain their native languages, traditions, cultures and communities. This course has been approved by the State Department of Education for content area in secondary Social Studies. Cr. 3

HUM 340 World Indigenous and Native Societies
This course is designed to develop an appreciation for the diversity of native societies around the world. Some important points for us to consider are the differences and disparities between the developed nations and the fourth world, as well as the ambiguities of terms like "native," "traditional," "indigenous," "aboriginal," and "civilized." We also will consider case studies of modern native societies, such as the Mayan, Kurd, and Basque peoples, looking not just at their traditional histories and cultures, but also at some of their contemporary movements, including the EZLN, PKK, and ETA rebellions. We will seek to find common issues faced by native peoples around the world, as well as to identify problems unique to each group. A particular focus of this course will concern some of the Eastern Algonquian nations of Maine and the Northeast, including the Androscoggin, Almouchiquois, and Abenaki. This course has been approved by the State Department of Education for content area in secondary Social Studies. Cr. 3

HUM 348 Reading Nature: Landscapes and Literature
Using the parallel skills of digital photography, reading, and writing, students will discover new ways of understanding the natural world. Readings and discussion will include excerpts from writers, such as Henry David Thoreau, Katharine S. White, Michael Pollan, Bernd Heinrich, as well as analysis of inspirational work of well-known nature photographers. The course includes journal and observational writing, creating digital photographs, and discussion of related topics of landscape photography history, philosophy, and anthropology. Cr. 3

HUM/SBS 349: Trauma and Narrative
This course examines the medical, political, and cultural history of the concept of trauma, focusing on how trauma has become a core concern in both contemporary clinical psychology and literary criticism. We consider models for conceptualizing responses to traumatic experiences. Topics include the diagnostic criteria of Post-Traumatic Stress Disorder, recommended treatment approaches, risk and protective factors. Students explore “narrative” vs. “traumatic” memories and carefully examine a number of literary texts and films to analyze the characteristics of representations of traumatic memory. The idea, that fashioning a narrative of traumatic experience is essential to trauma therapy and to the healing effects of trauma literature, will also be explored. Cr. 3

HUM 350 Cultural Fieldwork
This course is designed to help students develop new ways to think about their place in the world. They will visit and meet with professionals
HUM 355 Introduction to Journalism
This course focuses on the principles of journalistic practice and the important role journalism plays in democratic societies. We consider the historical changes in the field, including the use of new technologies, techniques and methods in contemporary journalism. Students will develop competencies in the skills of journalism, including research and interviewing, fact-checking and attribution, and journalistic styles. Prerequisites: College Writing (LCC 110/111) and Critical Thinking (LCC 200) with a C or better. Cr. 3. HUM 355 to be offered as a seminar every third semester, Fall and Spring

HUM/SBS 358 Representations of Motherhood
This course examines the ways in which motherhood is represented in various cultural forms (including film, literature and political rhetoric) and from within different historical and cultural contexts. Contemporary psychological theories will be considered in terms of how they are used to prescribe normative demands on women and mothers and also how they attribute various powers to mothers that then contribute to the construction of particular social policies and practices. This course has been approved by the State Department of Education for content area in secondary Social Studies. Cr. 3

HUM/SBS 365: Psychological Language of Dreams and Fairytales
This course explores psychological approaches to understanding the language of dreams and fairytales. Students consider how works of imaginative literature and dreams inform the theories of Freud and Jung and also how their theories, in turn, have shaped contemporary approaches to understanding images and metaphors. We, then, culturally situate this psychological approach by comparing it with cross-cultural and literary approaches. Cr. 3

HUM/SBS 366 Transforming Words: Poetry and Psychologies of Change
This course examines the interrelationships between poetry and psychology, with a focus on transformations of meaning in words and lives. Topics will include the varying functions of poetry over the life span, poets' reflections on how and why they write, poetry as political witness and community catalyst, therapeutic uses of poetry, and the distinctive qualities of "poetic" language. Students have the option of pursuing community-based projects involving poetry. This course has been approved by the State Department of Education for content area in secondary English. Cr. 3

HUM 355 Introduction to Journalism
This course focuses on the principles of journalistic practice and the important role journalism plays in democratic societies. We consider the historical changes in the field, including the use of new technologies, techniques and methods in contemporary journalism. Students will develop competencies in the skills of journalism, including research and interviewing, fact-checking and attribution, and journalistic styles. Prerequisites: College Writing (LCC 110/111) and Critical Thinking (LCC 200) with a C or better. Cr. 3.

HUM/SBS 365 Psychological Language of Dreams and Fairytales
This course explores psychological approaches to understanding the language of dreams and fairytales. Students consider how works of imaginative literature and dreams inform the theories of Freud and Jung and also how their theories, in turn, have shaped contemporary approaches to understanding images and metaphors. We, then, culturally situate this psychological approach by comparing it with cross-cultural and literary approaches. Cr. 3

HUM 369 Exploring Careers, Choosing Life Roles
In this mid-level course in the career development series, students relate self-knowledge to career and life roles, with an emphasis on gaining and managing career information; learning various career and life decision-making strategies; and communicating formative academic, co-curricular, and professional experiences in such formats as accomplishment statements and informal interviews. Prerequisite: LCC 123 or LCC 345. Cr 1.5. Offered fall, spring, summer.

HUM 370 Literacy Studies
Students examine theories of literacy, the ongoing process of learning to read and write, as a basis both for writing their own literacy narratives and for community research documenting the narratives of others. With participant consent, these will be posted in the Ohio State University Digital Archive of Literacy Narratives in order to create a collective portrait of literacy in the Lewiston-Auburn area. Cr. 3

HUM 385 Global Past, Global Present
This course is a thematic survey of global history from its origins to the present. Its aim is to provide a wide contextualized understanding of human existence in a new format that is called “Big History,” a concept that integrates knowledge from the natural and social sciences with the humanities. The result is a more realistic understanding of how humans fit into the vast expanse of the universe. As a part of this survey, students will consider some of the challenges of modern globalization, with an important theme being the quest to develop sustainable and ethical lifestyles. The overall focus of this course will be on what such knowledge might mean in everyday life and how we as responsible individuals and a responsible species should conduct ourselves in this world. Cr. 3

HUM 400 Argument and Persuasion
In this writing course, students examine the nature of argumentation, the qualities of good arguments, inductive and deductive reasoning, and
other commonly used types of reasoning (such as reasoning by analogy). Students also examine various persuasive strategies commonly used in popular media including politics and advertising. Emphasis is placed on improving students’ abilities to compose clear and persuasive arguments in writing. Cr. 3

**HUM 413 Job Search Skills for the 21st Century**
In this final course in the career development series, students assume active agency in career planning through learning how to market themselves to prospective employers. They learn to create and use the tools needed for career placement, such as cover letters, resumes, and interviews. Prerequisite: HUM/LOS/SBS/SCI 369. Offered fall, spring, summer. Cr 1.5.

**HUM 420 Speculative Fiction**
This course focuses on speculative fiction—short stories, novels, and films—presenting alternate worlds and possibilities that allow readers to think about where our worlds are heading and to explore what it means to be human. Works by H.G. Wells, Kazuo Ishiguro, Margaret Atwood, and others will be considered. Cr. 3

**HUM 440 Narrating the Human: Topics in Auto/Biography Studies**
The exploding new field of life writing encompasses a range of forms, including diaries, autobiographical novels, falsified memoirs, holocaust testimony, and biopics. Students analyze select readings with emphasis on human relationships configured in a specific time, place, and circumstance, as sociologically, historically, and geographically informed. Students also develop a life writing project of their own. Cr. 3

**HUM 447 Internship**
This online course provides students the opportunity to work in their chosen field to evaluate their interest and acquire basic skills needed to market themselves effectively. Students participate in an online seminar in which they learn about and reflect on workplace issues. Students wishing to take more than 3 credit hours must have permission from their faculty advisors. Prerequisite: HUM/LOS/SBS/SCI 413. Offered fall, spring, summer. Cr. 3-6

**HUM 460 Franco-American Community and Archives Work**
This course will consist of directed study and work with the Franco-American Collection. The largest repository of Franco-American documents in Maine and one of the largest in the United States, the Collection is home to a wide variety of letters, diaries, oral histories, newspapers, scrapbooks, maps, audio recordings, photographs, books, and academic papers. This diverse material comes from the Androscoggin Valley, other parts of Maine, the Northeast, and from around North America. Projects will include locating and obtaining materials, their conservation and preservation, cataloguing and accessioning documents, as well as projects of public service and community outreach. *This course has been approved by the State Department of Education for content area in secondary English.* Cr. 3–6

**HUM 465 Writing for Social Change**
This course considers literary works (including poetry, fiction, nonfiction and drama) that affect social change. Additionally, it combines cultural analysis with various forms of writing as the means of calling for social justice and as tools for social transformation. Students will address a pressing social concern within their communities. Cr. 3

**HUM 478 Community Research Projects**
This course connects individual concerns and interests to a community fieldwork project as the basis for research. Students learn how to develop research questions, document their experiences with field notes, conduct library research, and produce an annotated bibliography. The course is designed to prepare students to address one of the four themes of LCC 480 Senior Seminar (justice, democracy, sustainability, difference). Cr. 3

**HUM 490 Overseas Investigations and Comparisons**
This course will consist of directed study and work outside of the usually defined “boundaries” of the United States. This can mean outside the physical borders, such as Uruguay or New Brunswick, Chiapas, or Somalia. But it can also mean outside the perceived borders of the mainstream nation state, such as work on a Lakota Sioux reserve or with Latino/Latina community in East Los Angeles. A student in this course will work closely with a faculty member to develop a project, carry it through, and produce a summary presentation. Cr. 1-6

**HUM 498 Independent Study** Cr. 3-6

**HUM 499 Special Topics**
A variety of topics courses have been and will be offered. These have included: Religions of the World; Buffy the Vampire Slayer: Theory, Metaphor and Fashion; and Historical Archeology Field School. Cr. 3
Leadership Studies

Leadership Studies Overview

We promote the best in leadership knowledge and practice to improve the quality and diversity of leadership in organizations and communities -- regionally, nationally and internationally.

We believe in:

- Integrating theory and practice
- Reflection-in-action
- Continuous development
- Collaboration
- Creating sustainable enterprises
- Improving competitive advantage
- Social responsibility
- Systems thinking
- Strategic level change
- The value of diversity in all its forms
- Innovative thinking and practice

We see leadership as an activity, not a position.

4+1 in Leadership Studies

Description

The Leadership Studies 4+1 option allows qualified undergraduate students (in any major) to complete a bachelor’s degree and a Master of Arts in Leadership Studies degree in five years.

Students pursuing this option focus on bachelor degree requirements during the first three years, a mix of bachelor and graduate requirements in the fourth year, and exclusively graduate requirements in the fifth year.

Students may use up to 12 credits of graduate work for both the undergraduate and graduate degrees (using 4 required graduate level courses to fulfill general elective credits needed for the bachelor’s degree).

For more information about this option, contact Janet Etzel at jetzel@usm.maine.edu.

For a list of all LOS and MLS courses, including a full course rotation schedule, please click here.

Program Requirements

Students are required to maintain 3.0 GPA or higher and possess prior organizational experience. A minimum of 108 undergraduate credits and 36 graduate credits are required to complete both degrees.

Students may apply for the 4+1 option at the start of their junior year and enroll in graduate courses after a minimum of 90 credit hours of undergraduate course work has been accumulated.

Recommended Course Sequence

Students wishing to progress through the graduate program in five years should take LOS500: Foundations of Leadership I and LOS550: Cultural Contexts during the fall semester and LOS501: Foundations of Leadership II and LOS512: Deliberate Creativity and Innovation during the spring semester of their fourth year of study.
LOS Major requirements (57 credits)

Prerequisite Courses (4 credits)

- LAC 112 Microsoft Excel (prerequisite for LOS 304)
- LOS 250 Organizational Accounting or its equivalent (prerequisite for LOS 304)

Requirements for the major (35 credits)

- LCC 150 Statistics for Informed Decision Making
- LCC 370 Toward a Global Ethics
- LOS 299 Writing in the Major
- LOS 300* Organizational Theory
- LOS 301 Group Dynamics
- LOS 304 Organizational Budgeting
- LOS 329 Research Methods
- LOS 350* Leadership
- LOS 369 Exploring Careers, Exploring Life Roles
- LOS 413 Job Search Skills for the 21st Century
- LOS 440 Organizational Change and Development
- LOS 447 Internship
- LCC 480 Senior Seminar

*All LOS majors must earn a grade of B- or better in both LOS 300 and LOS 350.

Required electives for the major (18 credits)

LOS majors must take any 6 LOS electives (LOS courses that are 300-level or higher). LOS Electives are listed below. They can be selected based on student interest or as concentrations, certificates, etc. Please note that not all LOS electives are available online.

Human Services Concentration

This concentration requires completion of 6 of the following courses:

- LOS/SBS 302 Organizational Behavior
- LOS 322 Leadership in the Public/Nonprofit Sectors
- LOS 325 State and Local Government
- SBS 335 Legal Issues in Health and Human Services
- SBS 338 Health Care Policies
- LOS 373 Managing Nonprofits
- SBS 430 Applied Social Policy

Certificate in Lean Leadership

- LOS 302* Organizational Behavior (offered face-to-face, or online)
- LOS 308 Lean Systems and Methods
- LOS 309 Lean Systems/Methods Practicum
- LOS 440* Organizational Change (offered face-to-face, or online)
  (*LOS 302, or LOS 440 must be taken before LOS 308)

Other LOS Electives include:

- LCC 310 Science, Technology, and Society
- LOS 270 Exploring Leadership on Campus
- LOS 311 Leadership Through Art
- LOS 323 The Media and Politics
- LOS 330 Leadership in Different Cultures
- LOS 333 Portfolio Development
- LOS 345 Leadership and Film
- LOS 351 Exploring Transformational Leadership
- LOS 352 Exploring Servant Leadership
- LOS 353 Exploring Authentic Leadership
- LOS 354 Exploring Complexity Leadership
- LOS 355 Exploring Shared Leadership
- LOS 356 Exploring Followership
- LOS 360 Deliberate Creativity and Innovation
MLS Requirements (36 credits)

**Cornerstones (6 credits):**

- LOS 500 Foundations of Leadership Studies I: Theory and Practice
- LOS 501 Foundations of Leadership Studies II: Theory and Practice

*Students start their coursework with two Foundations of Leadership Studies courses to ground them in the latest thinking in leadership theory and practice.

**Competencies (9 credits):**

- LOS 512 Deliberative Creativity and Innovation
- LOS 610 Methods of Inquiry (should be taken in semester prior to LOS 688)
- LOS 611 Communication and Relationship Building

*Laid upon the cornerstones of this foundational work are the competency courses which are geared toward developing essential skills sets for leadership effectiveness.

**Contexts (6 credits):**

- LOS 550 Cultural Contexts
- LOS 651 Technology in Society
- LOS 661 Ethical and Spiritual Dimensions of Leadership
- LOS 670 Leadership Study Abroad

*The contexts courses place the rest of the work in situations, exploring the forces that environment places on leadership and followership.

**Electives (9 credits):**

- LOS 614 The Conflict Process
- LOS 641 Exploring Transformational Leadership
- LOS 642 Exploring Servant Leadership
- LOS 643 Exploring Authentic Leadership
- LOS 644 Exploring Chaos & Complexity Leadership
- LOS 645 Exploring Relational Leadership
- LOS 646 Exploring Followership
- LOS 662 Community Leadership
- LOS 699 Special Topics in Leadership
- LOS 695 Independent Study

*Students tailor their degrees to their particular interests through the selection of elective courses in leadership studies. If students wish, up to two electives may be selected from courses in other graduate programs (subject to advisor approval).

**Capstone Seminar & Project/Thesis (6 or more credits):**

- LOS 688 Capstone Seminar (Prerequisite: LOS 610)
- LOS 689 Master’s Project / Master’s Thesis

*At the end of the master's program, students do their capstone work which includes collegial (student) as well as faculty critique and assistance in developing research and projects. Students electing the project option design an intensive theory-based, action research, applied project that explores the role of leadership in developing and/or implementing meaningful change in an organization or community. Students electing the thesis option select a topic for intensive library research, reading, and analysis. It may, for example, summarize and analyze work in new methods or contribute a new theoretical proposal that calls for further testing or research.

**4+1 Student Schedule:**

Shared Senior Year Fall: 500, 550
Shared Senior Year Spring: 501, 512

Summer One: 610, 2 electives (one fulfilling the second context requirement)

Fall Two: 611, 688, elective

Spring Two: 689, elective

**BS in Integrative Professional Studies**

**Description**

The Integrative Professional Studies major is intended to meet the needs of transfer students who have a variety of academic backgrounds, employment experience, and career aspirations. Students in the program complete their degrees through a combination of LOS courses, transfer credits, and prior learning assessment.

This program may be completed face-to-face, fully online, or in a combination of the two. For more information about the fully online option, contact Ashley Collins at acollins@usm.maine.edu. For more information about our other options, contact Janet Etzel at jetzel@usm.maine.edu.

For a list of all undergraduate LOS courses and a rotation schedule, please click [here](#).

**Program Requirements**

Requirements for students pursuing this major are:

- At least 75 credits being transferred into the program
- The completion of at least 120 credits.
- Satisfaction of the 30 credit hours residency requirement for USM.
- Satisfaction of the general education requirements of USM.
- Completion of at least 18 credits in the LOS curriculum while matriculated at USM-LAC, with the equivalent of a B- or better earned in both LOS 300/LOS 299 and 350.
- Completion of at least 36 credit hours that satisfy the LOS curriculum requirements (can include prior learning assessment credits and credits transferred into the LOS curriculum which meet professional studies criteria).

**Recommended Course Sequence**

Students selecting this major work closely with advisors to facilitate transfer credit, prior learning assessment, and course selection.

**BS in Leadership and Organizational Studies**

**Description**

The baccalaureate degree in leadership and organizational studies (LOS) combines a liberal arts program with the study of how organizations operate and how leadership functions. It emphasizes the critical need to understand and work with people, the dynamics of change, the interdisciplinary nature of organizational operations, and the practical application of theories and leadership concepts. Drawing on faculty from diverse backgrounds, leadership and organizational studies is designed to prepare students for work in the nonprofit, public, or private sectors.

This program may be completed face-to-face, [fully online](#), or in a combination of the two. For more information about the fully online option, contact Ashley Collins at acollins@usm.maine.edu. For more information about our other options, contact Janet Etzel at jetzel@usm.maine.edu.

For a list of all undergraduate LOS courses and a rotation schedule, please click [here](#).
Program Requirements

The core courses of the LOS major will introduce students to the theory and practice of organizational behavior and leadership with emphasis on communication skills, problem solving, critical thinking, key quantitative skills, and team functioning. Required and prerequisite courses for the major (57 credits) are:

Prerequisite Courses (4 credits)

- LAC 112 Microsoft Excel (prerequisite for LOS 304)
- LOS 250 Organizational Accounting or its equivalent (prerequisite for LOS 304)

Requirements for the major (35 credits)

- LCC 150 Statistics for Informed Decision Making
- LCC 370 Toward a Global Ethics
- LOS 299 Writing in the Major
- LOS 300* Organizational Theory
- LOS 301 Group Dynamics
- LOS 304 Organizational Budgeting
- LOS 329 Research Methods
- LOS 350* Leadership
- LOS 369 Exploring Careers, Exploring Life Roles
- LOS 413 Job Search Skills for the 21st Century
- LOS 440 Organizational Change and Development
- LOS 447 Internship
- LCC 480 Senior Seminar

*All LOS majors must earn a grade of B- or better in both LOS 300 and LOS 350.

Required electives for the major (18 credits)

LOS majors must take any 6 LOS electives (LOS courses that are 300-level or higher). LOS Electives are listed below. They can be selected based on student interest or as concentrations, certificates, etc. Please note that not all LOS electives are available online.

Human Services Concentration

This concentration requires completion of 6 of the following courses:

- LOS/SBS 302 Organizational Behavior
- LOS 322 Leadership in the Public/Nonprofit Sectors
- LOS 325 State and Local Government
- SBS 335 Legal Issues in Health and Human Services
- SBS 338 Health Care Policies
- LOS 373 Managing Nonprofits
- SBS 430 Applied Social Policy

Certificate in Lean Leadership

- LOS 302* Organizational Behavior (offered face-to-face, or online)
- LOS 308 Lean Systems and Methods
- LOS 309 Lean Systems/Methods Practicum
- LOS 440* Organizational Change (offered face-to-face, or online)
- (*LOS 302, or LOS 440 must be taken before LOS 308)

Other LOS Electives include:

- LCC 310 Science, Technology, and Society
- LOS 270 Exploring Leadership on Campus
- LOS 311 Leadership Through Art
- LOS 323 The Media and Politics
- LOS 330 Leadership in Different Cultures
- LOS 333 Portfolio Development
- LOS 345 Leadership and Film
- LOS 351 Exploring Transformational Leadership
- LOS 352 Exploring Servant Leadership
In addition to completing these course requirements for the major, baccalaureate degree students must meet the proficiency and residency requirements of the University of Southern Maine, and complete the Core curriculum and elective courses to accrue a minimum of 120 credit hours of coursework.

Prerequisites for major courses may be met through specific courses, through any one of several programs of prior learning assessment sponsored by USM, or through waiver by the instructor of the course. Before taking 300-level courses in this major, students must have completed a 100-level college writing course with at least a grade of C+, or an equivalent.

No more than two courses from outside the major may be used toward completion of the requirements for the major without permission of the faculty—students may work with their advisor for this permission.

To learn more about the degree requirements, please view the official 2013-2014 catalog. You can also view the degree check sheet to track your progress.

**Recommended Course Sequence**

We recommend that students start their Leadership Studies coursework with LOS 300: Organizational Theory and LOS 350: Leadership. Students should work with their advisors to organize the scheduling of the rest of their coursework.

**Certificate in Creative Leadership and Global Strategy**

**Description**

One of the most versatile certificates ever offered at the University of Southern Maine. The Creative Leadership and Global Strategy Certificate is a new undergraduate certificate geared toward the student or community member interested in focusing on dynamic leadership skills. Select courses from the Leadership and Organizational Studies program blend deliberate creativity with organizational leadership in multi-cultural, multi-national environments. The Creative Leadership and Global Strategy Certificate will help you meet the challenges of our dramatically changing global workplace.

This program may be completed face-to-face, fully online, or in a combination of the two. For more information about the fully online option, contact Ashley Collins at acollins@usm.maine.edu. For more information about our other options, contact Janet Etzel at jetzel@usm.maine.edu. Apply now using this form.

Please note certificates may be pursued by either matriculated or non-matriculated students (students not pursuing a specific degree program).

For a list of all undergraduate LOS courses and a rotation schedule, please click here.

**Program Requirements**

**LOS 300 - Organizational Theory**

**LOS 330 - Leadership in Different Cultures or LOS 470 - Leadership Study Abroad**
Certificate in Leadership Studies

Description

The certificate you have been waiting for is now available at the University of Southern Maine’s Lewiston-Auburn College. The Leadership Studies certificate is an undergraduate certificate geared toward anyone interested in developing and expanding their leadership skills. Turn to USM-LAC and the Leadership and Organizational Studies program to learn about and meet the challenges of our dramatically changing world.

This program may be completed face-to-face, fully online, or in a combination of the two. For more information about the fully online option, contact Ashley Collins at acollins@usm.maine.edu. For more information about our other options, contact Janet Etzel at jetzel@usm.maine.edu.

Apply now using this form.

Please note certificates may be pursued by either matriculated or non-matriculated students (students not pursuing a specific degree program).

For a list of all undergraduate LOS courses and a rotation schedule, please click here.

Program Requirements

LOS 300 - Organizational Theory

LOS 301 - Group Dynamics

LOS 350 - Leadership

LCC 370 - Toward a Global Ethics

*To view course descriptions, please visit our most recent catalog page.

Recommended Course Sequence

We recommend that students start their Leadership Studies coursework with LOS300: Organizational Theory and LOS350: Leadership. Students should work with their advisors to organize the scheduling of the rest of their coursework.

Certificate in Lean Leadership

Description

The Lean Leadership Certificate is an undergraduate certificate geared toward people interested in developing and/or expanding their skills in leading continuous process improvement (lean) initiatives. “Lean” is a system of eliminating wastes in time, resources, and materials, thereby increasing value to the customer -- in any market, from manufacturing to service sectors.
For more information, contact Janet Etzel at jetzel@usm.maine.edu. Apply now using this form.

*Please note certificates may be pursued by either matriculated or non-matriculated students (students not pursuing a specific degree program).*

For a list of all undergraduate LOS courses and a rotation schedule, please click here.

**Program Requirements**

LOS 302 - Organizational Behavior

LOS 308 - Lean Systems and Methods

LOS 309 - Lean Systems and Methods Practicum

LOS 440 - Organizational Change and Development

*To view course descriptions, please visit our most recent catalog page.*

**Recommended Course Sequence**

LOS 308: Lean Systems and Methods must be taken before LOS 309: Lean Systems and Methods Practicum.

**Minor in Leadership Studies**

**Description**

One of the most exciting USM programs available! This minor provides a cross section of key courses offered by the Leadership and Organizational Studies (LOS) degree program. At a time when our communities, organizations, country, and the world are searching for leadership to guide us through new complexities and global challenges, USM students can now study leadership processes in an interdisciplinary minor, regardless of your major!

This program may be completed face-to-face, fully online, or in a combination of the two. For more information about the fully online option, contact Ashley Collins at acollins@usm.maine.edu. For more information about our other options, contact Janet Etzel at jetzel@usm.maine.edu.

For a list of all undergraduate LOS courses and a rotation schedule, please click here.

**Program Requirements**

The Leadership Minor (18 credits) consists of the following courses:

LOS 300 - Organizational Theory

LOS 301 - Group Dynamics

LOS 350 - Leadership

LCC 370 - Toward a Global Ethics

Two of the following electives complete the minor:

LOS 327 - Leading Through Conflict

LOS 330 - Leadership in Different Cultures or LOS 316 - Diversity in Organizations

LOS 440 - Organizational Change and Development
Recommended Course Sequence

We recommend that students start their Leadership Studies coursework with LOS300 - Organizational Theory and LOS301 - Group Dynamics. Students should work with their advisors to organize the scheduling of the rest of their coursework.

LOS Course Descriptions

- Undergraduate
- Graduate

Undergraduate

The Leadership and Organizational Studies program is interdisciplinary with courses that utilize a variety of active and experiential learning methods.

LOS 250 Organizational Accounting
This course will introduce students to the basic concepts of accounting that they will need to understand financial processes in private, public, and not-for-profit organizations. Cr 3.

LOS 270 Exploring Leadership on Campus
This exploratory leadership studies course is designed to approach leadership on campus and beyond as a relational phenomenon from self-development and strengths-based leadership to group dynamics and roles, complex organizations and their structures, teamwork, ethics, decision making, conflict resolution, diversity, and change. Concepts from leadership theory, current literature and research are introduced, discussed, and implemented by individual students as they develop effective leadership skills. Cr 3.

LOS 299 Writing in the Major
This course provides instruction and practice in the modes of thinking and writing applicable to leadership and organizational studies. As those in leadership positions should strive to be excellent communicators, the course goal is to increase both critical thinking and writing abilities as well as knowledge of various styles, formats, and appropriate voices. The one credit course is offered fully online. LOS majors only should take the course as soon as they start taking LOS courses. Co-requisite: LOS 300. Cr 1.

LOS 300 Organizational Theory
This is a foundational course that provides a solid overview of organizational theories in leadership. Current organizational issues are analyzed using structural, human resource, cultural, and political frameworks and the case method. Issues examined include leadership, organizational design, planning, change, decision making, communication, and control. This is an excellent course for students interested in how organizations work. Students in the LOS major must complete this required course with a grade of a B- or better as a condition of their degree. This course includes writing instruction. Prerequisite: familiarity with the Blackboard online learning community. Completion of College Writing with a C or better is required for LOS majors and preferred for all other students. Co-requisite for LOS majors only: LOS 299. Cr 3.

LOS/SBS 301 Group Dynamics
This course gives students an understanding of how people behave in groups and the skills needed by group members to participate effectively in group activities. It provides a theoretical foundation for how groups function, with focus on group process and development; and it discusses how these theories can be applied to a wide range of group settings. This course uses experiential techniques to help students develop critical skills and understanding of group dynamics. Completion of College Writing with a C or better is required for LOS majors and preferred for all other students. Co-requisite for LOS majors only: LOS 299. Cr 3.

LOS/SBS 302 Organizational Behavior
This course examines human behavior in organizations: individual, group, and organizational processes that impact workplace behaviors and organizational life. The focus is on understanding factors that contribute to organizational effectiveness and the major challenges facing organizations today. We will cover topics such as individual and organizational learning, individual values and motivation; interpersonal communication and work team dynamics, leadership and emotional intelligence, power and influence, organizational culture and change. Students will engage in experiential and skill-building activities and apply conceptual frameworks to their real-life work experiences. Cr

LOS 304 Organizational Budgeting and Finance
This course assesses the theory and practices of financial management in different forms of public and private organizations and emphasizes the relationship between financial decision making and organizational policy and strategy. Topics covered will include financial forecasting, the use of spreadsheets, and budgeting. Prerequisites: LOS 250 and LAC 112 or equivalents. Cr 3.
LOS 308 Lean Systems and Methods
This is an introductory course in applying Lean principles and methods in organizations, including front/back office manufacturing, non-profits, healthcare, IT, education and government. Students will learn basic Lean principles and methods and have an opportunity to observe, practice, and apply principles and methods learned. Cr 3.

LOS 309 Lean Systems/Methods Practicum
This supervised practicum provides an opportunity for students to apply lean principles and methods. Working in teams, students will demonstrate the ability to transfer learning from the Lean Methods and Systems course to the field as they implement projects designed to enhance value to the organization. Specific learning objectives will be set by the students and address competency in a needs assessment, the Implementation process, outcome evaluation including project results, and individual learning. Prerequisite: LOS 308 Lean Methods and Systems. Cr 3.

LOS 310 Science, Technology, and Society (SCA)
This course examines the history of science and technology, and the social changes related to them. It examines the impact of science and technology on ethical and religious beliefs, social institutions such as education, family, and work, and on larger sociopolitical entities and relations. The course also explores the effects of science and technology on natural and human-made environments. Cr 3.

LOS 311 Leadership Through Art
In this course we will explore the role of art in leadership. Built into the concept of a leader is the idea that the leader will influence people, not use brute force or manipulate them, and bring about change. The process of creating and using art teaches the artful leader about the power of imagery in communicating messages effectively. Art influences the public’s image of leaders and leadership by portraying leaders as they are or as they should be. Leaders also employ the arts to convey their ideas for societal change or a vision of a better future. Students in this class will learn basic concepts of leadership and art, analyze the ways in which leaders use art to motivate people and articulate their visions, examine the ways in which art motivates people to bring about change in society, and design a work of art that intends to motivate people, elevate people, and call for change. Cr 3.

LOS 312 Human Resource Management
This course focuses on the procedures and processes associated with the management of human resources within organizations. Topics include recruitment, staff development, job analysis, personnel systems, and training. Cr 3.

LOS 313 Professional Writing
This hands-on course will explore the types of writing and other forms of communication we use in a professional setting. By studying examples of writing in context and by creating original work, we will examine how get the point across in clear, concise and compelling language. We will also address creating strong and effective visual and verbal communication. Cr 3.

LOS 314 Employee Relations
This course provides an understanding of the trends in legal, social, and economic aspects of United States labor-management relations. Topics include a historical overview of labor law, grievance procedures, the negotiation process, equal opportunity, and personnel rules. Includes case studies and simulated bargaining and arbitration exercises. Cr 3.

LOS 315 Training and Development
This course provides students with a theoretical framework for adult learning as it applies to the training and development process. Topics covered include the assessment of learning needs and setting of objectives; the design and facilitation of learning processes such as workshops, on-the-job training, self-directed learning, web-based training, and the assessment of outcomes. Students will design and deliver a training program as a major project for this course. Cr 3.

LOS/SBS 316 Diversity in Organizations
Using historical, socio-economic, and psychological perspectives, students learn about the challenges diverse members of U.S. society, such as women, people of color, people from marginalized classes, and those from other countries have had and continue to face. Students gain an understanding of how the workplace may affect diverse peoples and how others can learn to make the workplace more hospitable. A primary focus of this course is on examining beliefs, behaviors, or unconscious attitudes that perpetuate the oppression and subordination of diverse members of society in the workplace, while also looking at how increased diversity is adding to workplace productivity, creativity, and learning. Readings are drawn from the social sciences and humanities to provide an interdisciplinary approach to the topic. Cr 3.

LOS/LAC 318 Database Management
This course introduces skills and builds proficiency in database management. It is taught on PC computers using the latest version of Microsoft Access and is designed to help students develop competencies in a variety of database processing functions. Students become proficient in setting up databases, managing data, creating reports, using report enhancements, and manipulating data. Prerequisite: Basic computer applications knowledge. Cr 3.

LOS 322 Leadership in the Public/Nonprofit Sectors
This course examines the basic processes through which public policy is formulated, adopted, and implemented in the United States. Prerequisite: junior standing or permission of the instructor. Cr 3.
LOS 323 The Media and Politics
This course explores the implications of political campaigns in American politics. Topics include management of campaigns, candidate recruitment, positive and negative advertising, political consultants, political parties and interest groups, effects of media coverage, campaign financing, and impact of campaigns and elections on public policy. Special consideration will be given to current campaigns. Cr 3.

LOS 326 Leadership in Sports
This course provides students interested in sports an opportunity to explore and deconstruct various aspects of sports leadership. Covering a wide range of material, the course will develop critical understanding of the mutually constituted link between sport, leadership, and society. To this end, it applies classical, modern, and postmodern theories of leadership to historical and contemporary sporting examples that will offer a critical view of how sport (and conceptions of sport) are constructed and represented. Micro, meso, and macro levels of analysis will be explained to assist interpretive work and to explore the complexity of the terrain as it directly relates to the study of leadership. Cr 3.

LOS 325 State and Local Government
This course is an introduction to the structure, roles, and processes of administration in state and local government. The state of Maine is a special focus of the course. Cr 3.

LOS 326 Leadership in Sports
This course provides students interested in sports an opportunity to explore and deconstruct various aspects of sports leadership. Covering a wide range of material, the course will develop critical understanding of the mutually constituted link between sport, leadership, and society. To this end, it applies classical, modern, and postmodern theories of leadership to historical and contemporary sporting examples that will offer a critical view of how sport (and conceptions of sport) are constructed and represented. Micro, meso, and macro levels of analysis will be explained to assist interpretive work and to explore the complexity of the terrain as it directly relates to the study of leadership.

LOS 327 Leading through Conflict
Conflict management is explored as an essential leadership tool and analyzed as a necessary component of healthy systems and innovations. We will investigate techniques that help individuals and groups mediate and negotiate differences encountered in a variety of situations. Cr 3.

LOS/SBS 329 Research Methods
This course is an introduction to quantitative and qualitative research methods which can be used in organizational planning and decision making and in the social and behavioral sciences. The course will cover topic areas related to the application of appropriate methods of inquiry and includes completion of an applied project. Strongly recommended for students going on to graduate school, careers in consulting, or human resource management. Prerequisite: LCC 150 or equivalent. Cr 3.

LOS 330 Leadership in Different Cultures
Students will explore leadership practices in multiple cultures and how our increasing interactions with these diverse leadership styles have changed our conception of leadership in the U.S. This course will help students determine the skills they will need to take on a leadership role in a global society. Cr 3

LOS 333 Portfolio Development: Recognizing Prior Leadership Experience and Knowledge
This Portfolio Development course is offered to the adult learner who is preparing a competency based, experiential, academic portfolio, documenting their college-level knowledge, competencies, and abilities. This course supports students in improving the skills and knowledge needed to document and communicate their prior learning in the area of leadership and organizational studies. At the end of the course, students submit a completed academic portfolio for assessment to USM's Office of Prior Learning for possible additional credits. Prerequisites: College writing or the equivalent, leadership LOS 350 either concurrently or completed, resume submission, and subsequent permission by instructor. Cr 3.

LOS 336 Dealing with Difficult People and Behaviors
It has been stated that everyone is someone's difficult person. Almost daily, we come in contact with people we would characterize as difficult. They are the people we work with, sell to, depend on, and live with. There are intimidators, manipulators, analyzers, know-it-alls, overly friendly, accommodators, chronic complainers and whiners. Their actions consume time, energy and emotion at the expense of productivity and morale. This course provides fresh insights and immediately usable skills needed to quickly, confidently and assertively identify and deal with various types of people, difficult or not, in a variety of contexts while maintaining your own self confidence. Cr 3.

LOS 345 Leadership in Film
Like literature, film allows for an exploration of various themes and experiences that would not normally be available to an individual. This course seeks to capture this opportunity by seeking to understand leadership as it is presented in various films. Through the use of film, we will explore themes relating to leadership such as power, influence, oppression, ethics, service, and more. Cr 3.

LOS 350 Leadership
This foundational course for students of leadership will provide learners with a review of major leadership concepts and theories designed to incorporate research findings, practice, skill-building, and direct application to real world scenarios. Beyond leadership concepts and theories, the course will cover a variety of topics impacting today's leaders as a foundation for learning including power and ethics, leadership development, politics and influence, decision making, and creativity and innovation. An experiential design is used along with traditional online techniques to help students reflect on their personal leadership styles and examine their approaches to leading others in diverse organizational settings. Students
in the LOS major must complete this required course with a grade of a B- or better as a condition of their degree. Completion of College Writing with a C or better is required for LOS majors and preferred for all other students. Cr 3.

**LOS 351 Exploring Transformational Leadership**
In the increasingly uncertain world of today, new leadership is needed for radical positive change. Transformational Leadership offers one such avenue for unleashing the potential in individuals and situations. This one credit course is an in depth exploration of Transformational Leadership. Students will gain an understanding of the theory, critiques of the theory and practical application of the theory. Prior Leadership courses are preferred but not required. Cr 3.

**LOS 352 Exploring Servant Leadership**
Through a unique paradox, servant-leaders seek to lead in a way that invests in the health and growth of the led while also seeking to improve the world around them. This one credit course is an in depth exploration of Servant-Leadership. Students will gain an understanding of the theory, critiques of the theory and practical application of the theory. Prior Leadership courses are preferred but not required. Cr 1.

**LOS 353 Exploring Authentic Leadership**
Authentic leadership seeks to create leaders that identify and are in tune with their true selves and then seek to lead from this place of authenticity. This one credit course is an in depth exploration of Authentic Leadership. Students will gain an understanding of the theory, critiques of the theory and practical application of the theory. Prior Leadership courses are preferred but not required. Cr 1.

**LOS 354 Exploring Chaos & Complexity Leadership**
Change is a natural part of the world around us. Often, it is the result of chaotic and complex systems interacting with one another. Acknowledging this reality, this course seeks to understand how leaders can learn from chaos theory and complex adaptive systems. The result will be a study of cutting edge leadership theory and practice that will provide students with a greater understanding of how to engage with the world as leaders. Cr 3.

**LOS 355 Exploring Relational Leadership**
Recent scholarship in the study of leadership has begun to understand and investigate the relationship nature of the leader/follow construct. As a result of this emerging body of research, this course seeks to understand leadership as a relational process. This course will explore the theory, practice and critiques of relational leadership theory in hopes of broadening students understanding of this new leadership perspective. Cr 3.

**LOS 356 Exploring Followership**
Leadership is often framed as a dyadic relationship between leader and follower. There is ample focus on the leader, but what about the other half of the relationship? This course aims to understand followership and how followers can have a significant impact on leaders and organizations. Through an exploration of theory and practice this course will prepare students to be both better followers and better leaders. Cr 3.

**LOS 360 Deliberate Creativity and Innovation**
This course is designed to develop practical skills in creative and innovative thinking that leaders can use to identify opportunities, generate value-creating ideas, and overcome barriers to successfully bringing new concepts to life. In this class, students will learn about creative thinking tools and how to practically apply them; develop an appreciation of the personal and organizational factors that influence creativity and innovation; and explore the leadership and facilitation skills that will prepare them to lead teams through creative problem solving. Cr 3.

**LOS 361 Entrepreneurship**
This course focuses on why people become entrepreneurs, the characteristics of successful entrepreneurs, the changing demographics of entrepreneurs, and the importance of entrepreneurship to the economy and society. In this class, students will examine the entrepreneurial process from the decision to become an entrepreneur through idea generating, writing a business plan, competitor analysis, getting financing, marketing, team building, considering ethical and legal issues, and developing strategies for growth. Cr 3.

**LOS 369 Exploring Careers, Choosing Life Roles**
In this mid-level course in the career development series, students relate self-knowledge to career and life roles, with an emphasis on gaining and managing career information; learning various career and life decision-making strategies; and communicating formative academic, co-curricular, and professional experiences in such formats as accomplishment statements and informal interviews. Prerequisite: LCC 123 or LCC 345. Cr 1.5.

**LOS 373 Managing Nonprofits**
This course will familiarize students with major concepts in the management of a nonprofit and will help them develop the skills to utilize this material in applied situations. Students will explore the mission of the nonprofit, marketing and funding, effective strategies for developing relationships and performance, and ways to enhance leadership skills. Cr 3.

**LOS/SBS 381 Introduction to Globalization**
This course examines the economic, political, social, and cultural aspects of globalization from an interdisciplinary perspective. The purpose is to get a sense of clarity about what globalization is, how it is affecting people around the world, and why there is an increasingly robust resistance to it on the grassroots level. We will also discuss how to empower ourselves, while being socially responsible in this rapidly changing world. Course format includes discussion, case study, and student presentation on research projects. Prerequisites: SOC 100, ANT 101, or equivalent. Cr 3.

**LOS 398 Independent Study**
Prerequisites: LOS 300 or junior standing and permission of instructor. Cr 3.

**LOS 399 Special Topics**
Topics offered will cover current special issues in organizations and/or the study of organizations through alternative methods. Cr 3.

**LOS 412 Topics in Human Resource Management**
This course will consider contemporary topics that represent emerging issues for human resource management within organizations. Cr 3.

**LOS 413 Job Search Skills for the 21st Century**
In this final course in the career development series, students assume active agency in career planning through learning how to market themselves to prospective employers. They learn to create and use the tools needed for career placement, such as cover letters, resumes, and interviews. Prerequisite: HUM/LOS/SBS/SCI 369. Cr 1.5.

**LOS/SBS 436 Risk, Public Policy, and Society**
This course considers the variety of ways in which risks, especially risks to the environment and to health, are measured, perceived, communicated, and acted upon in our society. Perspectives will be drawn from health fields, natural sciences, and political science, as well as from the social sciences. Cr 3.

**LOS 440 Organizational Change and Development**
As we move further into the twenty-first century, organizations and their leaders find themselves in highly competitive, fast-paced, and globalized environments in which change is essential for success, for their very survival. Organizations and their members must continue to learn, adapt, and evolve to keep pace with the changes occurring around them. This course is designed to provide necessary tools coupled with a better understanding of the major challenges and leadership orientations associated with initiating and implementing organizational change. We investigate theories, concepts, research, and their applications to better understand why and how organizations change. Cr 3.

**LOS 447 Internship**
This online course provides students the opportunity to work in their chosen field to evaluate their interest and acquire basic skills needed to market themselves effectively. Students participate in an online seminar in which they learn about and reflect on workplace issues. Students wishing to take more than 3 credit hours must have permission from their faculty advisors. Prerequisite: HUM/LOS/SBS/SCI 413. Cr 3-6.

**LOS 470 Leadership Abroad**
The goal of this course is to familiarize students with key issues in intercultural leadership and to provide tools to be an effective leader in a globally aware environment. Through international travel, a variety of readings, and reflection exercises, students will examine a diversity of leadership situations and the cultural factors that influence the quality of a leader's performance. In order to help apply theory to experience, students will be given a number of opportunities to articulate ideas about the concepts explored through presentation, group discussion, and writing. Prerequisite: instructor permission. Cr 6.

**Graduate** ([Back to top](#))

**LOS 500 Foundations of Leadership Studies I: Theory and Practice**
The course provides an overview of leadership theory, practice, and intellectual history using disciplinary and interdisciplinary approaches from philosophy, social science, the humanities (e.g., literature and history), and science. We explore the wealth of interpretive frameworks for leadership with the objective of increasing our understanding of this complex and multifaceted phenomenon. The study of leadership will be utilized to examine critical issues emerging today. Cr 3.

**LOS 501 Foundations of Leadership Studies II: Theory and Practice**
The goal of this course is to further the development of students' knowledge of leadership theory and practice, with a special emphasis on the individual and group levels of analysis. Throughout this interdisciplinary exploration of the diverse factors that impact leadership, students will engage in a variety of readings, discussions, writings, and exercises designed to demystify the connections between theory and practice. Cr 3.

**LOS 512 Deliberate Creativity and Innovation**
Deliberate creativity studies investigate the theory and practice of facilitation methods that enable people, processes, products, and environments to be innovative. After exploring the numerous and diverse facets of this area of study, students should be able to demonstrate (both in discussion and practice) their ability to use their learning in an applied setting. Cr 3.

**LOS 550 Cultural Contexts**
This course provides an analysis of the role that culture and cultural differences play in contemporary occupational, social/civic, and interpersonal life. The essential question for the course is: how does one show leadership in creating and supporting multicultural relationships, organizations, institutions, and socio-political and economic systems? Cr 3.

**LOS 610 Methods of Inquiry**
This course considers the concepts, principles, and methods that may be used in research for organizational and leadership studies. Quantitative and qualitative research methods that can be used in organizational planning and decision making and in the social and behavioral sciences will be considered. The course will cover topic areas related to the application of appropriate methods of inquiry. Cr 3.

**LOS 611 Communication and Relationship Building**
This course investigates the communication and behavioral theories and techniques that mediate interpersonal dynamics. Students will engage in a course of study designed to help them develop awareness of their communication abilities and difficulties and tools to effectively address the interpersonal challenges they face now and will face in the future. Cr 3.

**LOS 614 The Conflict Process**
Developing skills in framing conflicts and facilitating the communication processes that help groups mediate differences is key to successful leadership. The course examines research on leadership behaviors encountered in a variety of situations including small groups, organizations, communities, and internationally. Cr 3.

**LOS 631 Leadership in Film**
Like literature, film allows for an exploration of various themes and experiences that would not normally be available to an individual. This course seeks to capture this opportunity by seeking to understand leadership as it is presented in various films. Through the use of film, we will explore themes relating to leadership such as power, influence, oppression, ethics, service, and more. Cr 3.

**LOS 641 Exploring Transformational Leadership**
In the increasingly uncertain world of today, new leadership is needed for radical positive change. Transformational Leadership offers one such avenue for unleashing the potential in individuals and situations. This one credit course is an in depth exploration of Transformational Leadership. Students will gain an understanding of the theory, critiques of the theory and practical application of the theory. Prior Leadership courses are preferred but not required. Cr 1.

**LOS 642 Exploring Servant Leadership**
Through a unique paradox, servant-leaders seek to lead in a way that invests in the health and growth of the led while also seeking to improve the world around them. This one credit course is an in depth exploration of Servant-Leadership. Students will gain an understanding of the theory, critiques of the theory and practical application of the theory. Prior Leadership courses are preferred but not required. Cr 1.

**LOS 643 Exploring Authentic Leadership**
Authentic leadership seeks to create leaders that identify and are in tune with their true selves and then seek to lead from this place of authenticity. This one credit course is an in depth exploration of Authentic Leadership. Students will gain an understanding of the theory, critiques of the theory and practical application of the theory. Prior Leadership courses are preferred but not required. Cr 1.

**LOS 644 Exploring Chaos & Complexity Leadership**
Change is a natural part of the world around us. Often, it is the result of chaotic and complex systems interacting with one another. Acknowledging this reality, this course seeks to understand how leaders can learn from chaos theory and complex adaptive systems. The result will be a study of cutting edge leadership theory and practice that will provide students with a greater understanding of how to engage with the world as leaders. Cr 3.

**LOS 645 Exploring Relational Leadership**
Recent scholarship in the study of leadership has begun to understand and investigate the relationship nature of the leader/follow construct. As a result of this emerging body of research, this course seeks to understand leadership as a relational process. This course will explore the theory, practice and critiques of relational leadership theory in hopes of broadening students understanding of this new leadership perspective. Cr 3.

**LOS 646 Exploring Followership**
Leadership is often framed as a dyadic relationship between leader and follower. There is ample focus on the leader, but what about the other half of the relationship? This course aims to understand followership and how followers can have a significant impact on leaders and organizations. Through an exploration of theory and practice this course will prepare students to be both better followers and better leaders. Cr 3.

**LOS 651 Technology in Society**
Technology and society studies investigate the social implications of technology, the values expressed in uses of technology, and the policy decisions that affect and are affected by technological change. Students will analyze various arguments surrounding how technological change has affected the manner in which we live and how we as leaders should utilize technology in the future. Cr 3.

**LOS 661 Ethical and Spiritual Dimensions of Leadership**
What are the roles of ethics and spirituality in leadership? Where does ethics end and spirituality begin? This course approaches the study of leadership from the perspectives of meaning, values, and human connectedness. The hunger to understand our lives, be part of a larger whole, be complete, and serve are examined as they relate to the leadership process. Cr 3.

**LOS 662 Community Leadership**
This course studies how leadership principles and theories apply to the building of community. Consideration will be given to developing citizenship, volunteerism, and social equity among formal and informal leaders in communities. Cr 3.
LOS 665 Organizational Consulting: A Perspective on Leadership
In this course students learn what consultants do and how they do it effectively, including work in a local organization with a client leader who has a need. Topics include self-assessment, phases of consulting, system frameworks, intervention strategies, and ethical standards and practices. Cr 3.

LOS 670 Leadership Study Abroad
This course investigates the study and practice of leadership in other countries. Students will travel to other countries and examine leadership issues in different contexts. Cr 3.

LOS 688 Capstone Seminar
The seminar allows students the opportunity to work with faculty to develop their master's project or thesis. Seminar meetings will include collegial (student) as well as faculty critique and assistance in developing research and projects. Questions posed by both projects and theses will be discussed. The capstone advisor must approve all projects. The capstone advisor and, when appropriate, an outside reader in an area of concentration must approve thesis topics. The seminar will conclude with students identifying the key questions for their continued study of leadership. Prerequisite: LOS 610. Cr 3.

LOS 689 Master's Project/Master's Thesis
The project option requires students to design an intensive theory-based, applied project that explores the role of leadership in developing and/or implementing meaningful change in an organization or community. Each student will work with a faculty advisor. When appropriate (e.g., when students have a concentration from another graduate program), an outside reader will also be selected jointly by the student and advisor. Written analysis of the project will include a survey of relevant literature, a detailed description of the situation or change being studied, presentation of the method(s) of inquiry and data, and an analysis of the data and other outcomes. The written presentation will include an executive summary and complete bibliography. Projects will also be formally presented to other students, community members, and LAC faculty. Students will be evaluated on both their verbal and written presentation skills. The thesis option requires students to select a topic for intensive library research, reading, and analysis. It may, for example, summarize and analyze work in new methods or contribute a new theoretical proposal that calls for further testing or research. This work will be designed to produce an article of interest for the field of leadership studies. With a thesis advisor, the student will identify an appropriate professional or academic outlet for publication, and the paper will be prepared and submitted to this outlet. Students will formally present their theses to students, community members, and LAC faculty. Students will be evaluated on both their verbal and written presentation skills. Cr 3.

LOS 698 Independent Study Cr 3.
Natural and Applied Sciences

BA in Natural and Applied Sciences

Description

The Natural and Applied Sciences (NAS) Program graduates students with refined analytical reasoning skills that practice applied techniques in data collection while showing a strong content background on the intersection of human and environmental health, and proficiency in clear, succinct, modern modes of communication. The faculty of NAS apply several key themes associated with a transformative and applicable liberal arts education in the sciences: Quantitative Analysis, Critical Thinking, Communication, and Applied Laboratory Skills.

Study in the NAS Program provides a substantial foundation across the physical and life sciences while allowing the student, through judicious choice of electives, to focus their major along a pathways suitable for entry into a variety of fields including graduate and professional programs. Students can shape their learning to achieve careers in a variety of career paths:

Biotechnology, conservation biology, epidemiology, environmental science, health fields including dentistry, medicine, nursing, pharmacy, or public health; laboratory management, molecular biology, natural resource management, occupational therapy, secondary life sciences education

Professional programs associated the NAS such as Teacher Education Certification and the MOT Jumpstart program have slightly different requirements and fewer elective options.

If you have questions regarding whether a particular class may be substituted for or meets a requirement, speak with your advisor.

Program Requirements

Students with extensive transfer credit may be granted waivers or course equivalencies for certain classes. Discuss these options with your advisor.

NAS Required Classes (55.5 credits)

100 Level 25 credits

MAT 108 College Algebra 4 cr
MAT 140 Pre-Calculus Mathematics  4 cr
SCI 113/114 Principles of Chemistry I and Lab 4 cr
SCI 115/116 Principles of Chemistry II and Lab 4 cr
SCI 105/106 Biological Principles I and Lab 4.5 cr
SCI 107 Biological Principles II w/ Lab 4.5 cr

200 Level 7 credits

LCC 230 Environmental Science, Policy, and Sustainability w/Lab
(NAS student waive LCC 130 and instead are required to take LCC 230, see below)
SCI 209 Human Genetics 3 cr
SCI 252 Medical Microbiology w/Lab  4 cr

300 Level 14.5 credits

SCI 305 Molecular Physiology w/ Lab  4 cr
SCI 315 Environmental Health  3 cr
SCI 360 Sustainability Issues  3 cr
SCI 355 Ecology w/ Lab 4.5 cr

400 Level 3 credits

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SCI 440 Sustainability Projects  3 cr

**Career Development Sequence  6 credits**

SCI 369  Exploring Careers, Choosing Life Roles 1.5 cr  
SCI 413  Job Search Skills for the 21st Century 1.5 cr  
SCI 447  Internship 3 cr

**Lewiston-Auburn Common Core (~ 39 credits)**

Besides major requirements and electives, students are required to complete the [Lewiston-Auburn Common Core](#) which integrates tightly with the major and a [Thematic Cluster](#) which, in total, consists of minimum an additional 39 credit hours. For a NAS major, this would include:

LCC 110 or LCC 111, LCC 150, LCC 123 or LCC 345,  LCC 230, LCC 220 or LCC 320, LCC 200, LCC 250, LCC 370, LCC 480 plus a Thematic Cluster.

Certain thematic clusters compliment the NAS degree better than others or have prerequisites met by the degree. Consult with your adviser for more options.

**Student Selected Electives minimum 25.5 hrs**

Of the remaining 120 credits required for graduation, students can choose electives to fit their desired academic outcomes. For a degree in Natural and Applied Sciences, this should consist of at least 9 credits of science and/or math courses and 9 credits being at the 300+ level.

**Total Credits Required 120 Credits**

**Recommended Course Sequence**

NAS Recommended Sequence (* denote lab courses)

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MAT 108 (4)</td>
<td>MAT 142 (4)</td>
</tr>
<tr>
<td></td>
<td>SCI 105/106 (4.5)*</td>
<td>SCI 107 (4.5)*</td>
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<tr>
<td></td>
<td>LCC 110/111 (3)</td>
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<td></td>
<td>LCC 150 (3)</td>
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<tr>
<td></td>
<td>14.5 credit hours</td>
<td>14.5 credit hours</td>
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<tr>
<td>2</td>
<td>SCI 113/114 (4)*</td>
<td>SCI 115/116 (4)*</td>
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<tr>
<td></td>
<td>LCC 230 (4)*</td>
<td>SCI 252 (4)*</td>
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<tr>
<td></td>
<td>SCI 209 (3)</td>
<td>LCC 200 (4)</td>
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<tr>
<td></td>
<td>LCC 220/320(3)</td>
<td>Elective (3)</td>
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<tr>
<td></td>
<td>14 credit hours</td>
<td>15 credit hours</td>
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<td>LCC 250 (3)</td>
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<td>Elective (3)</td>
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<tr>
<td></td>
<td>Cluster (3)</td>
<td>Elective (3)</td>
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<tr>
<td></td>
<td>SCI 360 (3)</td>
<td>SCI 305 (4)*</td>
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<td></td>
<td>LCC 370 (4)</td>
<td>SCI 369 (1.5)</td>
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<tr>
<td></td>
<td>16.0 credit hours</td>
<td>SCI 413 (1.5)</td>
</tr>
<tr>
<td>4</td>
<td>LCC 480 (3)</td>
<td>SCI 315 (3)</td>
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<td></td>
<td>SCI 355 (4.5)*</td>
<td>SCI 447 (3)</td>
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</tr>
<tr>
<td></td>
<td>9 cr elective at 300 level</td>
<td>9 cr elective in science or math</td>
</tr>
</tbody>
</table>

**Concentration in Elementary Education, Natural and Applied Sciences major**

**Description**
This innovative program is available to students majoring in Arts & Humanities or Natural & Applied Sciences. Upon successful completion of this 120 credit hour program students earn their bachelor's degree as well as certification to teach K-8 General Elementary in the State of Maine. For more information on the K-8 Arts & Humanities track consult that portion of this catalog.

**Program Requirements**

**Natural & Applied Sciences/K-8 General Elementary**

**Education Courses:** 50 credit hours

- EDU 305 Foundations of Cultural & Linguistic Diversity 3
- LAE 200 Education in the U.S. 4
- LAE 320 Applied Skills 4
- LAE 405 Teaching Math in Grades K-8 3
- LAE 451 Teaching Social Studies in Grades K-8 3
- LAE 452 Teaching Science in Grades K-8 3
- LAE 465 Teaching Reading in Grades K-8 3
- LAE 466 Teaching Writing in Grades K-8 3
- LAE 480 Portfolio Seminar 3
- LAE 490 Student Teaching 9
- MAT 242 Applied Problem Solving 3
- HRD 200 Human Growth and Development 3
- SED 335 Students with Exceptionalities in General Education 3
- SED 420 Multi-tiered Systems for Educational Support 3

**Lewiston Common Core:** 24-25 credit hours

- LCC 110/111 College Writing 3-4
- LCC 150 Statistics for Informed Decisions 3
- LCC 200 Creative Critical Inquiry 4
- LCC 220 U.S. Democracy 3
  - Or LCC 320 Sustaining Democracy
- LCC 230 Environmental Science 4
- LCC 250 Thinking About the Arts 3
- LCC 370 Toward Global Ethics 4

**NAS Requirements:** 29 credit hours

- SCI 105/106 Biological Principles I 4.5
- SCI 107 Biological Principles II 4.5
- SCI 113/114 Chemistry I 4
- SCI 115/116 Chemistry II 4
- SCI 150 Physics and Biomechanics 3
- SCI 170/171 Human Anatomy & Physiology I 4.5
- SCI 240 Applied Botany 4.5

**English Content Elective:** 3 credit hours

Any course that meets State of Maine English content requirements.

**Science Elective:** 4 credit hours

Any science course with lab.

**Social Studies Content Elective:** 3 credit hours

Any course that meets State of Maine Social Studies content requirements.

**General Electives:** 6-7 credit hours

**Additional Program Requirements:**

- **Before Beginning Year Two:**
  - Passing Praxis I: Reading, Writing, Mathematics
  - Submit formal application to teacher education program
  - TK20 activation
  - Complete NETS-S Assessment
• Have a minimum GPA of 3.0 and maintain minimum GPA of 3.0 through rest of program.
• Must pass fingerprinting and background check.

Before Beginning Year Four:
• Passing Praxis II: Elementary Content Knowledge
• Demonstrate NETS-S Standards
• Successful completion of LAE 200, LAE 320, EDU 305, SED 335, and SED 420 with a B or better.
• Complete candidacy application process

Program Completion:
• Cumulative minimum GPA of 3.0 Core and major coursework require a grade of C or better. Professional education coursework require a grade of B or better.
• Demonstration of NETS-T standards and InTASC standards, successful completion of program and major requirements.

Tk20 Subscription:

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: http://usm.maine.edu/educatorpreparation

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed with in the context of the Unit’s data management system (i.e., Tk20).

Concentration in Secondary Education, Natural and Applied Sciences major

Description

This innovative program is available to students majoring in Natural & Applied Sciences. Upon successful completion of this 120 credit hour program, students earn their bachelor's degree as well as certification to teach Secondary Education in the State of Maine for the following content areas of Life Sciences. This pathway has significant deviations from the Natural and Applied Sciences BA, particularly in the area of electives.

This Bachelor of Arts program in Natural and Applied Sciences offers the required courses to obtain secondary teacher certification (Grades 7-12) in Life Science in the State of Maine. Students study the sciences, common core, education courses, and complete a semester of student teaching in their final year. The program enables NAS students to matriculate in a four-year undergraduate program that awards them a bachelor's degree in Natural and Applied Sciences while also qualifying for a State of Maine teaching certificate.

Program Requirements

Natural and Applied Sciences/Secondary Life Science

Education Courses: 35 credit hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 305 Foundations of Cultural &amp; Linguistic Diversity</td>
<td>3</td>
</tr>
<tr>
<td>LAE 200 Education in the U.S.</td>
<td>4</td>
</tr>
<tr>
<td>LAE 320 Applied Skills</td>
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</tr>
<tr>
<td>LAE 401 Teaching Science in Grades 7-12</td>
<td>3</td>
</tr>
<tr>
<td>LAE 410 Internship in Science in Grades 7-12</td>
<td>3</td>
</tr>
<tr>
<td>LAE 480 Portfolio Seminar</td>
<td>3</td>
</tr>
<tr>
<td>LAE 490 Student Teaching</td>
<td>9</td>
</tr>
<tr>
<td>SED 335 Students with Exceptionalities in General Education</td>
<td>3</td>
</tr>
<tr>
<td>SED 420 Multi-tiered Systems of Educational Support</td>
<td>3</td>
</tr>
</tbody>
</table>
Lewiston Common Core: 24-25 credit hours
LCC 110/111 College Writing 3-4
LCC 150 Statistics 3
LCC 200 Creative Critical Inquiry 4
LCC 220 U.S. Democracy 3
or LCC 320 Sustaining Democracy
LCC 230* Environmental Science 4
LCC 250 Thinking About the Arts 3
LCC 370 Global Ethics 4

Thematic Cluster Courses: Credits Already Counted Above
EDU 305 Foundations of Cultural & Linguistic Diversity
SED 335 Students with Exceptionalities in General Education
SED 420 Multi-tiered Systems of Educational Support

NAS Required Courses: 36.5 credit hours
MAT 108 College Algebra 4
MAT 148 Applied Calculus 3
SCI 105/106* Biological Principles I w/ Lab 4.5
SCI 107* Biological Principles II w/Lab 4.5
SCI 113/114 Principles of Chemistry I w/ Lab 4
SCI 170/171* Human Anatomy & Physiology w/ Lab 4.5
SCI 209* Genetics 3
SCI 240* Applied Botany w/ Lab 4.5
SCI 355* Ecology w/ Lab 4.5

Life Science Content Electives*: 6.5 credit hours
Any science course that meets approved Life Science content.

General Elective: 17-18 credit hours

Total Credits 120

*Life Science endorsement obtained by at least 24 hours in life science. These required courses provide 26.5 hours. Students intending to teach at the high school level are strongly encouraged to earn a total of 36 content hours by using 6.5 hours of life science content electives**. If student doesn’t want/need these additional 9.5 hours of content they may be replaced with general electives.

Additional Program Requirements:

- **Before Beginning Year Two:**
  - Passing Praxis I: Reading, Writing, Mathematics
  - Submit formal application to teacher education program
  - TK20 activation
  - Complete NETS-S Assessment
  - Have a minimum GPA of 3.0 and maintain minimum GPA of 3.0 through rest of program.
  - Must pass fingerprinting and background check.

- **Before Beginning Year Four:**
  - Passing Praxis II: Elementary Content Knowledge
  - Demonstrate NETS-S Standards
  - Successful completion of LAE 200, LAE 320, EDU 305, SED 335, and SED 420 with a B or better.
  - Complete candidacy application process

- **Program Completion:**
  - Cumulative minimum GPA of 3.0 Core and major coursework require a grade of C or better. Professional education coursework require a grade of B or better.
  - Demonstration of NETS-T standards and InTASC standards, successful completion of program and major requirements.

Tk20 Subscription:
All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement,
field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: http://usm.maine.edu/educatorpreparation

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed with in the context of the Unit’s data management system (i.e., Tk20).

NAS MOT JumpStart

It is possible to obtain both a BA in Natural and Applied Science and a Masters in Occupational Therapy using the JumpStart (3+2) option. Students may complete their undergraduate AND graduate education in five (5) years by selecting this option. Students should begin their academic career and identify as JumpStart when they matriculate into the Natural and Applied Sciences undergraduate program. At the start of their Junior year, the student must apply to the MOT program. See program specifics below:

During their final year, students complete the following as they plan to enter the program:

USM Core curriculum requirements
Academic major requirements
MOT prerequisite requirements.

The Jump Start option does not guarantee admission to the MOT program. Students must qualify in the same manner as any other applicant to the MOT program. Contact the Student Success Center for an advising appointment or more information at (207) 753-6536.

Students electing for the JumpStart program have slightly different requirements and fewer elective choices (due to meeting the prerequisites for entry into the Occupational Therapy program) than the standard NAS Bachelors of Arts. These specific electives are marked with a * below. If a student does not enter or complete the MOT program, they will need to complete additional classes shown on the NAS degree page before graduation.

NAS Required Classes (50 credits)

- MAT 108 College Algebra 4 cr
- SCI 113/114 Principles of Chemistry I and Lab 4 cr
- SCI 115/116 Principles of Chemistry II and Lab4 cr
- SCI 105/106 Biological Principles I and Lab 4.5 cr
- SCI 170/171 Human Anatomy & Physiology I & Lab 4.5 cr*
- SCI 270/271 Human Anatomy & Physiology II & Lab 4.5 cr*
- SCI 107 Biological Principles II w/ Lab4.5 cr
- SCI 209 Human Genetics 3 cr
- SCI 252 Medical Microbiology w/Lab4 cr
- SCI 305 Molecular Physiology w/ Lab4 cr
- SCI 315 Environmental Health 3 cr
- SCI 380 Pathophysiology I 3 cr*
- SCI 381 Pathophysiology II 3 cr*

Lewiston-Auburn Common Core (~ 35 credits)

Besides major requirements and electives, students are required to complete the Lewiston-Auburn Common Core which integrates tightly with the major and a USM Thematic Cluster which consists of minimum an additional 35 credit hours. For a NAS-OT JumpStart student, this would include:

LCC 110 or LCC 111, LCC 123 or LCC 345, LCC 150, LCC 200, LCC 220 or LCC 320, LCC 230, LCC 250, LCC 480 plus three additional Thematic Cluster Courses.

Certain thematic clusters compliment the NAS/MOT degrees better than others or have prerequisites met by the degree. Consult with your adviser for more options.
MOT Prerequisites

Students are also required to complete the following OT specific prerequisites with a "B" or better:

HRD 200 or PSY 220, SOC 100, SBS 303, SCI 150 or SCI 250, as well as a non-credit Medical Terminiology course available through Adult Education.

Transition to MOT

Once these items are completed and the student is admitted into the Occupational Therapy program, the student will begin taking graduate coursework consisting of the required classes for the Masters in Occupational Therapy.

NAS Course Descriptions

Note: Many classes have prerequisites that need to be met before registration. At times, though, these prerequisites can be waived by the instructor if similar classes have been taken in the past by the student. If you are having trouble registering, please contact your advisor or the instructor to seek a waiver.

SCI 105 Biological Principles I
An introduction to scientific principles underlying the unity and diversity of life. Prerequisite: students must have fulfilled the University minimum proficiency requirements in writing and mathematics. Cr 3.

SCI 106 Laboratory Biology I
Laboratory experiences illustrating concepts and principles introduced in SCI105. Must be taken concurrently with SCI 105. Cr 1.5.

SCI 107 Biological Principles II w/ Lab
This is an integrated lecture-laboratory course introducing students to biological diversity. The lecture and laboratory each meet three hours weekly. Prerequisites: SCI 105 and SCI 106 with a grade of C or higher. Cr 4.5.

SCI 108 Chemistry for Health Sciences
This is a one-semester introduction to general, organic, and biological chemistry that is specifically tailored for students in the health sciences. The course lays a foundation for the interactions that take place between small molecules, large molecules, and biological molecules. The class will initially focus on the language of chemistry and qualitative description of how chemical reactions take place. This includes a basic model for the electronic structure of atoms and molecules, and extending to the physical/chemical properties of a material. This foundation serves as a basis for the descriptive chemistry of functional groups of interest in biology, biochemistry and biological molecules such as carbohydrates, proteins, and lipids. This course is not suitable for chemistry majors or biology majors. This course meets the chemistry requirements for entry into the USM Nursing program. Cr 3.

SCI 113 Principles of Chemistry I
A presentation of fundamental principles of chemical science. These principles will be presented in quantitative terms and illustrated by examples of their applications in laboratories and in ordinary non-laboratory experience. This course and SCI 114 (normally taken concurrently) provide the basis for further study of chemistry. Prerequisite: MAT 108 Cr 3.

SCI 114 Laboratory Techniques I
Laboratory experiments to illustrate the principles that are presented in SCI 113 lectures. Three laboratory hours per week combining recitation and practical lab work. Corequisite: SCI 113. Cr 1.

SCI 115 Principles of Chemistry II

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A continuation of SCI 113. This course is designed to provide the foundation for all further studies in chemistry and is a prerequisite for all upper-level chemistry courses. Prerequisite: SCI 113 or CHY 113. Cr 3.

SCI 116 Laboratory Techniques II
Laboratory experiments to illustrate the principles that are presented in SCI 115 lectures. Three laboratory hours per week combining recitation and practical lab work. Prerequisite: SCI 114. Co-requisite: SCI 115. Cr 1.

SCI 153 AIDS: Biology, Social Policy, and the Law
AIDS is by definition a multi-disciplinary phenomenon that greatly impacts social policy, health care systems, personal relationships, the criminal justice system, and the legal system. To address the biomedical, ethical, and legal issues raised by AIDS in society, this course will inform students of the legal and public policy ramifications of AIDS while grounding this analysis in the biological and virologic facts of the disease. Cr 3.

SCI 170 Human Anatomy and Physiology I (SE)
This is the first course in a two-semester sequence in human anatomy and physiology. It introduces basic principles of physiology and anatomy through chemistry, cellular structure and function, genetics, and embryology. This course discusses several physiologic systems including the muscular, skeletal, nervous and integumentary systems. Prerequisites: students should have an understanding of basic biology and chemistry from high school courses or GED. SCI 170 must be taken concurrently with SCI 171. Cr 3.

SCI 171 Human Anatomy and Physiology I Laboratory (SE)
Laboratory experiences illustrating topics introduced in SCI 170. Must be taken concurrently with SCI 170. Cr 1.5

SCI 199 Special Topics
This is a class that has topics that vary from year to year and is meant to be taught at the introductory level with a minimum of prerequisites. Cr. 3-4

SCI/SBS 209 Human Genetics
This course examines the role of heredity in human growth, development, and behavior. Decision making, ethical issues and societal responsibilities related to genetic disorders will be discussed. Prerequisite: LCC 130 or SCI 170 or SCI 105. Cr 3.

SCI 240 Applied Botany w/Lab
The growth, structure, reproduction, and physiology of plants will be studied, and the role of plants in human affairs will be discussed in this combined lecture and laboratory/field course. Prerequisites: SCI 105/106. Cr 4.5

SCI 250 Applied Physics w/ Lab
An introductory course with a comprehensive presentation of the basic concepts and principles of physics. Lecture, problem solving, and laboratory experiments serve to strengthen the understanding of classical mechanics, vibrations and wave motion, light and optics. The course focuses on sound physical arguments and discussion of everyday experiences while providing practical examples that demonstrate the role of physics in other disciplines. Knowledge of spreadsheet software and trigonometry is essential. Prerequisite: MAT 108. Cr 4.

SCI 252 Medical Microbiology w/ Lab
This lecture and laboratory course introduces basic medical microbiology and focuses on the viruses, bacteria, protozoans, and multi-cellular organisms which cause human diseases. It also discusses epidemiology and the immune system. This course meets the requirements of nursing and allied health programs. Prerequisite: SCI 107 or SCI 270/271. Cr 4.

SCI 270 Human Anatomy and Physiology II
This is the second course in a two-semester sequence in human anatomy and physiology. Topics in this course will include the nervous system, special sense organs, blood and circulatory system, immune function, respiratory system, digestion and metabolism, endocrine function, renal function, and electrolyte balance. Prerequisites: SCI 170 and SCI 171. Must be taken concurrently with SCI 271. Cr 3.

SCI 271 Human Anatomy and Physiology II Laboratory
Laboratory experiences illustrating topics introduced in SCI 270. Must be taken concurrently with SCI 270. Cr 1.5.

SCI 305 Molecular Physiology w/ Lab
This lecture and lab course examines the linkage between cellular and organismal events and those at the molecular level. Particular attention is given to DNA replication, signal transduction and the control of transcription, genomics, proteomics, metabolism, and the compartmentalization of cellular functions. Prerequisites: SCI 209 and SCI 252. Cr 4.

SCI 315 Environmental Health
This course explores issues in environmental health from the dual perspectives of environmental issues and human health. A healthy environment includes species diversity, bountiful resources, and the absence of pollutants. Environmental health comprises those aspects of human health and disease that are determined by factors in the environment. It also refers to the theory and practice of assessing and controlling factors in the
environment that can potentially affect human health. Prerequisites: LCC 230. Cr 3.

SCI/SBS 336 Introduction to Public Health
This course provides an overview of the public health system and examines the purpose, history, organization, approach, functions and determinants of health. The course places special emphasis on current health issues from our daily lives to highlight the relevance of public health. Trends, successes and challenges from a population perspective will be discussed as well as various tools and techniques used to address public health issues. Cr 3.

SCI/SBS 337 Introduction to Epidemiology
This seminar course introduces the student to epidemiology as a utility for the establishment and maintenance of public health. In essence, epidemiology involves the observation and statistical analysis of the occurrence of health and disease in human populations. This science informs the practice of preventive health/disease control and the formulation of public health policy. Seminar topics will be drawn from both infectious and chronic disease epidemiology ranging from the historical plagues such as the Black Death to the modern plagues of AIDS, cancer, and obesity. Recommended prerequisites include Introductory Biology and Statistics. Cr 3.

SCI 350 Science Projects
This course is an independent study under the direction of a faculty member. Students develop and complete a laboratory or library project. Cr 1-3.

SCI 355 Ecology w/ Lab
This lecture and laboratory course examines the theoretical bases upon which ecological investigations are based. The laboratory portion of the course consists primarily of fieldwork during which students complete an ecological assessment of local habitat. Prerequisites: SCI 105/106 and LCC 230 or ESP 101. Cr 4.5.

SCI 359 Cancer and Society
This course will use an epidemiological framework to explore the scientific background and genetic, social, physical, and biological determinants of cancer. The course will examine the response of individual, family, and society to a diagnosis of cancer. Traditional and non-traditional medical approaches to a diagnosis of cancer will be explored. This course is approved as a substitute for LCC 310. Cr 3.

SCI 360 Sustainability Issues
Sustainability is one idea that shapes the past and future of the human race. The goal of this course is to allow students to develop a comprehensive worldview from which to evaluate current environmental issues and problems. Students will discuss concepts and data derived from the disciplines of ecology, biology, ethics, sociology, and politics and application of those concepts to sustainable development and the sociopolitical ramifications of environmental issues. Prerequisites LCC 230 and SCI 107. Cr 3.

SCI 365 Marine and Coastal Biology w/ Lab
A field-based course examining three major coastal habitats: the rocky shore, the sand beach, and the salt marsh along with the interactions among the living organisms in the earth's oceans. The course will focus on the relationships between the different aquatic trophic levels. Topics include species systematics and adaptations, ecosystem structure, and the relationship between humans and the biological systems. Where possible, local field examples will be utilized to illustrate these points. Prerequisites: SCI 107 and LCC 230 or ESP 101. Cr 4.

SCI 369 Exploring Careers, Choosing Life Roles
In this mid-level course in the career development series, students relate self-knowledge to career and life roles, with an emphasis on gaining and managing career information; learning various career and life decision-making strategies; and communicating formative academic, co-curricular, and professional experiences in such formats as accomplishment statements and informal interviews. Prerequisite: LCC 123 or LCC 345. Cr 1.5.

SCI 380 Pathophysiology I
This course examines the physiologic, biochemical, genetic, and environmental basis of noninfectious diseases. Emphasis will be placed on inflammation, immunity, cancer, fluid, electrolytes, and acid-base balance as well as the cardiovascular, endocrine, and respiratory systems will be studied. This course meets the pathophysiology requirement for entry into the USM Nursing program. Prerequisites: SCI 270/271 and SCI 252. Cr 3.

SCI 381 Pathophysiology II
This course examines the physiologic, biochemical, genetic, and environmental basis of noninfectious diseases. The nervous, hematologic, renal, digestive, reproductive, muscular and skeletal systems will be studied. Microscopic pathology of selected diseases will be examined. SCI 380 is not a prerequisite. Prerequisites: SCI 270/271 and SCI 252. Cr 3.

SCI 398 Independent Study
Prerequisite: permission of the instructor. Cr 1-6.

SCI 399 Special Topics
This is a class that has topics that vary from year to year and is meant to be taught at the junior or senior level and may include prerequisites. Cr
SCI 413 Job Search Skills for the 21st Century
In this final course in the career development series, students assume active agency in career planning through learning how to market themselves to prospective employers. They learn to create and use the tools needed for career placement, such as cover letters, resumes, and interviews. Prerequisite: HUM/LOS/SBS/SCI 369. Cr 1.5.

SCI 421 Natural Resource Policy
Examination of natural resource policies and evaluation procedures used by natural resource decision makers. Case studies focus on topics such as forest industry regulations, the Endangered Species Act, the Maine Environmental Priorities Project, transboundary ecosystems, aquatic and estuarine areas, and marine resources. Emphasis is on natural resource policy processes, conflict resolution through consensus building, and comparative risk assessment as it pertains to policy. Prerequisite: LCC 230 Cr 3.

SCI 440 Sustainability Projects
Students completing Sustainability Projects will develop understanding of the depth and meaning to the term "sustainability" and its differentiation from "sustainable development". This may include topical material on Sustainability Principles, Local and Global Climate Change, and Consumption Patterns in the developed and developing world with an eye towards local and regional consumption patterns. Also topics of Environmental Refugees, population transitions and migration, utilizing Maine examples, may be explored as well as general ecosystem threats and challenges. Topics will center on the Human Animal as a sustainable individual and species and local food production (fad or changing marketplace). Outcomes include: Relevant literature review and problem awareness, challenge determination, proposal writing and presentation, community-based challenge protocol formulation; field experiences & report writing and community presentation. Prerequisites: SCI 360 or SCI 315 Cr 3.

SCI 447 Internship
This online course provides students the opportunity to work in their chosen field to evaluate their interest and acquire basic skills needed to market themselves effectively. Students participate in an online seminar in which they learn about and reflect on workplace issues. Students wishing to take more than 3 credit hours must have permission from their faculty advisors. Prerequisite: HUM/LOS/SBS/SCI 413. Cr 3-6.

SCI 450 Science in the Classroom
This integrated lecture and laboratory course is designed for secondary teachers, summer camp counselors, parents, and others who wish to interest children in science. The course discusses the history of science teaching, science reform movements, and the development of science lesson plans. It provides knowledge of basic science and gives examples of inexpensive experiments which children can perform. Emphasis is placed on integrating science with the arts, math, humanities, and with social sciences. Maine State Department of Education, Division of Certification and Placement, accepts this course as an elementary science methods course. Cr 3.

MAT 242 Applied Problem Solving
This course is designed to introduce mathematical concepts and apply them to solving problems in various contexts. The focus will be on mathematical ideas required by Maine's Learning Results. Topics include sets, functions, logic, numeration systems, number theory, geometry, and calculus. Students will formulate key questions, gather and organize data, discover patterns and similarities, interpret and communicate information. Offered only at Lewiston-Auburn College. Prerequisite: MAT 108 Cr 3.
Social and Behavioral Sciences

BA in Social and Behavioral Sciences - Counseling Concentration

Description

A concentration is a way of organizing the six required SBS electives. The Counseling concentration provides students with an introduction to theory, topics, and skill areas relevant to professional applications in counseling. Organizing the choice of SBS electives through adoption of this concentration strengthens students’ preparation for entry into variety of positions in or related to the helping professions, as well as for the pursuit of graduate study. Students doing so should complete the necessary paperwork so that the counseling concentration appears on their transcripts.

Two foundational courses are required, plus one each from categories below. Substitutions must be approved by a faculty adviser. Any student who wants to fulfill the MHRTC (Mental Health Rehabilitation Technician - Community) certificate for the State of Maine should work closely with an advisor as early as possible. The counseling concentration is currently approved for MHRT/C provisional level B accreditation, while completing the MHRT/C subtrack within the Counseling Concentration earns full MHRT/C accreditation.

If you are interested in Social Work, use the following advising sheet to plan your career: Advising Sheet

Note: For the Counseling Concentration, the required Internship (SBS 447) must be in a clinical-type setting.

Program Requirements

In addition to the requirements listed in the BA, the following requirements apply to the Counseling Concentration:

Foundational courses for everyone pursuing this concentration:

- SBS 311 Theories of Personality
- SBS 411 Counseling and Psychotherapy

Four additional electives for concentration – Choose one course from each of the following four groups of courses. Any substitutions must be approved by faculty advisor:

Psychosocial Disorders and Services:
- SBS 303 Abnormal Psychology
- SBS 346 Introduction to Social Services
- SBS 348 Responding to Mental Health Crisis in the Community
- SBS 350 Psychosocial Disorders of Childhood and Adolescence

Diversity and Multiculturalism:
- SBS 315 The Social Psychology of Disabilities
- SBS 316 Diversity in the Workplace
- SBS 345 Diversity: Many Voices
- SBS 360 Culture, Behavior, and Personality
- SBS 470 Study Abroad

Developmental Contexts:
- SBS 305 Child Development
- SBS 306 Adolescence
- SBS 307 Midlife and Development
- SBS 341 The Family

Applied Topics:
- SBS 304 Food, Culture, and Eating
- SBS 308 Health, Illness, and Culture
- SBS 342 Gerontology
- SBS 343 Substance Abuse
- SBS 344 Violence: Causes and Control
BA in Social and Behavioral Sciences - Early Childhood Studies Concentration

Description

This concentration (also available as a minor) provides the skills needed of professionals working with young children and their families, and provides the academic background required for graduate study or advanced training in the field. Students pursuing ECS as either a minor or a concentration should complete the necessary paperwork so that ECS appears on their transcript. SBS students pursuing a minor in ECS are required to take at least four extra SBS electives in addition to the requirements of the major. These can be met in various ways. In contrast, a concentration is simply a way of organizing the 6 required SBS electives, one from each of the categories below. Any substitutions must be approved by faculty advisor.

Early Childhood Teacher certification (081): In addition to supporting early educators, the state has tried to address the needs of parents, public schools, and community members by creating several new specialized credentials. These credentials will help to ensure that early educators have specialized training specific to the developmental levels of the children with whom they work. A track for the State of Maine's Early Childhood Teacher certification (081) is now available through the SBS degree. Please see the Maine Department of Education website for full requirements.

The ME EC Teacher Certification 0-5 (081 Endorsement) allows graduates to teach in a variety of early childhood settings, including inclusive pre-kindergarten classrooms located in public schools. Graduates must submit an initial application, fee and official transcripts to The Maine Department of Education (DOE) Certification. The DOE will then complete an evaluation sending back a letter (checklist) indicating the requirements met (such as courses already approved for credit toward the certification) and any remaining requirements. The EC 0-5 Teacher Endorsement is an additional and different certification than the K-3 (029) or K-8 (020) Endorsement.

In public early care and education programs such as school-based pre-K programs and kindergartens, early educators are required to hold a bachelor’s degree and certifications or licenses specific to their field. For example, in school-based pre-K programs, early educators must have a bachelor’s degree in early childhood, a state of Maine teaching certificate, and an additional early childhood teacher endorsement, the Endorsement 081.

The Endorsement 081: Early Childhood Teacher (Birth to School Age), is for pre-K educators. Endorsement 081 is intended to support appropriate early education learning experiences by ensuring that all educators working in public school pre-K programs have specialized knowledge of early childhood development. As of 2011, all public school pre-K programs will be required to have a lead teacher who has both a valid Maine state teaching certificate and Endorsement 081.

Program Requirements

In addition to the requirements listed in the BA, the following requirements apply to the Early Childhood Studies Concentration:

Choose one course from each of the following six groups of courses. Any substitutions must be approved by faculty advisor:

Child Development
- SBS 305 Child Development
- SBS 309 The Psychology of Attachment in Early Childhood
  Note: SBS 309 would be an appropriate choice for students with significant prior learning in developmental psychology. SBS 309 is not recommended for students in other majors who are taking a Minor in ECS.

Family
- SBS 341 The Family

Leadership
- SBS 301 Group Dynamics
- SBS 302 Interpersonal Behavior
Systems
EDU/LAE 200 Education in the U.S
SBS 310 Childhood and Society
SBS 346 Introduction to Social Services

Children and Evaluation
SBS 350 Psychosocial Disorders of Childhood and Adolescence
SBS 375 Infant Mental Health
SBS 450 Approaches to Assessing Individual Differences in Children

Teaching/Preparing Children for Learning
EDU 336 Children’s Literature
SBS 340 Language Acquisition and Literacy Development

**BA in Social and Behavioral Sciences - Public Health Concentration**

**Description**

The Public Health concentration is intended to help SBS majors structure the choice of their electives and to prepare them to become decision makers and policy advocates. It is also intended to shape their ability to understand myriad public health concerns and their facility in applying pertinent theoretical and practical knowledge to create a safe and functioning society. Professions that utilize knowledge of public health may be in delivery of mental health services, gerontological services, or child and family services. Students should formally specify a Concentration in PH through completion of the necessary paperwork through the Student Success Center so that it appears on their transcript.

**Program Requirements**

In addition to the requirements listed in the BA, the following requirements apply to the Public Health Concentration:

The following courses are required:

- SBS 308 Health, Illness, and Culture
- SBS 335 Legal Issues in Health and Human Services
- SBS/SCI 336 Introduction to Public Health
- SBS/SCI 337 Introduction to Epidemiology

One elective course will be chosen from the following:

- SBS 304 Food, Culture and Eating
- SBS/SCI 399 Public Health Nutrition

One elective course will be chosen from the following:

- SBS 333 Death, Dying, and Denial
- SBS/LOS 338 Health Care Policies
- SBS 341 The Family
- SBS 343 Substance Abuse (Note: CON 497 Substance Use and Abuse: Issues and Policies may substitute for SBS 343)
- SBS 344 Violence: Causes and Control
- SBS 345 Diversity: Many Voices
- SBS 350 Psychosocial Disorders of Childhood and Adolescence
- SBS 381 Globalization and Development
- SBS 339 Ethnicity, Immigration, and Identity
- SBS 399 Prevention and Wellness
- SBS 399 Working with Diverse Populations
BA in Social and Behavioral Sciences

Description

The Social and Behavioral Sciences (SBS) degree program integrates perspectives from psychology, sociology, and anthropology as it prepares students for careers in social services, mental health, law and public policy, early childhood care, and education.

Designed to enhance students' understanding of the psychosocial and cultural influences shaping individual lives and social institutions, the curriculum interweaves interdisciplinary courses in liberal arts (the LAC Common Core curriculum) with foundational SBS courses and a variety of courses providing more specific tools of the trade. Students expand upon this knowledge through choices made from an extensive array of elective courses.

Many students focus their choice of electives thematically, pursuing a Concentration in Counseling; a Concentration or Minor in Early Childhood Studies; or a Concentration or Minor in Public Health. Other students more fully customize their choice of electives or integrate their SBS degree with related minors such as Global Studies, Leadership and Organizational Studies, or with a Certificate in Public Health or in Leadership and Organizational Studies.

Program Requirements

A critical component of this degree program is the internship (SBS 447). Students select their internship with the assistance of the faculty advisor and the director of field experience. Students identify an organization that will enable them to evaluate potential career opportunities and develop workplace skills. Prior to the internship, students participate in a sequence of 1.5-credit hour seminars where they learn aspects of career decision making and launching a successful career.

Students may use two courses from outside the major as electives with faculty approval. No more than two courses from outside the major may be used as elective courses without permission of the faculty.

Prerequisite Courses (12 credits) expected to be taken before 300-level courses

- SOC 100 Introduction to Sociology
- PSY 101 General Psychology I
- PSY 102 General Psychology II
- ANT 101 Anthropology: The Cultural View

Before taking 300-level courses in this major, students must have completed a 100-level college writing course with a grade of at least C.

Requirements for the Major (28 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCC 150 Statistics for Informed Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>SBS/HRD 200 Multicultural Human Development</td>
<td>3</td>
</tr>
<tr>
<td>SBS 300 Deviance and Social Control or SBS 310 Childhood and Society (teacher preparation and Early Childhood Studies)</td>
<td>3</td>
</tr>
<tr>
<td>SBS 329 Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>SBS 369 Exploring Careers, Choosing Life Roles</td>
<td>1.5</td>
</tr>
<tr>
<td>LCC 370 Toward a Global Ethics (writing instruction)</td>
<td>4</td>
</tr>
<tr>
<td>SBS 413 Job Search Skills for the 21st Century</td>
<td>1.5</td>
</tr>
<tr>
<td>SBS 430 Applied Social Policy</td>
<td>3</td>
</tr>
<tr>
<td>SBS 447 Internship</td>
<td>3</td>
</tr>
<tr>
<td>LCC 480 Senior Seminar (writing Instruction)</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives (18 credits)

Students will complete at least six electives in SBS. They may structure their choice of these electives by picking a Concentration (Counseling, Early Childhood Studies, or Public Health) or may instead more fully customize the choice of electives, selecting a minimum of two courses from the list below, with the remainder drawn from any of the other 300-level SBS electives described on the following pages:

- SBS 209 Human Genetics
- SBS 305 Child Development
- SBS 306 Adolescence
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBS 307</td>
<td>Midlife and Adult Development</td>
<td></td>
</tr>
<tr>
<td>SBS 310</td>
<td>Childhood and Society</td>
<td></td>
</tr>
<tr>
<td>SBS 311</td>
<td>Theories of Personality</td>
<td></td>
</tr>
<tr>
<td>SBS 341</td>
<td>The Family</td>
<td></td>
</tr>
<tr>
<td>SBS 342</td>
<td>Gerontology</td>
<td></td>
</tr>
<tr>
<td>SBS 345</td>
<td>Diversity: Many Voices</td>
<td></td>
</tr>
<tr>
<td>SBS 360</td>
<td>Culture, Behavior, and Personality</td>
<td></td>
</tr>
<tr>
<td>SBS 381</td>
<td>Introduction to Globalization</td>
<td></td>
</tr>
<tr>
<td>SBS 390</td>
<td>Brain and Behavior</td>
<td></td>
</tr>
<tr>
<td>LCC 110</td>
<td>College Writing: Language and Literacies (CW)</td>
<td>3</td>
</tr>
<tr>
<td>Or LCC 111</td>
<td>College Writing: Language and Literacies: Enrichment (CW)</td>
<td>4</td>
</tr>
<tr>
<td>LCC 130</td>
<td>The Biology of Human Health w/Lab (SE)</td>
<td>4</td>
</tr>
<tr>
<td>Or LCC 230</td>
<td>Environmental Science, Policy, and Sustainability w/Lab (SE)</td>
<td></td>
</tr>
<tr>
<td>LCC 150</td>
<td>Statistics for Informed Decision Making (QR)</td>
<td>Req. of major</td>
</tr>
<tr>
<td>LCC 123</td>
<td>College and Community I (EYE)</td>
<td>3</td>
</tr>
<tr>
<td>LCC 200</td>
<td>Creative Critical Inquiry into Modern Life (writing instruction) (CI)</td>
<td>4</td>
</tr>
<tr>
<td>LCC 220</td>
<td>U.S. Democracy: Origins and Development (SCA)</td>
<td>3</td>
</tr>
<tr>
<td>Or LCC 320</td>
<td>Sustaining Democracy (SCA)</td>
<td></td>
</tr>
<tr>
<td>LCC 250</td>
<td>Thinking About The Arts, Thinking Through The Arts (CE)</td>
<td>3</td>
</tr>
<tr>
<td>LCC 401</td>
<td>Engaging the Future</td>
<td>3</td>
</tr>
<tr>
<td>LCC 310</td>
<td>Science, Technology and Society (SCA)</td>
<td>3</td>
</tr>
<tr>
<td>Or LCC 410</td>
<td>(SCA)</td>
<td></td>
</tr>
<tr>
<td>LCC 350</td>
<td>Global Past, Global Present (CI)</td>
<td>3</td>
</tr>
<tr>
<td>LCC 345</td>
<td>College and Community II (writing instruction) (EISRC)</td>
<td>3</td>
</tr>
<tr>
<td>LCC 370</td>
<td>Toward a Global Ethics (writing instruction) (EISRC)</td>
<td>Req. of major</td>
</tr>
<tr>
<td>LCC 480</td>
<td>Senior Seminar (writing instruction)</td>
<td>Req. of major</td>
</tr>
<tr>
<td></td>
<td>Total =</td>
<td>29 or 30</td>
</tr>
</tbody>
</table>

1 LCC 130 is not required for Natural and Applied Sciences majors.

2 LCC 123 is required for entering students with less than 24 credits while LCC 345 is required only of students who were not required to take LCC 123.

3 Requirement may be met with any Thematic Cluster, or with any USM minor or double major.

* Descriptions of LCC classes may be found in the introductory portion of the Lewiston-Auburn College section of this catalog.

General Electives (32-33 Credits)

Additional courses towards completing a total of 120 credits for the degree may be drawn from any variety of other courses within or outside of the major, chosen depending on student interests, career plans, and prior transfer credits. In some cases, this may entail pursuit of a minor. Students should consult with their advisors on these choices.

Concentrations

A concentration is a way of organizing the six required SBS elective classes.

Concentration in Counseling
This concentration provides students with an introduction to theory, topics, and skill areas relevant to professional applications in counseling. Organizing the choice of SBS electives through adoption of this concentration strengthens students' preparation for entry into variety of positions in or related to the helping professions, as well as for the pursuit of graduate study. Students doing so should complete the necessary paperwork so that the counseling concentration appears on their transcripts.

Two foundational courses are required, plus one each from the categories below. Substitutions must be approved by a faculty adviser.

Foundational courses for the concentration in Counseling:

SBS 311 Theories of Personality
SBS 411 Counseling and Psychotherapy

Choose one course from each of the following four groups of courses. Any substitutions must be approved by faculty advisor:

Psychosocial Disorders and Services:

SBS 303 Abnormal Psychology
SBS 346 Introduction to Social Services
SBS 348 Responding to Mental Health Crisis in the Community
SBS 350 Psychosocial Disorders of Childhood and Adolescence

Diversity and Multiculturalism:

SBS 315 Social Psychology of Disability
SBS 316 Diversity in the Workplace
SBS 345 Diversity: Many Voices
SBS 360 Culture, Behavior, and Personality
SBS 470 Study Abroad

Developmental Contexts:

SBS 305 Child Development
SBS 306 Adolescence
SBS 307 Midlife and Development
SBS 341 The Family

Applied Topics:

SBS 304 Food, Culture, and Eating
SBS 308 Health, Illness, and Culture
SBS 342 Gerontology
SBS 343 Substance Abuse
SBS 344 Violence: Causes and Control
SBS 349 Trauma: Social, Psychological and Cultural Dimensions
SBS 450 Approaches to Assessing Individual Differences in Children

Note that the Internship (SBS 447) for SBS students pursuing the Counseling Concentration must be related to this focus of study, that is, in a clinical-type setting. Students are advised to consult with their faculty advisors early regarding choice of internship placements.

MHRT/C (Mental Health Rehabilitation Technician – completed in conjunction with the Counseling Concentration)

Any student who wants to fulfill the certificate for the State of Maine should work closely with an advisor as early as possible. The counseling concentration is approved for MHRT/C provisional level B accreditation. In addition, students can earn full MHRT/C accreditation at LAC with the new MHRT/C track within the SBS Counseling Concentration. Details on courses required within this track, formally reviewed and approved by the Muskie Center for Learning, are available on SBS's Counseling Concentration Web page: [http://usm.maine.edu/sbs/ba-social-and-behavioral-sciences-counseling-concentration](http://usm.maine.edu/sbs/ba-social-and-behavioral-sciences-counseling-concentration).

Concentration in Public Health

The concentration is intended to help SBS majors structure the choice of their electives and to prepare them to become decision makers and policy advocates. It is also intended to shape their ability to understand myriad public health concerns and their facility in applying pertinent theoretical and practical knowledge to create a safe and functioning society. Professions that utilize knowledge of public health may be in delivery of mental health services, gerontological services, or child and family services.

The following courses are required:

SBS 308 Health, Illness, and Culture
SBS 335 Legal Issues in Health and Human Services
SBS/SCI 336 Introduction to Public Health
SBS/SCI 337 Introduction to Epidemiology
One elective course will be chosen from the following:
SBS 304 Food, Culture and Eating
SBS/SCI 399 Public Health Nutrition

One elective course will be chosen from the following:
SBS 332 Death, Dying, and Denial
SBS 338 Health Care Policies
SBS 341 Family
SBS 343 Substance Abuse (Note: CON 497 Substance Use and Abuse: Issues and Policies may substitute for SBS 343)
SBS 344 Violence: Causes and Control
SBS 345 Diversity: Many Voices
SBS 350 Psychosocial Disorders of Childhood and Adolescence
SBS/LOS 381 Introduction to Globalization
SBS 339 Ethnicity, Immigration, and Identity
SBS 399 Prevention and Wellness
SBS 399 Working with Diverse Populations

**Early Childhood Studies Concentration**

In the SBS ECS Concentration, the 6 required SBS electives (18 credits) are organized into one selection from each of the categories outlined below. Course options are available in each of six content areas listed below based upon the recommendations of the National Association for the Education of Young Children (NAEYC) and our community advisors.

**Early Childhood Teacher certification (081):** A track for the State of Maine's Early Childhood Teacher certification (081) is now available through the SBS degree. Please see the Maine Department of Education website for full requirements. Additionally, several courses in the ECS Concentration/Minor have been individually approved toward the State of Maine EC Teacher Certification 0-5 (081 endorsement) including SBS 200, SBS 305, EDU 336, SBS 310, SBS 341, SBS 375 and SBS 450. The Endorsement 081: Early Childhood Teacher (Birth to School Age), is for pre-K educators. It is intended to support appropriate early education learning experiences by ensuring that all educators working in public school pre-K programs have specialized knowledge of early childhood development.

Note that the Internship (SBS 447) for SBS students pursuing the ECS Concentration must be related to this focus of study. Students are advised to consult with their faculty advisors early regarding choice of internship placements. Finally, students should formally specify either a Minor or Concentration in ECS through completion of the necessary paperwork through the Student Success Center so that ECS appears on their transcript.

Any substitutions must be approved by faculty advisor:

**Child Development**
SBS 305 Child Development
SBS 309 The Psychology of Attachment in Early Childhood
Note: SBS 309 would be an appropriate choice in this category for students transferring in prior coursework in child development.

**Family**
SBS 341 The Family

**Leadership**
SBS/LOS 301 Group Dynamics
SBS/LOS 302 Organizational Behavior

**Systems**
SBS 310 Childhood and Society
EDU/LAE 200 Education in the U.S
SBS 346 Introduction to Social Services

**Children and Evaluation**
SBS 350 Psychosocial Disorders in Childhood and Adolescence
SBS 375 Infant Mental Health
SBS 450 Approaches to Assessing Individual Differences in Children

**Teaching/Preparing Children for Learning**
EDU 336 Children's Literature
SBS/LAC 340 Language Acquisition and Literacy Development
Certificate in Public Health

Description

A Certificate in Public Health is open to all students.

The certificate in public health addresses a need for awareness of public health issues not only in Maine, but the whole world. Evolutionary and multicultural aspects of diseases and their interface with human populations are daily headlines in the media: for instance, health care systems; food utilization and governmental policies; epidemics of flu, HIV/AIDS, and drug-resistant strains of TB; as well as the threat of bioterrorism. Therefore, to prepare undergraduates, decision makers, and policy advocates to be able to understand the multitude of public health concerns and to be able to apply that knowledge is essential to any safe and functioning society.

Program Requirements

The following courses are required:

- SBS 335 Legal Issues in Health and Human Services
- SBS/SCI 336 Introduction to Public Health
- SBS/SCI 337 Introduction to Epidemiology

In addition one of the following elective courses must be completed:

- SBS 304 Food, Culture and Eating
- SBS 308 Health, Illness, and Culture
- SBS/SCI 399 Public Health Nutrition

*A minimum grade of C in each course is required to earn the certificate.

Minor in Early Childhood Studies

Description

This minor provides the skills needed of professionals working with young children and their families, and the academic background required for graduate study or advanced training in the field.

Program Requirements

Course options are available in each of six content areas listed below based upon the recommendations of the National Association for the Education of Young Children (NAEYC) and our community advisors.

A track for state Early Childhood Teacher Certification (081) is now available through the SBS degree. Please see the Maine Department of Education website for full requirements. Several courses in the ECS Concentration/Minor have been approved toward the State of Maine EC Teacher Certification 0-5 (081 endorsement) including SBS 200, SBS 305, EDU 336, SBS 310, SBS 341, SBS 375 and SBS 450. The Endorsement 081: Early Childhood Teacher (Birth to School Age), is for pre-K educators. Endorsement 081 is intended to support appropriate early education learning experiences by ensuring that all educators working in public school pre-K programs have specialized knowledge of early childhood development.

Also note that the Internship (SBS 447) for SBS students pursuing the ECS Concentration must be related to this focus of study. Students are advised to consult with their faculty advisors early regarding choice of internship placements. Finally, students should formally specify either a Minor or Concentration in ECS through completion of the necessary paperwork through the Student Success Center so that ECS appears on their transcript.

Students majoring in programs other than SBS need only the courses outlined below. The ECS Minor as part of an SBS Major requires at least 4 additional SBS elective courses (12 credits) beyond the requirements of the concentration.

Choose one course from each of the following six groups of courses. Any substitutions must be approved by faculty advisor:
Minor in Public Health

Description

The Minor in Public Health advances students’ understanding of myriad public health concerns and their ability to apply pertinent theoretical and practical knowledge to contribute to a safe and functioning society. The Public Health Minor can complement professional preparation of students working in human services and in allied health and applied sciences, including their capacity to contribute to relevant policy-making and advocacy. The Minor will also strengthen the pursuit of graduate study in Public Health and Policy. Professions that utilize knowledge of public health include medical and allied health and human services, mental health, gerontology, and child and family support. Public health approaches address the full spectrum of services, planning and evaluation.

Students should formally specify a Minor in Public Health through completion of the necessary paperwork through the Student Success Center so that it appears on their transcript.

Program Requirements

A total of six courses are required for the Minor for students majoring in degrees other than SBS. Students matriculated as SBS majors and wishing to complete the Minor (vs. the Concentration) in Public Health must also take four additional SBS courses (in any SBS elective area) beyond the six courses listed below:

One Course from each of the following areas:

Overview of Public Health Systems
SBS/SCI 336 Introduction to Public Health

Basic concepts in Epidemiology (must be specifically rooted in Public Health applications vs. a more general Statistics or Research Methods course)
SBS/SCI 337 Introduction to Epidemiology

Cultural perspectives on health
SBS 308 Health, Illness, and Culture
Legal and policy perspectives
  SBS 335 Legal Issues in Health and Human Services

Nutrition
  SBS 304 Food, Culture and Eating
  SBS SCI 399 Public Health Nutrition

One Elective (any program prefix) reflecting student's professional interests in Public Health, including from list below or, with approval of student's advisor, a course that will be equivalent in substance or intent:
  SCI 315 Environmental Health
  SBS 339 Ethnicity, Immigration, and Identity
  SBS 343 Substance Abuse or CON 497 Substance Use and Abuse: Issues and Policies
  SBS 344 Violence: Causes and Control
  SBS 345 Race, Class, Gender
  LOS/SBS 381 Introduction to Globalization
  LOS/SBS 436 Risk, Public Policy, and Society

SBS Course Descriptions

SBS/HRD 200 Multicultural Human Development (SCA)
This course introduces developmental theory and research that encompasses the entire lifespan. Emphasis will be on prenatal development through adolescence, with an overview of adult development. A multi-disciplinary and multicultural view of human development will be taken by examining theories from a socio-cultural context and in consideration of change as well as stability throughout the life cycle. The interaction of hereditary, environmental, and socio-cultural factors will be considered in studying physical, cognitive, and psychosocial development. Prerequisites: Second semester freshmen or above; must have completed College Writing and an EYE course. This course is cross-listed with HRD 200 . Cr 3.

SBS/SCI 209 Human Genetics
This course will examine the role of heredity in human growth, development and behavior. Decision making, ethical issues and societal responsibilities related to genetic disorders will be discussed. This course is approved as a menu selection to satisfy the LCC 310 Science, Technology and Society requirement. Prerequisite: any laboratory science course. Cr 3.

SBS 300 Deviance and Social Control
The course examines the historical and relative notion of deviance and the nature(s) and type(s) of social control. Cr 3.

SBS/LOS 301 Group Dynamics
This course gives students an understanding of how people behave in groups and the skills needed by group members to participate effectively in group activities. It provides a theoretical foundation for how groups function, with focus on group process and development; and it discusses how these theories can be applied to a wide range of group settings. This course uses experiential techniques to help students develop critical skills and understanding of group dynamics. Cr 3.

SBS/LOS 302 Organizational Behavior
The goal of this course is to familiarize students with interpersonal dynamics and the tools to make organizational interactions more effective. Through assessments, exercises, and discussions, students will examine how perceptions of self and others influence people's behavior in a variety of situations. As good communication is critical in building sound interpersonal relationships, students will have many opportunities to fine-tune writing and speaking skills. Cr 3.

SBS 303 Abnormal Psychology
This course presents an introduction to the classification, diagnosis, and etiology of what is considered "mental illness." Cultural aspects of "abnormality" will be emphasized, as will integrative models of the causes of mental disorders. This integrative approach considers the complex interplay between biological, psychological, interpersonal, and cultural factors as they contribute to the development and expression of psychological disorders. Cr 3.

SBS 304 Food, Culture, and Eating
This course examines cultural beliefs and practices surrounding diet, food, cooking, eating, and nutrition. Students explore how behaviors and attitudes toward food and eating influence and are shaped by culture. Discussion may include food and healing, the social functions of food, food as represented in the media, food production and food politics, the diet industry, and eating disorders. Students gain insight into their own behaviors and attitudes toward food and eating, as well as those of today's global cultures. Cr 3.

SBS 305 Child Development

USM Undergraduate Academic Catalog 2014-15
This course examines the development and behavior of children from conception through middle childhood, and introduces topics in adolescence. Theoretical frameworks and research upon which current knowledge in child development is based will be considered, as well as applications to contemporary topics in child welfare and education. SBS/HRD 200 recommended. Cr 3.

SBS 306 Adolescence
This course is an overview of the psychological and social dimensions of adolescent development, including consideration of gender and group differences in the experience of the physical, cognitive, and social transformations of adolescence. Cr 3.

SBS 307 Midlife and Adult Development
This course considers the ongoing challenges and opportunities for development throughout the adult years, with emphasis on midlife and its associated physical, personality, and socio-cultural processes. Psychological and other social science perspectives on the study of midlife will be complemented by examples from field interviews, folk tales, and imaginative literature. Cr 3.

SBS 308 Health, Illness, and Culture
This course is an examination of the cultural dimensions of health and illness. Consideration will be given to contemporary issues such as the definition of health and illness, the distribution of diseases across different populations, cross-cultural variations in treatment models, and the implications thereof for health and human service professionals. Cr 3.

SBS 309 The Psychology of Attachment in Early Childhood
This course focuses on the critical importance of attachment process in early childhood and the emotional development of young children as the basis of forming relationships throughout one's life. Stages in attachment process will be presented as well as types and categories of attachment. Stages of emotional development in early childhood will also be presented with critical accomplishments in each stage. Positive and negative influences on both attachment and emotional development will be discussed as well as implications for attachment relationships throughout the lifespan. Recommended: PSY 102, HRD/SBS 200, a course in Child Development, or SBS 311. Cr 3.

SBS 310 Childhood and Society
This course weaves several broad themes regarding children and childhood in society, including how socio-historical circumstances shape our perceptions of children and childhood as a distinct life stage; how various agents of socialization including family, educational systems, and media shape contemporary childhood socialization; how children are co-constructors of childhood and society; and how the experiences of childhood are shaped by ethnicity, race, class, and gender. Cr 3.

SBS 311 Theories of Personality
This course is an in-depth study of the major theories of personality. It includes consideration of historical developments and cultural differences in the area of personality theory and research. The specific understanding of psychopathology contained in the theories will also be explored. Cr 3.

SBS 312 Crime and Criminal Justice
This is a survey course of the social and cultural factors that influence crime and delinquency. Focus will be on misconceptions and myths about crime and the institutional responses to crime in our society. Cr 3.

SBS 315 Social Psychology of Disability
This course will examine some of the social psychological issues associated with disability and the rehabilitation of individuals who have disabilities, with a focus on minimizing existing social, vocational, educational, and attitudinal barriers to individuals rather than on minimizing the impact of clients' physical/mental differences within a normed environment. It will familiarize students with the points of view and the experiences of people from various social, ethnic, and cultural backgrounds with a wide range of disabilities/abilities, towards enabling students to approach counseling as a means of expanding opportunities for their clients' access to these opportunities, and empowering their clients to attain their goals. Cr 3.

SBS/LOS 316 Diversity in the Workplace
Using historical, socio-economic, and psychological perspectives, students will learn about the challenges diverse members of U.S. society, such as women, people of color, people from marginalized classes, and those from other countries, have had and continue to face. Students will gain an understanding of how the workplace may affect diverse peoples and how others can learn to make the workplace more hospitable. A primary focus of this course will be on examining beliefs, behaviors, or unconscious attitudes that perpetuate the oppression and subordination of diverse members of society in the workplace, while also looking at how increased diversity is adding to workplace productivity, creativity, and learning. Readings are drawn from the social sciences and humanities to provide an interdisciplinary approach to the topic. Cr 3.

SBS/LOS 329 Research Methods
This course provides an introduction to quantitative and qualitative research methods which can be used in organizational planning and decision making and in the Social and Behavioral Sciences. The course will cover topic areas related to the application of appropriate methods of inquiry and includes completion of an applied project. Prerequisite: LCC 150. Cr 3.

SBS 332 Death, Dying, and Denial
An interdisciplinary consideration of death and dying that may include biological, historical, and various social science perspectives, this course
examines cross-cultural variations in beliefs and practices related to death, care for the dying, and bereavement. It also explores the personal, social, and cultural implications of denying death and refusing to mourn. Cr 3.

**SBS 334 Spirituality**
Spirituality, variously defined, is a central part of human experience, constituting important levels of consciousness and meaning. This course will investigate the experience and development of spirituality over the life span as depicted in religious, psychological, "New Age," and imaginative literatures. Cr 3.

**SBS 335 Legal Issues in Health and Human Services**
This course examines the legal framework underlying the delivery of health and human services with an emphasis on current socio-legal problems including the rights of clients and the responsibilities of workers. Cr 3.

**SBS/SCI 336 and MPH 400/500 Introduction to Public Health**
This course provides an overview of the public health system and examines the purpose, history, organization, approach, functions and determinants of health. The course places special emphasis on current health issues from our daily lives to highlight the relevance of public health. Trends, successes and challenges from a population perspective will be discussed as well as various tools and techniques used to address public health issues. Cr 3.

**SBS/SCI 337 Introduction to Epidemiology**
This seminar course introduces the student to epidemiology as a utility for the establishment and maintenance of public health. In essence, epidemiology involves the observation and statistical analysis of the occurrence of health and disease in human populations. This science informs the practice of preventive health/disease control and the formulation of public health policy. Seminar topics will be drawn from both infectious and chronic disease epidemiology ranging from the historical plagues such as the Black Death to the modern plagues of AIDS, cancer, and obesity. Recommended prerequisites include introductory biology, and statistics. Cr 3.

**SBS 338 Health Care Policies**
This course provides a comprehensive introduction to health care policy and the organization of the American health care system. Critical issues confronting the consumption, delivery, and financing of health care will be considered. Health care systems in other countries and around the United States will be examined. Cr 3.

**SBS/HUM 339 Ethnicity, Immigration, and Identity: a focus on Lewiston**
This course will focus on concepts of ethnicity, immigration, and identity through an investigation of the immigration history of the city of Lewiston, Maine. We will explore how ethnic identity is defined and why people emigrate. Through historical and contemporary readings and films, oral histories and personal interviews, the course examines the challenges immigrants face as they attempt to assimilate within the U.S. while trying to maintain their native languages, traditions, cultures and communities. Cr 3.

**SBS/LAC 340 Language Acquisition and Literacy Development**
This course provides students with opportunities to apply knowledge of fundamental principles and means of investigation used in the study and explanation of language acquisition and literacy development. It plays a foundational role in fostering students' understanding of literacy, which is key to their development as professionals charged with enhancing children's literacy development. Cr 3.

**SBS 341 The Family**
This course is a contemporary, interdisciplinary approach to the study of the family that includes an examination of family structures, familial relationships, and the impact of historical change on these structures and relationships. Cr 3.

**SBS 342 Gerontology: Perspectives on the Long Life**
A review of current theories and issues related to aging and the significance of increasing numbers of people living longer. Consideration will be given to physical, psychological, and sociological aspects of aging as well as to cultural perspectives regarding growing older and the elderly. Applications will focus on facilitating health, well-being, and meaning in later life. Cr 3.

**SBS 343 Substance Abuse**
This course considers patterns of use of drugs, the bases of their effects and associated harms, and the history of and current options for prevention and intervention efforts. Consideration will be given to the role of society and public policy in influencing our thinking and behavior concerning substance use and abuse. Cr 3.

**SBS 344 Violence: Causes and Control**
This course studies violence and the possibilities of living peacefully as explored in psychological and sociological works and in writings on anthropology, social policy, and religion. The course reviews the causes of violent and aggressive behaviors and specific approaches to the prevention and control of these behaviors. Cr 3.

**SBS 345 Diversity: Many Voices**
This course examines the impact of various markers of diversity including race, class, and gender on individual and social experiences in the United States. Students will analyze issues of diversity concerning inequality, power, privilege, and social justice. Students will explore their
own place in a diverse society and develop opportunities for building strength through diversity in organizations and communities. Cr 3. *This course takes the place of the former SBS 345 Race, Class and Gender and also meets the USM Core Diversity Requirement.

SBS 346 Introduction to Social Services
This course examines the profession of social work from both historical and contemporary perspectives. Students will explore specialty areas in social work such as mental health and disability, crime and violence, and family work. Career options in the social work field will be explored. Cr 3.

SBS 347 Youth, Community, and Higher Education
This interdisciplinary, community-based elective provides students with the opportunity to work with diverse vulnerable youth in hopes of promoting higher education and encouraging resiliency. The course will be conducted through weekly sessions which will include both a discussion/ supervision piece and group program activity piece. Students will take on roles as mentors, allies, and advocates for youth, and as organizers and developers for the group of youth as a whole as well as for the local community. Students will learn to work with adolescents, families, and communities in a comprehensive and integrated manner. Prerequisites: PSY 101 and 102, and permission of instructor. Cr Var.

SBS 348 Responding to Mental Health Crisis in the Community
This course explores history and models of mental health focused on the ability of individuals with mental illness to function successfully in the community. The course will assist students in developing an understanding of crisis intervention theory and perspectives, including knowledge of risk factors and precipitating events, and of available emergency community resources (and associated obstacles to access to these services). Cr 3.

SBS/HUM 349 Trauma and Narrative
This course examines the medical, political, and cultural history of the concept of trauma, focusing on how trauma has become a core concern in both contemporary clinical psychology and literary criticism. We consider models for conceptualizing responses to traumatic experiences. Topics include the diagnostic criteria of Post-Traumatic Stress Disorder, recommended treatment approaches, risk and protective factors. Students explore "narrative" vs. "traumatic" memories and carefully examine a number of literary texts and films to analyze the characteristics of representations of traumatic memory. The idea that fashioning a narrative of traumatic experience is essential to trauma therapy and to the healing effects of trauma literature, will also be explored. Prerequisites: Completion of a 100-level College Writing course (with grade of at least a C), SOC 100, PSY 101 & 102, and ANT 101). Cr 3.

SBS 350 Psychosocial Disorders in Childhood and Adolescence
This course includes readings and discussion of the etiology and manifestation of psychosocial disorders in childhood and adolescence. Topic areas, including approaches to intervention, will be considered from developmental, psychological and sociological perspectives. Cr 3.

HUM/SBS 358 Representations of Motherhood
This interdisciplinary course examines the ways in which motherhood is represented in various cultural forms (including film, literature, and political rhetoric) and from within different historical and cultural contexts. Contemporary psychological theories will be considered in terms of how they are used to prescribe normative demands on women and mothers and also how they attribute various powers to mothers that then contribute to the construction of particular social policies and practices. This course has been approved by the State Department of Education for content area in secondary Social Studies. Prerequisite: LCC 110 or other College Writing course. Cr 3.

SBS 360 Culture, Behavior, and Personality
This course is an examination of interactions between culture, behavior, and personality through the life span. Cross-cultural variations and commonalities in child rearing practices, gender roles, and conceptions of self are among topics to be considered. Applications will be made to contemporary issues in multicultural relations in community and professional settings. Prerequisites: PSY 102 and ANT 101. Cr 3.

SBS 361 Psychology and Sociology of Women
This course approaches the study of the psychological and sociological realities of women's lives from a feminist perspective. This involves a critical examination of cultural assumptions regarding girls and women and also of the methodological biases within traditional social science research. In addition, students will look at the ways in which systems of discrimination based on race, class, and gender affect women's lives, and enhance their own appreciation of the diversity in women's social realities and experiences. Cr 3.

SBS 364 Introduction to Expressive Therapies
This course introduces students to the basic principles, theories, and varied professional applications of the expressive therapies, including modalities of art, drama, movement, music, poetry and play. Exposure to and experience with a variety of experiential processes is a major feature of the course. Exploration of the value of these methods in transcending barriers of age, mental health, physical health, learning styles and needs, language ability and cultural norms is also woven into the course. Cr 3.

SBS/HUM 365 Psychological Language of Dreams and Fairytales
This course explores psychological approaches to understanding the language of dreams and fairytales. Students consider how works of imaginative literature and dreams inform the theories of Freud and Jung and also how their theories, in turn, have shaped contemporary approaches to understanding of images and metaphors. We then culturally situate this psychological approach by comparing it with cross-cultural and literary approaches. Cr 3.
SBS/HUM 366 Transforming Words: Poetry and Psychologies of Change
This course examines the interrelationships between poetry and psychology, with a focus on transformations of meaning in words and lives. Topics will include the varying functions of poetry over the life span, poets' reflections on how and why they write, poetry as political witness and community catalyst, therapeutic uses of poetry, and the distinctive qualities of "poetic" language. Students have the option of pursuing community-based projects involving poetry. This course has been approved by the State Department of Education for content area in secondary English. Cr 3.

SBS 367 Healthy Learners Project
The Healthy Learners Project provides training in individual, non-directive play intervention to support the emotional and educational achievement of at-risk children in their first three years of elementary education. This service-learning course consists of training, direct individual work with children, and scholarship supported in a biweekly course meeting throughout the academic year. Supervision of the student's work is provided both in local elementary schools and in class. Prerequisite: permission of instructor. Cr 3.

SBS 369 Exploring Careers, Choosing Life Roles
In this mid-level course in the career development series, students relate self-knowledge to career and life roles, with an emphasis on gaining and managing career information; learning various career and life decision-making strategies; and communicating formative academic, co-curricular, and professional experiences in such formats as accomplishment statements and informal interviews. Prerequisite: LCC 123 or LCC 345. Offered fall, spring, summer. Cr 1.5.

SBS 375 Infant Mental Health
This course focuses on post-fetal dependence and development (the fourth trimester), brain development, early communication, infant cuing, the calming reflex, and how an infant learns to view and respond to the world. The concepts of infant mental health as relational, reflective, and interdisciplinary will be presented as well as skills and strategies for supporting positive infant mental health. SBS 200 recommended. Cr 3.

SBS/LOS 381 Introduction to Globalization
This course examines the economic, political, social, and cultural aspects of globalization from an interdisciplinary perspective. The purpose is to get a sense of clarity about what globalization is, how it is affecting people around the world, and why there is an increasingly robust resistance to it on the grassroots level. We will also discuss how to empower ourselves while being socially responsible in this rapidly changing world. Course format includes discussion, case study, and student presentation on research projects. Prerequisites: SOC 100, ANT 101. Cr 3.

SBS 390 Brain and Behavior
This course is a survey of biological and environmental factors affecting the relationship between brain/mind and behavior. Topics will include brain organization, neural transmission, stress and emotion, learning, memory, violence, psychopathology, and the development of consciousness. Cr 3.

SBS 398 Independent Study
Prerequisite: junior standing and permission of instructor. Cr 3.

SBS 399 Special Topics
Cr 3.

SBS 411 Counseling and Psychotherapy
A study of the conceptual foundations, fundamental characteristics, and ethical principles involved in the process of psychological counseling. Alternative models (e.g., individual, group, family) of therapy will be explored in relation to theories of personality development and functioning. Special focus will also be placed on counseling approaches in community mental health areas such as trauma and crisis intervention. Prerequisite: SBS 311. Cr 3.

SBS 413 Job Search Skills for the 21st Century
In this final course in the career development series, students assume active agency in career planning through learning how to market themselves to prospective employers. They learn to create and use the tools needed for career placement, such as cover letters, resumes, and interviews. Prerequisite: HUM/LOS/SBS/SCI 369. Offered fall, spring, summer. Cr 1.5.

SBS 430 Applied Social Policy
A review of contemporary social policy alternatives and an examination of social policy making processes at both the macro- and micro-levels. Students complete an applied social policy project which might take the form of a policy paper, a grant proposal or written legislative testimony for a community agency. Prerequisites: either LCC 200 or LCC 370 as well as junior standing or permission of the instructor. Cr 3.

SBS 435 Children, Policy, and Law
This course explores the interface of legal policy related issues and problems in childhood. The relationship among legal, public policy, and psychological concepts will be framed within family relationships, legal decision making, and the judicial and legislative allocation of power between parents and the state. Topics will include the state of knowledge about outcomes for children's emotional health and development related to the risks and protections that legal intervention brings. Cr 3.
SBS/LOS 436 Risk, Public Policy, and Society
This course considers the variety of ways in which risks, especially risks to the environment and to health, are measured, perceived, communicated, and acted upon in our society. Perspectives will be drawn from health fields, natural sciences, and political science, as well as from the social sciences. Cr 3.

SBS 447 Internship
This online course provides students the opportunity to work in their chosen field to evaluate their interest and acquire basic skills needed to market themselves effectively. Students participate in an online seminar in which they learn about and reflect on workplace issues. Students wishing to take more than 3 credit hours must have permission from their faculty advisors. Prerequisite: HUM/LOS/SBS/SCI 413. Offered fall, spring, summer. Cr 3-6.

SBS 450 Approaches to Assessing Individual Differences in Children
A survey of methods used to evaluate the developing child for abilities and disabilities. There will be an emphasis on understanding the interrelatedness of social, psychological, educational, physical-developmental, and health related assessments, as well as the cultural meaning of individual and group assessments. Cr 3.

SBS 470 Study Abroad
The goal of this course is to provide an experiential learning opportunity for students to increase their global awareness. Through a variety of readings, overseas traveling, site experiences, and reflection exercise, students will examine a diversity of sociocultural issues in a foreign environment. Prerequisite: Instructor permission. Cr 3.
CMHS Overview

Academic Leadership

Dean: Joseph W. McDonnell; Associate Dean, Muskie School of Public Service: Andrew Coburn; Associate Dean, School of Education and Human Development: Jean Whitney; Associate Dean, School of Business: Bert Smoluk; Director, School of Social Work: Susan Fineran

Administrative Leadership

Director of Finance: Tammy Blair; Director of Student Affairs: Kimberly Warren; Director of Administration: Sondra Bogdonoff; Director of Communications: TBD; Coordinator of Human Resources: Judy Letarte; Administrative Specialist: Arline Palmer

The College of Management and Human Service brings together dedicated faculty and staff from four professional schools at the University of Southern Maine: the School of Business, School of Education and Human Development, School of Social Work, and the Muskie School of Public Service, including more than 120 research staff in the Muskie School’s Catherine E. Cutler Institute for Health and Social Policy and additional research centers throughout the college. Through their dedicated teaching, applied research, and engagement within the community, our faculty offer students unique opportunities to engage in socially relevant studies that address today’s most pressing issues in education, public policy, management, and social services.

The college offers a wealth of both graduate and undergraduate degree programs, as well as teacher education, professional development tracks, and certificate options. Unique to the college is cross-cutting curricula that allow students to engage in coursework from more than one school or program, an approach that best prepares students for today’s challenging and complex work environment. Additionally, partnerships with area businesses, organizations, and agencies create opportunities for students to gain knowledge and skills through experiential learning, preparing them for leadership roles within their respective fields.

Schools within the College

- The Muskie School of Public Service
- The School of Business
- The School of Education and Human Development
- The School of Social Work

Undergraduate Programs

The College of Management and Human Service offers the following undergraduate degree programs:

- Bachelor of Arts (BA) in Geography-Anthropology
- Bachelor of Arts (BA) in Social Work
- Bachelor of Arts (BA) in Tourism and Hospitality
- Bachelor of Science (BS) in Business Administration with majors in accounting, finance, general management, marketing, and sport management
- Undergraduate-Graduate 3+2 Program in Geography Anthropology, and Community Planning and Development

Graduate Programs

The College of Management and Human Service offers the following graduate degree programs:

- Master of Business Administration (MBA)
- Master of Science (MS) in Adult and Higher Education
- Master of Science (MS) in Counseling
- Master of Science (MS) in Educational Psychology
- Master of Science (MS) in Special Education
- Master of Science in Education (MSEd) in Applied Literacy
- Master of Science in Education (MSEd) in Educational Leadership
- Master of Science in Education (MSEd) in Literacy Education
- Master of Science in Education (MSEd) in Professional Educator
- Master of Science in Education (MSEd) in Teaching and Learning
- Master of Science in Education (MSEd) in TESOL
- Master of Social Work (MSW)
- Master of Community Planning and Development (MCPD)
- Master of Public Policy and Management (MPPM)
- Master of Public Health (MPH)
- Doctor of Philosophy (PhD) in Public Policy
- Doctor of Psychology (PsyD) in School Psychology

The college also offers certificates of graduate study and certificates of advanced study in several areas.

**Undergraduate Teacher Education Programs at USM**

With an historic dedication to teacher education dating back to 1878, the School of Education & Human Development, in partnership with colleges throughout the university, offers students the opportunity to earn a teaching certificate while still pursuing their specific major and academic goals.

USM undergraduate students pursue their major and then choose the content area for their teaching based on the major. All colleges at USM offer this teacher education option. Students identify early on in their major to also pursue a teacher education pathway and take the courses defined by their content area. In addition, students take the education courses needed such as teaching methods and student teaching. At the end of the student's undergraduate career at USM, he or she will have a bachelor's degree, major, and teacher certification in a content area related to their major.

**Admission and Academic Policies and Requirements**

Admission and academic deadlines, policies, and requirements reside with the programs that are housed within the four schools of the College of Management and Human Service. Please see individual programs listed under each school section for these policies and requirements.

**Scholarships and Assistantships**

The schools within the College of Management and Human Service offer a limited number of scholarships and/or graduate assistantships to help fund a student’s education. Please see the individual schools or programs for more information.

**Accreditation**

Our programs are characterized by quality and integrity. They meet the highest standards set by professional accreditation bodies. The College of Management and Human Service has specific degree programs that are accredited by the following agencies or bodies:

- Association to Advance Collegiate Schools of Business (AACSB International)
- Commission on Accreditation of Healthcare Management Education (CAHME)
- Council for Accreditation of Counseling and Related Education Programs (CACREP)
- Council on Rehabilitation Education (CORE)
- Council on Social Work Education (CSWE)
- National Association of School Psychologists (NASP)
- Teacher Education Accreditation Council (TEAC)

**Professional Licensure and Certification Notice**

Professional licensure and certification is regulated by various State of Maine credentialing offices. Students who are pursuing degrees leading to application for professional licensure or certification, and/or who will be participating in clinical placements, internships, or practica through their USM program should be aware that their host facility may require a criminal background check, fingerprinting, or drug screening. In such situations, each student is responsible for obtaining and paying for the background check or other screening process and for delivering required documentation to the facility. Although the university will make reasonable efforts to place admitted students in field experiences and internships, it will be up to the host facility to determine whether a student will be allowed to work at that facility. Students should further be aware that a criminal record may jeopardize licensure by the state certification body. Students may consult the certification body corresponding to their intended occupation for more details. Successful completion of a program of study at USM does not guarantee licensure, certification, or employment in the relevant occupation.

**Tk20 Online Data Management System for Educator Preparation Programs and Pathways**

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for
specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation)

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed within the context of the Unit’s data management system (i.e., Tk20).
Tourism and Hospitality Overview

Program Chair: Kreg Ettenger, 300D Bailey Hall, Gorham

Faculty Teaching in Program: Professors: Sanford (Environmental Science); Associate Professors: Ettenger (Geography-Anthropology); Jones (Recreation and Leisure Studies); Pavri (Geography-Anthropology); Wagner (Environmental Science); Lecturers: Michaud Stutzman (Geography-Anthropology)

The Program in Tourism and Hospitality (TAH) is designed for students who have an interest in tourism and travel as well as those currently employed in the hospitality industry, or who are considering working in this growing field. The program offers a Bachelor of Arts in Tourism and Hospitality, featuring a broad array of courses, specialized concentrations in key career areas and subjects of interest, and faculty whose expertise touches on many aspects of tourism and hospitality. The program also offers a Minor in Tourism and Hospitality and a Certificate in Tourism Development and Planning.

The Program in Tourism and Hospitality draws upon faculty and courses from several departments and colleges throughout the University of Southern Maine, with engaging courses taught by a core of USM faculty, and tourism and hospitality courses taught both by USM faculty and by qualified adjuncts with extensive experience in the tourism industry. Courses are available both on campus during day and evening hours and in online and blended formats. Professional experiences, including internships and practicums, provide critical, real-world experience for students in various aspects of tourism management, marketing, and planning.

BA in Tourism and Hospitality

Description

The Bachelor of Arts in Tourism and Hospitality is an interdisciplinary degree designed to prepare students with the skills and knowledge to serve as leaders in the tourism and hospitality industry in Maine and beyond.

The 39-credit major provides a solid and comprehensive academic foundation for all students, both experienced professionals and those new to the field. It draws upon the social and natural sciences, recreation, business, and planning disciplines to provide an integrated understanding of tourism as a global industry and source of economic, environmental and social change. Graduates of the BA in Tourism and Hospitality bring to their careers and the community an understanding of the local, regional, and global implications of the sector, including its impact on communities and places and its prominent role in cultural contact, exchange, and learning.

Flexibility and customization are hallmarks of the program. Students may select one or more specialized concentrations, including:

- Tourism Products and Promotion
- Managing in Tourism and Hospitality
- Sustainable Tourism and Hospitality
- Tourism Development and Planning
- Nature-Based Tourism and Ecotourism
- Cultural, Arts and Heritage Tourism

Students complement these concentrations with electives drawn from a number of disciplines, and a capstone experience that allows them to apply their knowledge to a real-world setting or problem. The degree curriculum emphasizes hands-on learning and practical knowledge, with faculty from several departments within USM, as well as industry professionals, preparing students to engage directly in this sector in a variety of possible career pathways.

Program Requirements

The BA in Tourism and Hospitality includes four required courses, plus an internship or other professional experience; an intercultural communication and awareness requirement; and a three-course concentration. Students may then complete an additional concentration plus two electives, or take five electives, to meet the minimum 39 credits for the major. Students must earn a minimum GPA in the major of 2.0, and a
grade of C- or better in all major courses. Majors must also fulfill the program's Intercultural Awareness and Communication requirement. Students may apply a maximum of nine (9) credit hours of internships, practicums, field courses, and/or independent studies toward the major. All students must meet with their advisors before registering for courses each semester.

**Required Courses**

All students must complete these required courses:

- TAH 101 Introduction to Tourism & Hospitality
- TAH 301 Global Issues in Travel & Tourism

Students also select one of the following:

- TAH 211 Tourism Product Development
- TAH 221 Tourism & Hospitality Management

Plus one of the following:

- TAH 231 Introduction to Sustainable Tourism
- TAH 241 Tourism & Community Development
- TAH 251 Ecotourism & Sustainable Development
- TAH 261 Introduction to Cultural Tourism
- ESP/REC 223 Nature Based Tourism

Students must also complete at least one of the following:

- TAH 406 Research in Tourism & Hospitality
- TAH 407 Field Study in Tourism & Hospitality
- TAH 408 Practicum in Tourism & Hospitality
- TAH 409 Tourism & Hospitality Internship

**Concentrations**

Each student must complete at least one three-course concentration to develop knowledge and proficiency in an area that reflects his or her interests and career goals. The following are general descriptions and requirements of the six concentrations. Course descriptions for non-TAH classes in each concentration can be found in the descriptions of those programs.

1) **Tourism Products and Promotion**

This concentration focuses on identifying and developing tourism and hospitality products and services and promoting these through advertising, trade shows, social media, and other means.

Students must first take this required course:

- TAH 211 Tourism Product Development

Then select two of the following:

- TAH 311 Event Planning & Management
- TAH 312 Group Tour Planning & Management
- TAH 410 Seminar in Tourism Promotion (selected topics)
- TAH 415 Trends & Innovation in Tourism & Hospitality
- BUS 260 Marketing
- BUS 363 Branding and Advertising
- BUS 364 Professional Selling

Followed by one of the program capstones, in an area connected to the concentration.

2) **Managing in Tourism and Hospitality**

In this concentration, students learn about key aspects of running a hospitality-related business, from accounting and organizational management to human resource issues.

Students must first take this required course:

- TAH 221 Tourism & Hospitality Management
Then select two of the following:

- TAH 321 Lodging Operations & Systems
- TAH 331 Sustainable Hospitality Management
- TAH 420 Seminar in Hospitality Management (selected topics)
- ACC 110 Financial Accounting Information for Decision Making
- BUS 200 Introduction to Business
- BUS 340 Managing Organization Behavior

Followed by one of the program capstones, normally TAH 408 or TAH 409.

3) **Sustainable Tourism and Hospitality**
This concentration focuses on creating or transforming tourism and hospitality businesses to be more environmentally, economically, and socially sustainable.

Students must first take this required course:

- TAH 231 Introduction to Sustainable Tourism

Then select two of the following:

- TAH 251 Ecotourism & Sustainable Development
- TAH 252 Tourism, Wildlife & Biodiversity
- TAH 331 Sustainable Hospitality Management
- TAH 341 Tourism, Development & Sustainability
- ESP 275 Sustainability & Global Energy Systems
- ESP 308 Global Environmental Problems & Sustainability
- GEO 320 Conservation of Natural Resources

Followed by one of the program capstones, in an area connected to the concentration.

4) **Tourism Development and Planning**
Students learn about elements of tourism planning from a community and regional perspective, preparing them to work for or with town offices, state agencies, and other government and non-government entities to create beneficial tourism opportunities.

Students must first take this required course:

- TAH 241 Tourism & Community Development

Then select two of the following:

- TAH 221 Tourism Product Development
- TAH 251 Ecotourism & Sustainable Development
- TAH 261 Introduction to Cultural Tourism
- TAH 311 Event Planning & Management
- TAH 341 Tourism, Development & Sustainability
- ESP 200 Environmental Planning
- ESP 305 Community Planning Workshop
- GEO 203 Urban & Regional Development
- GEO 209 Introduction to Land Use Planning
- GEO 210 Planning Maine Communities

Followed by one of the program capstones, in an area connected to the concentration.

5) **Nature-Based Tourism and Ecotourism**
This concentration is for students who wish to create guided experiential tourism products in natural settings and environmentally sustainable outdoor experiences.

Students must first take one of these required courses:

- TAH 251 Ecotourism & Sustainable Development
- ESP/REC 223 Nature Based Tourism

Then select two of the following:
• TAH 252 Tourism, Wildlife & Biodiversity
• ESP 203 Environmental Communication
• REC 218 Wilderness Emergency Response
• REC 233 Outdoor Recreation
• REC 241 Recreation Leadership
• REC 373 Belize: Planning & Leading Sustainable Tourism Trips
• REC 374 Newfoundland: Planning & Leading Sustainable Tourism Trips

Followed by one of the program capstones, in an area connected to the concentration.

6) Cultural, Arts and Heritage Tourism
Students in this concentration explore how local history, arts, and cultural heritage can be both preserved and promoted as an important element of tourism development.

Students must first take this required course:

• TAH 261 Introduction to Cultural Tourism

Then select two of the following:

• TAH 262 Women, Arts, & Global Tourism
• TAH 311 Event Planning & Management
• TAH 460 Seminar in Cultural Tourism (selected topics)
• ANT 355 Public Interpretation in Anthropology
• ANT 450 Indigenous Peoples & Tourism
• HTY 360 History of Maine

Followed by one of the program capstones, in an area connected to the concentration.

Second Concentration and/or Electives

Students have the option of completing a second concentration plus electives, or electives alone, to complete the 39 credits toward the major. If students choose the electives option, at least three courses must come from outside their concentration, and two must be at or above the 300 level.

Intercultural Awareness and Communication Requirement

Working within the hospitality industry, as well as understanding the social and cultural aspects of tourism, requires students to be aware of the challenges that often arise between speakers of different languages and members of different cultures. We therefore require graduates to possess competency in intercultural awareness and communication, which may include language skills as well as intercultural knowledge and experience. Students must demonstrate the capacity to interact successfully outside of their own primary culture and/or language and to assist foreign travelers and those with special needs in a sensitive way. Prior to graduation, all majors must have their advisor's confirmation that they possess the interpersonal and intercultural skills needed for entry level into the tourism and hospitality industry. The following options may be used to meet this requirement.

• Successful completion of the course TAH 305, Culture & Communication in the Travel Industry, with a grade of C- or better.
• Demonstration of competence in a modern language other than English, including American Sign Language, through one of the following methods: a score of three or above on a high school AP exam; testing out of an intermediate-level modern language course via a USM placement exam, the College Level Examination Program (CLEP), or an ACTFL or ASLPI assessment higher than two; or completing at least six credits of college-level language courses.
• Completion of a pre-approved study abroad program, travel course, or professional position such as an internship, which provides a significant cultural and/or linguistic experience. In most cases students will be required to report on this experience as part of the outcome.
• Completion of a research project, internship, or other experience that involves significant interaction with a group that differs from the student in language, culture, or special needs. This experience may also satisfy the capstone requirement for the major, with approval.
• Completion of an approved Core thematic cluster focusing on culture and language, and/or completion of Core Diversity and International requirements using approved courses that provide significant knowledge of groups with different languages and/or cultures than the student's own.
• Completion of one or more travel experiences that provide significant knowledge of other peoples and cultures. For this option students must provide a written narrative explaining their experiences and how these have influenced their perception of other peoples, cultures and languages (further guidelines for this essay will be provided with advising materials). A faculty committee will determine whether a student's experience(s) satisfy this requirement.
• Demonstrating through written narrative that the student's life experience, when combined with their academic course of study, provides them with extensive intercultural communication skills. This option is intended mainly for international students attending USM, but may apply to others as well. Satisfaction of the requirement will involve a faculty committee review.
School of Business Credit Restrictions

The USM School of Business has limitations on the number of Business courses (including certain Economics courses) that non-Business majors may take. In general, non-business majors may take a maximum of 30 credit hours in ACC, BUS, FIN, and RMI courses, plus ECO 101, 102 and 310. Students completing concentrations in the Tourism and Hospitality program that use these courses would count them toward the 30-credit hour maximum. Students may also apply for admission into minors in the School of Business and use up to one-third of the credits in their minors toward the Tourism and Hospitality major.

Thirty-Credit Rule

For all baccalaureate degrees at the University of Southern Maine, a minimum of 30 credit hours, including at least nine hours in the major, must be completed while matriculated in the school or college from which the degree is sought. A student may earn no more than six of these 30 credit hours at another campus of the University of Maine System. In addition, the final 30 credits of a student's degree program must normally be completed at USM. For this program, this rule includes online and blended courses offered through USM's Division of Professional and Continuing Education.

Admission Information

Admission to the program requires formal acceptance to USM, which is completed through the Admissions Office. The University of Southern Maine has defined measures of college readiness in writing and math, which are available on the USM website or through the Office of Admissions. All students must meet these measures before matriculating in this program. Full-time USM students should declare their major through the Student Success Center, which can provide them with the necessary forms and instructions.

Articulation Agreement with Southern Maine Community College (SMCC)

USM and the Southern Maine Community College (SMCC) have developed an articulation agreement designed to allow eligible SMCC graduates to complete the Bachelor of Arts in Tourism and Hospitality with only an additional two years of study at USM, provided they meet the following requirements:

- Graduated with the AAS in Hospitality at SMCC within the past five years with a minimum GPA of 2.0 overall and in the major; and
- Completed courses at SMCC that satisfy the following requirements of the USM Core: College Writing; Quantitative Reasoning; Creative Expression; Cultural Interpretation; Socio-Cultural Analysis; Science Exploration; Diversity; and International. Any of these requirements not met at SMCC must be completed at USM, in addition to the various requirements listed below.

Students will then be required to complete the following at USM:

- An additional 15 credits of Core requirements, including the Ethical Inquiry, Social Responsibility and Citizenship course; a Thematic Cluster (three courses or a minor); and a Capstone course;
- An additional 18-21 credits toward the major, depending on which concentration(s) they elect to complete;
- The major's Intercultural Awareness & Communication requirement, which may take 3-8 credits depending on the option selected; and
- An additional 18-27 credits of electives to complete the required 120 credits for the BA degree.

Certain SMCC courses may also be applied toward the major, including up to three approved courses toward their selected concentration(s) and/or electives up to a total of 21 credits toward the major. The remaining 18 or more credits in the major must be completed at USM. Any exceptions to these requirements may be made on an individual basis at the discretion of the program chair.

Prior Learning Assessment

The Office for Prior Learning Assessment (PLA) at USM believes that students should be rewarded for knowledge acquired outside the traditional classroom if it fulfills the academic criteria set forth and evaluated by the USM faculty. PLA is a process that builds a bridge between students' practical, applied learning experiences and their theoretical, college-level knowledge. There are several pathways across this bridge: testing options, credential reviews, military evaluations, and academic portfolio development, paving the way to academic credit where appropriate. Proof of competency rests with the student. Transcripts older than twenty years cannot be used for credit. For further details regarding credit options, students should contact the Office for Prior Learning Assessment at http://usm.maine.edu/pla.

The Tourism and Hospitality program supports the PLA process and works with students to identify and give credit for various professional and life experiences, including employment in the tourism and hospitality industry. In particular, the TAH program awards credit through the Academic Portfolio Assessment Program, based on a formal collection of evidence in support of a person's claim for college credit. To earn credit the student must prove understanding and learning competency in specific areas, subject to evaluation by appropriate faculty. The TAH program also uses Credential Review, which recognizes professional certifications, educational and training courses, and certain college-level experiential learning that has led to licenses, certificates, and/or credentials for organizations outside the University. Credit is assessed and given on a case-by-case basis. More information on these programs is available through the Office for Prior Learning Assessment.
Certificate in Tourism Development and Planning

Description

The Certificate in Tourism Development and Planning provides professional training in the theory and practice of economic development based on tourism attractions and services. While designed to meet the needs of those engaged in economic development and planning, it is open to all students, including those enrolled in Tourism and Hospitality degrees. Courses examine tourism from community and regional perspectives and prepare students to work for and with town offices, state agencies, and other government and non-government entities to develop, plan and market tourism opportunities. Case studies and projects allow students to learn from and apply their knowledge to real-world situations in Maine and beyond.

Program Requirements

Completion of 12 credits as described below with a grade of C- or better in each. TAH courses at the 200-level and above normally have the prerequisite of TAH 101, but this may be waived at the discretion of the instructor based upon professional experience or previous coursework.

All students must complete the following course:

- TAH 241  Tourism & Community Development

Students then select three of the following courses, at least one of which must be at the 300 level or higher, and one of which must include a research, service or professional project.

- TAH 211  Tourism Product Development
- TAH 231  Introduction to Sustainable Tourism
- TAH 251  Ecotourism & Sustainable Development
- TAH 261  Introduction to Cultural Tourism
- TAH 311  Event Planning & Management
- TAH 341  Tourism, Development & Sustainability
- TAH 406  Research in Tourism & Hospitality
- TAH 407  Field Study in Tourism & Hospitality
- TAH 408  Practicum in Tourism & Hospitality
- TAH 409  Tourism & Hospitality Internship
- TAH 415  Trends and Innovation in Tourism & Hospitality

Students may select one of the following courses in place of one elective above.

- ESP 200  Environmental Planning
- ESP 305  Community Planning Workshop
- GEO 209  Introduction to Land Use Planning
- GEO 203  Urban & Regional Development
- GEO 210  Planning Maine Communities

As part of at least one of their courses in the certificate, students must complete a project that involves original research, service learning, and/or professional experience directly related to the certificate. The certificate coordinator will assist the student with selection of a project that meets the student’s personal goals and interests.

Minor in Tourism and Hospitality
Description

The Minor in Tourism and Hospitality provides an overview of tourism, or travel for leisure, culture, and other non-work purposes, and hospitality, the provision of services to travelers. Students design their own program of study that reflects personal interests and career goals. The Minor in Tourism and Hospitality is an excellent complement to majors that study cultures, languages, history, international relations, business, and the environment.

Program Requirements

The minor requires completion of at least five TAH courses (minimum 15 credits) with a grade of C- or better in each course. At least one course must be 300-level or higher. TAH 101 is a prerequisite of several other courses, but may be waived on the basis of past experience or other coursework. Students may complete one three-credit TAH internship, practicum, or field course as part of the minor. Students may also select one non-TAH course from the list below, which can overlap with the requirements of their own major. Up to six credits may be courses from other institutions that transfer as TAH courses at USM. However, no more than two courses or six credits in total may be transfer courses or non-TAH courses.

Approved Non-TAH Courses

- ANT 355 Public Interpretation in Anthropology
- ESP 223 Nature Based Tourism
- ESP 308 Global Environmental Issues & Sustainability
- GEO 203 Urban & Regional Development
- GEO 285 Global Environmental Issues & Sustainability
- HTY 360 History of Maine
- REC 223 Nature Based Tourism
- REC 233 Outdoor Recreation
- REC 373 Belize: Planning & Leading Sustainable Tourism Trips
- REC 374 Newfoundland: Planning & Leading Sustainable Tourism Trips

Course Descriptions

TAH 101 Introduction to Tourism & Hospitality
This course is an introduction to the major concepts, issues, and theories of tourism and hospitality as an economic sector and topic of academic study. The course covers a broad range of topics related to the travel experience, from tourism as an industry to the impacts it has on communities and places, as well as on travelers themselves. Students will also be introduced to key elements of the hospitality industry and opportunities for employment within this industry. The course will introduce concepts such as sustainability, planning, and ethical responsibility. This course is required of all TAH majors. 3 cr.

TAH 211 Tourism Product Development
This course teaches students how to identify, develop, promote and sustain tourism and hospitality products and services through the business planning process. Topics such as market and sector research, logistics, staffing, sales, promotion, management structure, and finances specific to tourism and hospitality businesses will be explored. Case studies and guest speakers are used to illustrate areas of opportunity and challenges to product development. This is the introductory course for the concentration Tourism Products and Promotion. 3 cr.

TAH 221 Tourism & Hospitality Management
This course introduces students to fundamental concepts of management related to the tourism and hospitality industry. Topics include financial management and accounting, human resource issues, hotel and resort management, and food and beverage management. Examples from Maine and New England illustrate key principles and guidelines. Students will be introduced to standards, practices, regulations and laws in the tourism and hospitality industry. This is the introductory course for the concentration Managing in the Hospitality Industry. 3 cr.

TAH 231 Introduction to Sustainable Tourism
This course provides students with an overview of the sustainable planning and management of tourism and hospitality. Concepts such as planning, conservation of resources, monitoring and assessment, environmental audits, visitor management, and green building construction will be discussed. The course also provides a global and regional perspective on sustainability issues related to tourism, such as the impact of travel on climate change. This course is the entryway for the concentration Sustainable Tourism and Hospitality. 3 cr.

TAH 241 Tourism & Community Development
Students learn about tourism as a tool for economic and community development and the impacts it can have on a community's sense of identity, control, and wellbeing. Topics linking community development theory to tourism and hospitality development include economic development;
social and cultural impacts; strategic planning; stakeholder theory; first impression analysis; community participation; destination life cycles; marketing and promotion; and social conflict resolution. Students engage with local communities to do real tourism development work as part of the learning process. This is the introductory course for the concentration Tourism Development and Planning. 3 cr.

**TAH 251 Ecotourism & Sustainable Development**
Examines the growing role of ecotourism, or travel to natural areas with benefits to local communities, as a tool for sustainable economic development both in Maine and worldwide. Students will learn about the value of small-scale, environmentally sustainable tourism businesses and their potential role in protecting critical habitats and wildlife while supporting the needs of local residents and communities. The course also examines the challenges and problems associated with such development, from corporate greenwashing and economic leakage to the impacts of tourism on potentially fragile ecosystems, cultural sites and local communities. 3 cr.

**TAH 252 Tourism, Wildlife & Biodiversity**
This course explores links between global tourism and biodiversity, including threats to nature when tourism is done improperly and the potential role of tourism in conservation. Focusing on biodiversity hot spots in the Americas, Africa, Asia, and the poles, it considers how activities such as wildlife viewing, forest canopy tours, adventure travel, photography, and outdoor recreation can promote conservation, scientific research, education, and public awareness of biodiversity and related issues. 3 cr.

**TAH 261 Introduction to Cultural Tourism**
This class explores the many dimensions of cultural tourism, including how arts, crafts, local heritage, history, and other elements of culture can be incorporated into tourism planning and development. Topics include the meaning, value, and potential tourism roles of historical sites and monuments, festivals and events, local art and artisans, archaeological and cultural heritage sites, and museums and educational institutions. Issues such as cultural identity and representation, authenticity and commoditization will be analyzed. This is the entryway for the concentration in Cultural, Arts & Heritage Tourism. 3 cr.

**TAH 262 Women, Arts & Global Tourism**
All over the world women are improving their socioeconomic status, investing in their families, and contributing to community development through involvement in tourism arts and crafts production. We will learn about the historical and contemporary experiences of women from North and South America, Africa, Asia and other international settings. The course will explore themes of cultural heritage, culture change, traditional versus tourist art, gender inequality, empowerment and community development. 3 cr.

**TAH 299 Topics in Tourism & Hospitality**
Courses with this designation include special topics in various aspects of tourism and hospitality, offered on a one-time or experimental basis. This designation may also include courses that are cross-listed with other majors at USM and taught by faculty from those programs. Specific titles and course descriptions for upcoming courses can be found in MaineStreet. More information may also be found in the Advising section of the TAH program website. Prerequisites vary by individual course. 3 cr.

**TAH 301 Global Issues in Travel & Tourism**
As one of the world's largest industries, and one that brings travelers and host communities into close contact, tourism and travel are rife with challenges. This course delves into these issues from a social science perspective, showing how tourism affects travelers and communities in complex and contentious ways, from commoditization of art forms to sex tourism, drug use, and changes in local economies and culture. It also explores the connection of tourism to global issues such as infectious diseases, climate change, and terrorism. This course is required of TAH majors. 3 cr.

**TAH 305 Culture & Communication in the Travel Industry**
This course explores the challenges of communication between people from different cultures in the context of travel and tourism. Specific topics include the role of cultural patterns, verbal and nonverbal codes in interpersonal relationships; obstacles to effective intercultural communication; causes of and ways to avoid or manage intercultural conflict; and skills necessary for cultural adaptation and coping with culture shock. This class is valuable for anyone planning to work in travel, hospitality or related fields, and fulfills the TAH requirement for Intercultural Awareness and Communication. 3 cr.

**TAH 309 Tourism & Hospitality Experience**
Students complete a professional experience in the tourism and hospitality industry, such as in lodging or food service, attractions, transportation, retail, marketing and promotion, or travel services. The nature of the experience would be detailed in advance, and the student would work with a faculty advisor to update them on their activities on a regular basis and provide a final report and evaluation. This course may also be used for recording credit obtained through the Office of Prior Learning Assessment. Students may repeat this course for up to six credits. Prerequisites: TAH major; permission of supervising faculty. 3 cr.

**TAH 311 Event Planning & Management**
Festivals, meetings, conferences and special events are an important part of the tourism sector. In this class students, through work on a real event, will learn how to plan and manage events, and explore ways of promoting and marketing events that respect local traditions and celebrate community assets. Students will also be introduced to various types of events including food and music festivals, sporting events, conferences and meetings, and celebratory events such as weddings and reunions. Students will be immersed in the work of event planning and meet real planners and promoters. Prerequisite: TAH 211, 221, or 261, or permission of instructor. 3 cr.

TAH 312 Group Tour Planning & Management
This course builds skills in the creation, planning, and oversight of group-based travel such as packages and charter tours. Students will investigate various types of travel packages and how tour companies, travelers, host communities, and indigenous cultures intersect in the travel and tour planning and management process. With a community partner, students will apply their knowledge and skills to the creation of Maine-based group travel tours. Prerequisite: TAH 211, 221, or 261, or permission of instructor. 3 cr.

TAH 321 Lodging Operations & Systems
This course examines operating procedures and systems for managing various types of lodging facilities, including hotels, resorts, and inns. Topics covered include front desk operations, reservation systems, housekeeping and maintenance, inventory management systems, guest policies, internal and external communication, human resources, and security and risk management. Prerequisite: TAH 101 or TAH 221, or permission of instructor. 3 cr.

TAH 331 Sustainable Hospitality Management
This course focuses on the application of sustainability principles and techniques to the planning and management of tourism and hospitality businesses. It is taught by faculty experienced in designing and implementing sustainable hospitality guidelines, and will take students through the steps of assessing planned or existing businesses and making these businesses more sustainable. Certification guidelines for sustainable businesses will be examined, and students will have the opportunity to do audits or other exercises to apply their knowledge in actual industry settings. Prerequisite: TAH 231 or permission of instructor. 3 cr.

TAH 341 Tourism, Development & Sustainability
This course provides theoretical understandings of tourism's economic, environmental, and social benefits and impacts on local communities and environments, using case studies to illustrate various types of tourism in several regions of the world. Theories and concepts such as destination life cycles, community planning, impact assessment, destination management, and culture change will be examined. Students will conduct their own research based on published literature and other sources and present their findings in class and a final paper. Prerequisite: TAH 101, 231, or 241, or permission of instructor. 3 cr.

TAH 399 Advanced Topics in Tourism & Hospitality
Courses with this designation include advanced topics in specialized aspects of tourism and hospitality, offered on a one-time or experimental basis. This designation may also include courses that are cross-listed with other majors at USM and taught by faculty from those programs. Specific titles and course descriptions for upcoming courses can be found in MaineStreet. More information may also be found in the Advising section of the TAH program website. Prerequisites vary by individual course. 3 cr.

TAH 406 Applied Research in Tourism & Hospitality
Students will conduct independent research guided by a faculty supervisor on an approved subject related to tourism or hospitality. Research may include qualitative or quantitative methods as determined in collaboration with the supervisor, and possibly with external clients or collaborators. Students must propose a research topic prior to the semester in which the research is to take place, and with enough time to allow the supervisor to approve or amend the proposed research subject. This course may serve as the student’s capstone experience if approved as such by the faculty advisor and program chair. Prerequisites: TAH major; permission of faculty supervisor. 3 - 6 cr.

TAH 407 Field Study in Tourism & Hospitality
This course involves travel to one or more sites outside of Maine and combines tourism activities with research, active learning, and community engagement. Actual courses will vary and may be taught by USM faculty, outside instructors, or a combination. Courses may focus on ecotourism, community development, cultural tourism, sustainable tourism, volunteer tourism, or other areas. Students may also attend an external field course they have identified and which their TAH advisor agrees meets the goals of this course. They would then obtain program approval to register for this course and will receive credit upon completion of agreed-upon assignments. Prerequisites: TAH major; permission of faculty advisor. 3 cr.

TAH 408 Practicum in Tourism & Hospitality
This course combines a professional work placement with a final project designed to complete a concentration requirement. Students work with a faculty member and client organization, business, or community to gain work experience (generally at least 100 hours) and create or assist with a tangible product, such as a research report, website, promotional material, or conference or other event, that serves the client's needs. Prerequisites: TAH major; completion of all other requirements for a concentration; permission of supervising faculty. 3 - 6 cr.

TAH 409 Tourism & Hospitality Internship
Students complete a professional internship (usually at least 150 hours) related to their primary concentration in the major. This might include working for a hotel, restaurant, or other business; for a tourism association or agency; or for a local community engaged in tourism planning and development. Students may complete more than one internship depending on their chosen concentration(s). Prerequisites: TAH major; completion of all other requirements for a concentration; permission of supervising faculty. 3 - 6 cr.

**TAH 410 Seminar in Tourism Promotion**

In this upper-level seminar, special topics related to the development and promotion of tourism and hospitality products and services will be examined. Experienced faculty from the travel industry will share their experiences and insights, addressing the potential and challenges of developing and promoting specific types of tourism such as resorts, adventure travel, cruise ships, ecotourism, and niche businesses. Emerging trends in tourism promotion, such as new social media and participatory marketing, will be explored for their potential and limitations. Prerequisite: TAH 101, 211, or 221, or permission of instructor. 3 cr.

**TAH 415 Trends & Innovation in Tourism and Hospitality**

Students will be introduced to major trends and innovations in contemporary tourism and hospitality, with a focus on identifying opportunities for Maine and New England. In addition to studying global and national trends in travel, the course will look at specific innovations that create new prospects for tourism in the region or demand for new types of products such as green tourism. Guest lecturers from the tourism industry, and trips to experience innovative products or services, may be employed. Prerequisite: TAH 101, 211, or 221, or permission of instructor. 3 cr.

**TAH 420 Seminar in Hospitality Management**

This upper-level seminar covers topics related to the planning and management of businesses, events, and attractions in the tourism and hospitality industry. Expert faculty from industry and academia will share their insights and experiences in managing businesses ranging from hotels, resorts, and campgrounds, to wilderness excursions and wildlife viewing, to tourism attractions large and small throughout Maine and beyond. Emphasis will be on practical skills and knowledge that students can use in planning and managing businesses or working within the tourism and hospitality industry. Prerequisite: TAH 101, 211, or 221, or permission of instructor. 3 cr.

**TAH 460 Seminar in Cultural Tourism**

This advanced seminar looks at specific topics in cultural tourism, drawing upon experiences of regular and visiting faculty. The role of the arts in tourism; interpretation of culture and history at historical sites and museums; issues in cultural heritage and identity; the challenges of performance spaces and events; and the relation of tourism to the creative economy may be examined. Theoretical and critical issues such as commoditization, cultural authenticity, and representation of identity will be explored. Prerequisite: TAH 261 or permission of instructor. 3 cr.
Business Overview

Associate Dean: Bert Smoluk, 113 Luther Bonney

Director for Student Affairs: Alice Cash; Coordinator of Student Affairs/Academic Counselor: Laura O'Neili; Coordinator of Career Services and Internships: Melissa Burns

Chair (Accounting and Finance): Dana Kerr

Chair (Marketing, Sport Management, and General Management): Jo Williams

Professors: Artz, Gold, Gramlich, Manny, Smoluk, Violette, Voyer; Associate Professors: Aiello, Bennett, Chene, Chinn, Dean, Grover, Heiser, Kerr, Kohli, Munger, Parker, Purdy, Sanders, Shields, Suleiman, Williams; Assistant Professor: Chen

Mission Statement

We prepare and inspire current and future leaders, and stimulate economic growth, by providing quality learning opportunities, valuable research, and professional service, all in partnership with the business community.

Programs

The School of Business offers a Bachelor of Science degree in business administration with majors in:

- accounting
- finance
- marketing
- sport management*
- general management with a track in:
- entrepreneurship and small business management*
- international business
- risk management and insurance
- sustainable business*
- generalist (advanced study across multiple fields of business)

*Note: required courses in the sport management major, the sustainable business track, and the entrepreneurship track may not be offered during the evening (5:30 p.m. or later).

The undergraduate program is designed to develop the student's abilities to assume the responsibilities of general and financial management, and to cope successfully with the changing problems of managers in the years ahead. Entering students begin by acquiring broad preparation in the arts and sciences as a foundation for the study of business. All students also complete the business core, which is a series of courses covering major functional areas common to business operations. Lastly, students acquire a deeper knowledge in their selected major.

School of Business majors may obtain a double major within the school, and non-accounting majors may pursue a minor in accounting. Students may also enroll in the 3-2 program to obtain both undergraduate and graduate degrees in five to six years. Please see the graduate catalog for more information on the 3-2 MBA program option.

For students pursuing other majors, the School offers minors in:

- accounting
- business administration
- marketing
- pre-MBA
- information management

The School of Business offers certificate programs of undergraduate study in:

- accounting
risk management and insurance

The graduate degree provided by the School is the master of business administration with a choice of optional concentrations. (See graduate catalog for information).

Accreditation

The School of Business is accredited by AACSB International–The Association to Advance Collegiate Schools of Business. AACSB International assures quality and promotes excellence and continuous improvement in undergraduate and graduate education for business administration and accounting.

Course Enrollment Policies

Enrollment Restriction

No undergraduate student, unless accepted into a major in the School of Business, is allowed to take more than 30 credit hours in business courses under any circumstances. The undergraduate business program has the responsibility of monitoring the implementation of this requirement. No student may pursue more than one minor offered by the School of Business.

Students who are not majoring within the School, having fewer than 28 credit hours in business courses, may enroll in 300-level or higher courses provided they meet one of the following criteria:

- They have declared a major that requires the course.
- They have been admitted to a School of Business minor.
- They are admitted to a School of Business certificate program.
- The course fulfills a requirement for the USM general education.
- They have approval from the Dean.

Any School of Business major or minor who has enrolled in an ACC, FIN, BUS, or RMI course more than twice must, before continuing in that course, complete and have approved by the Department chair, a course condition form (available from the School of Business office). Failure to do so may result in course credit disqualification. A Federal Financial Aid policy states that if a student passes a course - according to the catalog-definition of "pass" as "D-" or higher - they can use financial aid to pay for ONE repeat of that course. Subsequent repetitions are ineligible for financial aid, and would then need to be paid by other means. Please see the USM Financial Aid website for more information - http://usm.maine.edu/fin.

Internship Program

School of Business majors are encouraged to participate in an internship to experience on-the-job learning. Employment in a professional setting provides opportunities to apply classroom learning, develop work-related skills, and explore careers. Credit may be received for paid or non-paid positions with new employers, or for new responsibilities with current employers. Credit is not granted for past work experience. Students obtain internship positions by contacting the School of Business internship coordinator or by contacting employers to develop positions. Students are also welcome to discuss internship availability with faculty members and chairs. An intern must work a minimum of 140 hours on site and be advised by a faculty sponsor during the internship. Under the supervision of a faculty sponsor, the student must prepare a written learning contract that contains a job description, the student's learning goals, self-directed learning activities, and an evaluation process. Grading is pass/fail, except BUS 378 and 397 which are graded. Refer to the course descriptions for ACC 395-396, BUS 378, 391-397, FIN 395-396, and RMI 395-396 for prerequisites and restrictions. Majors are limited to a maximum of six internship credits toward the degree; minors are limited to a maximum of three internship credit hours. For further information, contact the School of Business Internship Office at (207) 780-4020.

Centers

Center for Entrepreneurship

In November 1996 the Board of Trustees of the University of Maine System approved the creation of the Center for Entrepreneurship at the University of Southern Maine. Administered by the School of Business within the College of Management and Human Service, the Center develops courses, workshops and research projects that respond to the needs of small businesses throughout Maine and coordinates credit and non-credit programs offered through several USM units. More information can be found on the Center's website at http://usm.maine.edu/cesb or by contacting the Center for Entrepreneurship Office at (207) 780-4563.

Maine Center for Business and Economic Research
The Maine Center for Business and Economic Research (MCBER) was originally formed in 1974 as an EDA University Center, and now serves as a conduit for bringing the expertise and skills of faculty from the School of Business, the Muskie School, and other academic units at USM, to the challenges and opportunities facing the public and private sectors in Maine. As a joint center managed by the Business School and the Muskie School, MCBER is dedicated to helping the state prosper.

Supported by both public and private sources, the Center offers applied research and technical assistance services to Economic Development Districts, profit and nonprofit organizations, and individuals. These services include: business analytics, survey-based research, economic impact analysis, forecasting, data mining, statistical analysis, simulation modeling, strategic planning, feasibility studies, risk management, market research, financial/economic modeling, and other forms of customized business/economic analysis. For additional information, contact the Maine Center for Business and Economic Research, University of Southern Maine, P.O. Box 9300, Portland, ME 04104-9300, (207) 780-4187, http://usm.maine.edu/mcber.

**Maine Small Business Development Centers**

State Director: Mark Delisle

Associate State Director, Finance: Carol Papciak

Maine Small Business Development Centers (Maine SBDC) provide comprehensive business management assistance, training, resource, and information services to Maine's micro, small, and technology-based business communities. Professional certified counselors, who meet rigorous education and business experience standards, provide business assistance at no cost to Maine's existing and prospective business owners.

Maine SBDC is a partnership program of the U.S. Small Business Administration (SBA) in association with the SBA/OSBDC, Maine Department of Economic and Community Development (Maine DECD), the University of Southern Maine, and leading economic and/or community development hosting organizations, with support from other contractors, allies, and stakeholders. Accredited by the Association of Small Business Development Centers (ASBDC) and administered by USM's School of Business for over 30 years, Maine SBDC operates a network of nine service centers and numerous outreach offices located conveniently throughout the state.

Maine SBDC's mission is to engage itself and others in development activities that contribute to the improvement of the economic climate for and the success of micro, small, and technology-based businesses in the state of Maine. Its focus is to assist in the creation, growth, and maintenance of viable small businesses and the jobs these businesses provide. Maine SBDC serves those seeking assistance who are willing and able to build, sustain, and/or expand their business. More information about the Maine SBDC can be found at http://www.mainesbdc.org or by calling (207) 780-4420. Maine SBDC state administrative offices are at 501 Forest Avenue, Portland. Mailing address: P.O. Box 9300, Portland, ME 04104-9300.

**BS in Business Administration - 3-2 Program [BS to MBA]**

**Description**

The 3-2 program for the master of business administration (MBA) allows interested and qualified students to complete a bachelor’s degree and an MBA in five years depending on the undergraduate major. (Degree requirements for some majors necessitate a longer completion time.) Generally, students in the 3-2 programs focus on their bachelor’s degree requirements during their first three years, a mix of bachelor’s and MBA requirements in the fourth year, and mostly MBA requirements in the fifth year. Each degree is awarded once the specific degree requirements are successfully met.

**Why Consider a School of Business 3-2 Program?**

- No matter what your career choice, a solid understanding of business is always relevant.
- Since our MBA program only admits the academically best students, you will be part of a strong academic community.
- Maximize your professional skills and advance your career opportunities by networking with top business professionals.
- Develop closer links and more meaningful interaction with faculty through joint research and graduate assistantship opportunities.
- Save time and money by developing a sound plan for your future now.
Program Requirements

The MBA program is comprised of 30 credit hours of core courses and 9 credit hours of elective courses. In addition, up to 15 credit hours of foundation courses may be required depending on a student’s previous academic background.

Students in the 3-2 program are required to maintain a grade point average of 3.0 or higher after 90 credit hours of undergraduate course work to remain in good standing and be allowed to continue in the 3-2 program. Enrollment in 600-level MBA courses may only occur in a student's final semester of undergraduate course work.

Admission Information

Students may apply to the 3-2 program directly from high school or anytime after the end of their first semester of undergraduate studies. Students entering directly from high school need an S.A.T. combined score of 1200 or higher. Students currently enrolled in a baccalaureate degree program at USM may enter the 3-2 program by meeting the regular MBA admission criteria of a formula score of 1100 or higher with a minimum GMAT score of 500. (The formula is: undergraduate grade point average x 200, plus the GMAT total score.)

BS in Business Administration - Accounting Major

Description

The accounting major (22 credits) has a strong regional reputation for providing students with the quality accounting and business skills necessary for success in the accounting profession. Many of our students are employed in tax and accounting internships, obtaining valuable practical experience while completing their degree.

The accounting major offers students the coursework necessary to meet the rapidly changing business environment, in which accountants play a significant and critical role. Students learn accounting concepts and practical applications necessary to work in the profession. The program fosters the development of critical thinking and professional skills crucial for career success.

The major also prepares students for graduate studies in accounting and business such as our MBA with an accounting concentration. The undergraduate accounting major along with the MBA accounting concentration provides students with the depth and breadth of education needed to help pass the CPA exam and meet the 150 credit hour education required by Maine and most states for licensure as a CPA.

Program Requirements

In addition to meeting all University requirements, students must earn a minimum grade of C- in 100-200 level courses, and a C in 300-400 level courses in all Business Core courses applied toward the degree. To ensure that students graduate with a current understanding of their field, upper-level courses taken more than 10 years before the degree is awarded must have Departmental approval for use in the Business Core or the major.

Students may declare or change a major by completing a form available at the School office. Double majors are possible as long as the courses applied toward one major are not applied toward the second major. Under no circumstances can credits be double-counted for two program options (e.g., major, minor, track, or concentration) within the School of Business.

Before enrolling in their first School of Business course (ACC, BUS, FIN, or RMI designations) requiring junior standing, students majoring in a School of Business major must have junior standing (54 credits completed) and a minimum grade point average of 2.33 in USM courses. This minimum GPA requirement supersedes any course-specific GPA requirement lower than 2.33.

Overview of course requirements

- Core Curriculum (USM requirement)
- Non-Business Core (School requirement)
- Business Core (School requirement)
- Major Requirements
- General Electives

USM Core Curriculum Requirements

(up to 45 credits, minus credit counted elsewhere) please see USM Core Curriculum section of this catalog for details. School of Business specific Core courses are noted below.
Entry Year Experience – EYE required for students entering with fewer than 24 credit hours; May be fulfilled with EYE 125 Getting Down to Business

College Writing

Quantitative Reasoning: MAT 210 Business Statistics (credits counted in the non-business core).

Creative Expression: THE 170 Public Speaking (credits counted in the non-business core).

Socio-cultural Analysis: ECO 101 Macroeconomics (credits counted in the non-business Core)

Cultural Interpretation

Science Exploration

Ethical Inquiry, Social Responsibility, and Citizenship; May be fulfilled with BUS 347 Triple Bottom Line Business

Diversity

International: May be fulfilled and double counted in the Business Core section by successful completion of BUS 335 International Business or BUS 361 International Marketing.

Thematic Cluster or a minor of 15 credits or more or a double major of 15 or more unique credits (Note: The Professional Practices Cluster includes Business Core courses; one of which may be counted in the Business Core and in the Professional Practices Cluster.)

Capstone: BUS 450 Business Policy and Strategy (credits counted in the Business Core)

Non-business Core Requirements (17 credits)

Spreadsheet proficiency: demonstrated by passing ABU 190 Spreadsheets and Problem Solving with a grade of C or higher, or by successfully passing a School of Business spreadsheet proficiency exam. Proficiency must be demonstrated to graduate.

ECO 101 Introduction to Macroeconomics
ECO 102 Introduction to Microeconomics
MAT 108 College Algebra with C- or higher grade

Substitutes include a C- or higher grade in MAT 140 or approved higher level math course or passing a CLEP exam

MAT 210 Business Statistics with C- or higher grade

or C- or higher grade in prior credit for MAT 120 or other approved statistics course (http://usm.maine.edu/sb/stats).

THE 170 Public Speaking

or other course by permission

Business Core Requirements (36 credits)

A minimum of 50 percent of business core courses must be taken at USM, and the student must achieve a minimum grade in each course (listed below).

ACC 110 Financial Accounting Information for Decision Making (C- or higher)
ACC 211 Managerial Accounting Information for Decision Making (C- or higher)
BUS 260 Marketing (C- or higher)
BUS 275 Applied Business Analysis (C- or higher)
BUS 280 Legal Environment of Business (C- or higher)
BUS 340 Managing Organizational Behavior (C or higher)
BUS 345 Information Technology/Management Information Systems (C or higher)
BUS 370 Management Science (C or higher)
BUS 375 Production/Operations Management (C or higher)
BUS 450 Business Policy and Strategy (C or higher)
FIN 320 Basic Financial Management (C or higher)

Select one of the following international courses:

BUS 335 International Business (C or higher)
BUS 361 International Marketing (C or higher)
BUS 382 International Business Law (C or higher)
FIN 330 International Financial Management (C or higher)

Major Requirements (22 credits)

At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher (with a minimum grade of C in ACC 221 and C- in remaining courses) in the 22 credits applied toward the major.

Required Courses (16 credits)

ACC 221 The Financial Accounting Cycle (one credit)
ACC 301 Financial Reporting I
ACC 302 Financial Reporting II
ACC 329 Accounting Information Systems
ACC 410 Auditing and Assurance
ACC 413 Concepts and Strategies of Taxation
Electives (6 credits)

Select two of the following courses:
- ACC 395 Internship I in Accounting
- ACC 405 Cost Management Systems
- ACC 416 Governmental and Nonprofit Accounting
- ACC 418 Principles of Fraud Examination
- ACC 490 Independent Study in Accounting
- ACC 499 Special Topics

General Electives (remaining credits for 120 credit minimum)

The exact number of general elective credits varies and is dependent upon choices made in University core requirements.

**BS in Business Administration - Finance Major**

**Description**

The finance major (15 credits) prepares students for careers in corporate finance, investments, financial services, banking, and related fields. Students learn a blend of theoretical and practical concepts and apply this knowledge to real-world settings. The program develops analytical and critical thinking skills that will aid students throughout their careers. The flexibility of the major requirements allows students to create self-designed specializations within the major. For example, students interested in pursuing a career in financial services might select FIN 321 Personal Financial Planning and an internship at a financial services company.

**Program Requirements**

In addition to meeting all University requirements, students must earn a minimum grade of C- in 100-200 level courses, and a C in 300-400 level courses in all Business Core courses applied toward the degree. To ensure that students graduate with a current understanding of their field, upper-level courses taken more than 10 years before the degree is awarded must have Departmental approval for use in the Business Core or the major.

Students may declare or change a major by completing a form available at the School office. Double majors are possible as long as the courses applied toward one major are not applied toward the second major. Under no circumstances can credits be double-counted for two program options (e.g., major, minor, track, or concentration) within the School of Business. Before enrolling in their first School of Business course (ACC, BUS, FIN, or RMI designations) requiring junior standing, students majoring in a School of Business major must have junior standing (54 credits completed) and a minimum grade point average of 2.33 in USM courses. This minimum GPA requirement supersedes any course-specific GPA requirement lower than 2.33.

**Overview of course requirements**

- Core Curriculum (USM requirement)
- Non-Business Core (School requirement)
- Business Core (School requirement)
- Major Requirements
- General Electives

**USM Core Curriculum Requirements**

(up to 45 credits, minus credit counted elsewhere) please see USM Core Curriculum section of this catalog for details. School of Business specific Core courses are noted below.

- Entry Year Experience – EYE required for students entering with fewer than 24 credit hours; May be fulfilled with EYE 125 Getting Down to Business
- College Writing
- Quantitative Reasoning: MAT 210 Business Statistics (credits counted in the non-business core).
- Creative Expression: THE 170 Public Speaking (credits counted in the non-business core).
- Socio-cultural Analysis: ECO 101 Macroeconomics (credits counted in the non-business Core)
- Cultural Interpretation
- Science Exploration
- Ethical Inquiry, Social Responsibility, and Citizenship; May be fulfilled with BUS 347 Triple Bottom Line Business
• Diversity
• International: May be fulfilled and double counted in the Business Core section by successful completion of BUS 335 International Business or BUS 361 International Marketing.
• Thematic Cluster or a minor of 15 credits or more or a double major of 15 or more unique credits (Note: The Professional Practices Cluster includes Business Core courses; one of which may be counted in the Business Core and in the Professional Practices Cluster.)
• Capstone: BUS 450 Business Policy and Strategy (credits counted in the Business Core)

Non-business Core Requirements (17 credits)

Spreadsheet proficiency: demonstrated by passing ABU 190 Spreadsheets and Problem Solving with a grade of C or higher, or by successfully passing a School of Business spreadsheet proficiency exam. Proficiency must be demonstrated to graduate.
ECO 101 Introduction to Macroeconomics
ECO 102 Introduction to Microeconomics
MAT 108 College Algebra with C- or higher grade

Substitutes include a C- or higher grade in MAT 140 or approved higher level math course or passing a CLEP exam
MAT 210 Business Statistics with C-or higher grade
or C- or higher grade in prior credit for MAT 120 or other approved statistics course (http://usm.maine.edu/sb/stats).
THE 170 Public Speaking
or other course by permission

Business Core Requirements (36 credits)

A minimum of 50 percent of business core courses must be taken at USM, and the student must achieve a minimum grade in each course (listed below).
ACC 110 Financial Accounting Information for Decision Making (C- or higher)
ACC 211 Managerial Accounting Information for Decision Making (C- or higher)
BUS 260 Marketing (C- or higher)
BUS 275 Applied Business Analysis (C- or higher)
BUS 280 Legal Environment of Business (C- or higher)
BUS 340 Managing Organizational Behavior (C or higher)
BUS 345 Information Technology/Management Information Systems (C or higher)
BUS 370 Management Science (C or higher)
BUS 375 Production/Operations Management (C or higher)
BUS 450 Business Policy and Strategy (C or higher)
FIN 320 Basic Financial Management (C or higher)
Select one of the following international courses:
BUS 335 International Business (C or higher)
BUS 361 International Marketing (C or higher)
BUS 382 International Business Law (C or higher)
FIN 330 International Financial Management (C or higher) (if used to fulfill international; may not also be used to fulfill a finance elective below)

Major Requirements (15 credits)

At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.5 or higher in the 15 credits applied toward the major.

Finance Major Requirements
FIN 327 Investment Management

Finance Electives (12 credits; at least three courses must be FIN courses)
FIN 321 Personal Financial Planning
FIN 323 Derivatives: Options, Futures, and Swaps
FIN 326 Financial Modeling
FIN 330 International Financial Management (cannot be counted in core)
FIN 395 Internship I in Finance
FIN 490 Independent Study in Finance
FIN 499 Special Topics in Finance
ACC 413 Concepts and Strategies of Taxation
ACC 302 Financial Reporting II
ECO 310 Money and Banking
BUS 385 Entrepreneurship and Venture Creation
BUS 485 Managing the Growing Entrepreneurial Venture
RMI 320 Introduction to Risk Management
The exact number of general elective credits varies and is dependent upon choices made in University core requirements.

**BS in Business Administration - General Management Major**

**Description**

General management has the following tracks: a) entrepreneurship and small business management, b) international business, c) risk management and insurance, d) sustainable business, and e) generalist track (advanced study across multiple fields of business).

Note: required courses in the entrepreneurship track and the sustainable business track may not be offered during the evening (5:30 p.m. or later).

**Program Requirements**

Students in the general management major (15 credits) select one of the tracks below, which either provide broad exposure to management issues or provide a specific industry focus. Each track specifies 9 of the 15 credits in the major, leaving 6 credits for business electives. At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 15 credits applied toward the major.

In addition to meeting all University requirements, students must earn a minimum grade of C- in 100-200 level courses, and a C in 300-400 level courses in all Business Core courses applied toward the degree. To ensure that students graduate with a current understanding of their field, upper-level courses taken more than 10 years before the degree is awarded must have Departmental approval for use in the Business Core or the major.

Overview of course requirements

- Core Curriculum (USM requirement)
- Non-Business Core (School requirement)
- Business Core (School requirement)
- Major Requirements
- General Electives

USM Core Curriculum Requirements

(up to 45 credits, minus credit counted elsewhere) please see USM Core Curriculum section of this catalog for details. School of Business specific Core courses are noted below.

- Entry Year Experience – EYE required for students entering with fewer than 24 credit hours; May be fulfilled with EYE 125/128 Getting Down to Business
- College Writing
- Quantitative Reasoning: MAT 210 Business Statistics (credits counted in the non-business core).
- Creative Expression: THE 170 Public Speaking (credits counted in the non-business core).
- Socio-cultural Analysis: ECO 101 Macroeconomics (credits counted in the non-business Core)
- Cultural Interpretation
- Science Exploration
- Ethical Inquiry, Social Responsibility, and Citizenship; May be fulfilled with BUS 347 Triple Bottom Line Business
- Diversity
- International: May be fulfilled and double counted in the Business Core section by successful completion of BUS 335 International Business or BUS 361 International Marketing.
- Thematic Cluster or a minor of 15 credits or more or a double major of 15 or more unique credits (Note: The Professional Practices Cluster includes Business Core courses; one of which may be counted in the Business Core and in the Professional Practices Cluster.)
- Capstone: BUS 450 Business Policy and Strategy (credits counted in the Business Core)
Non-business Core Requirements (17 credits)

Spreadsheet proficiency: demonstrated by passing ABU 190 Spreadsheets and Problem Solving with a grade of C or higher, or by successfully passing a School of Business spreadsheet proficiency exam. Proficiency must be demonstrated to graduate.

- ECO 101 Introduction to Macroeconomics
- ECO 102 Introduction to Microeconomics
- MAT 108 College Algebra with C- or higher grade

Substitutes include a C- or higher grade in MAT 140 or approved higher level math course or passing a CLEP exam MAT 210 Business Statistics with C-or higher grade

or C- or higher grade in prior credit for MAT 120 or other approved statistics course (http://usm.maine.edu/sb/stats).

THE 170 Public Speaking

or other course by permission

Business Core Requirements (36 credits)

A minimum of 50 percent of business core courses must be taken at USM, and the student must achieve a minimum grade in each course (listed below).

- ACC 110 Financial Accounting Information for Decision Making (C- or higher)
- ACC 211 Managerial Accounting Information for Decision Making (C- or higher)
- BUS 260 Marketing (C- or higher)
- BUS 275 Applied Business Analysis (C- or higher)
- BUS 280 Legal Environment of Business (C- or higher)
- BUS 340 Managing Organizational Behavior (C or higher)
- BUS 345 Information Technology/Management Information Systems (C or higher)
- BUS 370 Management Science (C or higher)
- BUS 375 Production/Operations Management (C or higher)
- BUS 450 Business Policy and Strategy (C or higher)
- FIN 320 Basic Financial Management (C or higher)

Select one of the following international courses:

- BUS 335 International Business (C or higher)
- BUS 361 International Marketing (C or higher)
- BUS 382 International Business Law (C or higher)
- FIN 330 International Financial Management (C or higher)

Entrepreneurship and Small Business Track (15 credit hours)

Students in this track graduate with a concentration in entrepreneurship and small business management listed on their transcript. Required courses in this track may not be available at night. At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 15 credits applied toward the major.

Requirements

- BUS 362 Market Opportunity Analysis
- BUS 385 Entrepreneurship and Venture Creation
- BUS 485 Managing the Growing Entrepreneurial Venture

Select 6 credits of 300-level or higher ACC, BUS, FIN, or RMI courses.

International Business Track (15 credit hours)

Students in this track graduate with a concentration in international business listed on their transcript. Students are encouraged to develop their foreign language skills, to travel abroad, and to obtain a minor in international studies. At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 15 credits applied toward the major.

Requirements (in addition to the international requirement in the Business Core):

- BUS 335 International Business

Select 6 credits from

- BUS 361 International Marketing
- BUS 382 International Business Law
- BUS 394 Internship in International Business
- ECO 370 International Economics
BUS 337 Approved International Business Experience (see below)

Select 6 credits of 300-level or higher ACC, BUS, FIN, or RMI courses.

BUS 336 Approved International Experience, and BUS 337 Approved International Business Experience, award credit for educational activity by a student while outside of the U.S. that contributes to the student's understanding of international business and which has been approved by one of the international business faculty members.

Activities which normally will be approved for credit as BUS 336 include, without limitation:

- A course relevant to international business, taken at an educational institution outside the U.S., and qualifying for 3 or more credits when transferred to USM.
- BUS 490 Independent Study involving a student's activities outside the U.S. (3 cr. min.)
- A USM course relevant to international business, involving study outside the U.S. and which has 3 or more credits.
- An international study tour offered by a reputable organization. Courses relevant to international business shall include, without limitation, courses in economics, political science, law, history, geography, culture, and courses that develop skills in languages other than English.
- BUS 336 may be used either as a course in the International Business Track or as a 300-level or higher BUS course.

BUS 337 Approved International Business Experience, and BUS 337 Approved International Business Experience, award credit for educational activity by a student while outside of the U.S. that contributes to the student's understanding of international business and which has been approved by one of the international business faculty members.

An activity approved for credit as BUS 337 will normally be limited to an upper-level (300-level or higher equivalent at USM) course in a business discipline, including economics and/or law, taken at an educational institution outside the U.S., and qualifying for three or more credits when transferred to USM. Approval for BUS 337 may be denied if the student lacks the necessary foundational course(s) in the relevant discipline. BUS 336 is not a prerequisite for BUS 337. BUS 337 may be used either as a course in the International Business track or as a 300-level or higher BUS course.

Risk Management and Insurance Track (15 credit hours)

The risk management and insurance track prepares students for careers in the insurance industry (including insurance carriers and underwriters, insurance agencies or brokerages, insurance service fields) and its allied fields, such as banking, financial planning, accounting, real estate, stockbrokerage, and third party administration. Students learn a blend of theoretical and practical concepts and apply this knowledge to risk management and insurance. The program develops analytical and critical thinking skills that will aid students throughout their careers. At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 15 credits applied toward the major.

Requirements:

- RMI 320 Introduction to Risk Management and Insurance
- RMI 330 Health, Life, and Disability Insurance
- RMI 350 Managing Risk with Property and Liability Insurance

Select 6 credits of 300-level or higher ACC, BUS, ECO (310 only), FIN or RMI courses, including - RMI 395 Internship in Insurance.

Sustainable Business Track (15 credit hours)

Students completing this track will be better prepared to identify "green market" opportunities and to manage – both traditional firms and social enterprises - for the triple bottom line of environmental, social, and financial performance. A concentration in sustainable business will be listed on their transcript. Students are encouraged to take ESP 101/102 as their Core science course and obtain a minor or certificate related to sustainability, applied energy, or nature tourism. Required courses in this track may not be available at night. At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 15 credits applied toward the major.

Requirements:

- BUS 347 Triple Bottom Line Business
- Select 6 credits from
  - BUS 391 Internship in Sustainable Business
  - ESP 275 Energy Use and Social Adaptations [prerequisite: ESP 101/2K or permission for SB concentrators]
  - Business: BUS 362/385/396/398/490, RMI 320
  - Economics: ECO 316/326/327/335
  - Other Areas: ESP 223/308, ANT 450 (Tourism, Development & Sustainability), POS 363/380 (Energy Policy), or advisor approved course.

Select 6 credits of 300-level or higher ACC, BUS, FIN, or RMI courses.

General Management Track (15 credit hours)

Students in this track select advanced study courses across multiple fields of business. At least 50 percent of credit hours applied to the major
must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 15 credits applied toward the major.

Requirements

Select 3 credits from each of three different disciplinary areas:

- Accounting (ACC 301-329)
- Finance (FIN 321-330)
- Law (BUS 380, BUS 382)
- Management (BUS 335, 342, 346, 347, 377, 385, 485)
- Marketing (358-369, 398)
- Risk Management and Insurance (RMI 320-350)
- Sport Management (BUS 311, BUS 312, BUS 315, BUS 316)

Select 6 credits of 300-level or higher ACC, BUS, FIN, or RMI courses.

General Electives (remaining credits for 120 credit minimum)

The exact number of general elective credits varies and is dependent upon choices made in University core requirements.

BS in Business Administration - General Management Major with Entrepreneurship and Small Business Track

Description

Students in this track graduate with a concentration in entrepreneurship and small business management listed on their transcript.

Program Requirements

In addition to the requirements listed in the BS, the following requirements apply to the Entrepreneurship and Small Business Track:

Required courses in this track may not be available at night. At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 15 credits applied toward the major.

Requirements

- BUS 362 Market Opportunity Analysis
- BUS 385 Entrepreneurship and Venture Creation
- BUS 485 Managing the Growing Entrepreneurial Venture

Select 6 credits of 300-level or higher ACC, BUS, FIN, or RMI courses.

BS in Business Administration - General Management Major with General Management Track

Description

Students in this track select advanced study courses across multiple fields of business.

Program Requirements
In addition to the requirements listed in the BS, the following requirements apply to the General Management Track:

At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 15 credits applied toward the major.

Requirements

Select 3 credits from each of three different disciplinary areas:

- Accounting (ACC 301-329)
- Finance (FIN 321-330)
- Information Management (BUS 377)
- Law (BUS 380, BUS 382)
- Management (BUS 335, 342, 346, 347, 385, 485)
- Marketing (358-369, 398)
- Risk Management and Insurance (RMI 320-350)
- Sport Management (BUS 311, BUS 312, BUS 315, BUS 316)

Select 6 credits of 300-level or higher ACC, BUS, FIN, or RMI courses.

## BS in Business Administration - General Management Major with International Business Track

### Description

Students in this track graduate with a concentration in international business listed on their transcript. Students are encouraged to develop their foreign language skills, to travel abroad, and to obtain a minor in international studies.

### Program Requirements

In addition to the requirements listed in the BS, the following requirements apply to the International Business Track:

At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 15 credits applied toward the major.

Requirements (in addition to the international requirement in the Business Core):

- BUS 335 International Business

Select 6 credits from

- BUS 361 International Marketing
- BUS 382 International Business Law
- BUS 394 Internship in International Business
- ECO 370 International Economics
- FIN 330 International Financial Management
- BUS 336 Approved International Experience (see below)
- BUS 337 Approved International Business Experience (see below)

Select 6 credits of 300-level or higher ACC, BUS, FIN, or RMI courses.

BUS 336 Approved International Experience, and BUS 337 Approved International Business Experience, award credit for educational activity by a student while outside of the U.S. that contributes to the student's understanding of international business and which has been approved by one of
the international business faculty members.

Activities which normally will be approved for credit as BUS 336 include, without limitation:

- A course relevant to international business, taken at an educational institution outside the U.S., and qualifying for 3 or more credits when transferred to USM.
- BUS 490 Independent Study involving a student's activities outside the U.S. (3 cr. min.)
- A USM course relevant to international business, involving study outside the U.S. and which has 3 or more credits.
- An international study tour offered by a reputable organization. Courses relevant to international business shall include, without limitation, courses in economics, political science, law, history, geography, culture, and courses that develop skills in languages other than English. BUS 336 may be used either as a course in the International Business Track or as a 300-level or higher BUS course.

An activity approved for credit as BUS 337 will normally be limited to an upper-level (300-level or higher equivalent at USM) course in a business discipline, including economics and/or law, taken at an educational institution outside the U.S., and qualifying for three or more credits when transferred to USM. Approval for BUS 337 may be denied if the student lacks the necessary foundational course(s) in the relevant discipline. BUS 336 is not a prerequisite for BUS 337. BUS 337 may be used either as a course in the International Business track or as a 300-level or higher BUS course.

BS in Business Administration - General Management Major with Risk Management and Insurance Track

Description

The risk management and insurance track prepares students for careers in the insurance industry (including insurance carriers and underwriters, insurance agencies or brokerages, insurance service fields) and its allied fields, such as banking, financial planning, accounting, real estate, stockbrokerage, and third party administration. Students learn a blend of theoretical and practical concepts and apply this knowledge to risk management and insurance. The program develops analytical and critical thinking skills that will aid students throughout their careers.

What do risk management and insurance careers look like?

Although the insurance industry employs millions in the U.S., the careers that can be found in risk management and insurance still fly under the radars of many students. Those who land jobs in this industry tend to stay for a reason. The industry is relatively more stable than most others and the opportunities within it are thriving as the U.S. population ages, wealth grows, and new risks evolve. That you help individuals and businesses protect themselves against catastrophic losses and help them anticipate the next big risk can make careers in risk management and insurance personally fulfilling. Depending on your specific job, you may be in a position to help clients understand their risks, advise them about the options they have to manage those risks, and help them explore different ways to finance and control the risks.

Looking for more information about our Risk Management and Insurance program? Contact Dr. Dana Kerr, CPCU, ARM at 207.780.4059 or dkerr@usm.maine.edu

Learn about our programs from RMI majors.

Program Requirements

In addition to the requirements listed in the BS, the following requirements apply to the Risk Management and Insurance Track:

At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 15 credits applied toward the major.

Requirements:
- RMI 320 Introduction to Risk Management and Insurance
- RMI 330 Health, Life, and Disability Insurance
BS in Business Administration - General Management Major with Sustainable Business Track

Description

Students completing this track will be better prepared to identify "green market" opportunities and to manage – both traditional firms and social enterprises - for the triple bottom line of environmental, social, and financial performance. A concentration in sustainable business will be listed on their transcript.

Program Requirements

In addition to the requirements listed in the BS, the following requirements apply to the Sustainable Business Track:

Students are encouraged to take ESP 101/102 as their Core science course and obtain a minor or certificate related to sustainability, applied energy, or nature tourism. Required courses in this track may not be available at night. At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 15 credits applied toward the major.

Requirements

BUS 347 Triple Bottom Line Business
Select 6 credits from
BUS 391 Internship in Sustainable Business
ESP 275 Energy Use and Social Adaptations [prerequisite: ESP 101/2K or permission for SB concentrators]
Business: BUS 362/385/396/398/490, RMI 320
Economics: ECO 316/326/327/335
Other Areas: ESP 223/308, ANT 450 (Tourism, Development & Sustainability), POS 363/380 (Energy Policy), or advisor approved course.

Select 6 credits of 300-level or higher ACC, BUS, FIN, or RMI courses.

BS in Business Administration - Marketing Major

Description

The marketing major (15 credits) prepares business administration students for a wide range of marketing and management careers ranging from client services to new product development and brand management. Separate courses are offered in career areas such as retailing, advertising, sales, and sport marketing. Students acquire a solid grasp of marketing concepts and practices along with a comprehensive understanding of business. Most important, the program fosters the development of professional skills crucial for career success. Students are encouraged to further develop skills by taking the applied courses listed below and being active in student organizations such as the School's Student Marketing Association (SMA).

Program Requirements

In addition to meeting all University requirements, students must earn a minimum grade of C- in 100-200 level courses, and a C in 300-400 level courses in all Business Core courses applied toward the degree. To ensure that students graduate with a current understanding of their field, upper-level courses taken more than 10 years before the degree is awarded must have Departmental approval for use in the Business Core or the major.

Students may declare or change a major by completing a form available at the School office. Double majors are possible as long as the courses
applied toward one major are not applied toward the second major. Under no circumstances can credits be double-counted for two program options (e.g., major, minor, track, or concentration) within the School of Business. Before enrolling in their first School of Business course (ACC, BUS, FIN, or RMI designations) requiring junior standing, students majoring in a School of Business major must have junior standing (54 credits completed) and a minimum grade point average of 2.33 in USM courses. This minimum GPA requirement supersedes any course-specific GPA requirement lower than 2.33.

Overview of course requirements

- Core Curriculum (USM requirement)
- Non-Business Core (School requirement)
- Business Core (School requirement)
- Major Requirements
- General Electives

USM Core Curriculum Requirements

(up to 45 credits, minus credit counted elsewhere) please see USM Core Curriculum section of this catalog for details. School of Business specific Core courses are noted below.

- Entry Year Experience – EYE required for students entering with fewer than 24 credit hours; May be fulfilled with EYE 125/128 Getting Down to Business
- College Writing
- Quantitative Reasoning: MAT 210 Business Statistics (credits counted in the non-business core).
- Creative Expression: THE 170 Public Speaking (credits counted in the non-business core).
- Socio-cultural Analysis: ECO 101 Macroeconomics (credits counted in the non-business Core)
- Cultural Interpretation
- Science Exploration
- Ethical Inquiry, Social Responsibility, and Citizenship; May be fulfilled with BUS 347 Triple Bottom Line Business
- Diversity
- International: May be fulfilled and double counted in the Business Core section by successful completion of BUS 335 International Business or BUS 361 International Marketing.
- Thematic Cluster or a minor of 15 credits or more or a double major of 15 or more unique credits (Note: The Professional Practices Cluster includes Business Core courses; one of which may be counted in the Business Core and in the Professional Practices Cluster.)
- Capstone: BUS 450 Business Policy and Strategy (credits counted in the Business Core)

Non-business Core Requirements (17 credits)

Spreadsheet proficiency: demonstrated by passing ABU 190 Spreadsheets and Problem Solving with a grade of C or higher, or by successfully passing a School of Business spreadsheet proficiency exam. Proficiency must be demonstrated to graduate.

ECO 101 Introduction to Macroeconomics
ECO 102 Introduction to Microeconomics
MAT 108 College Algebra with C- or higher grade

Substitutes include a C- or higher grade in MAT 140 or approved higher level math course or passing a CLEP exam

MAT 210 Business Statistics with C- or higher grade
or C- or higher grade in prior credit for MAT 120 or other approved statistics course ([http://usm.maine.edu/sb/stats](http://usm.maine.edu/sb/stats)).
THE 170 Public Speaking
or other course by permission

Business Core Requirements (36 credits)

A minimum of 50 percent of business core courses must be taken at USM, and the student must achieve a minimum grade in each course (listed below).

ACC 110 Financial Accounting Information for Decision Making (C- or higher)
ACC 211 Managerial Accounting Information for Decision Making (C- or higher)
BUS 260 Marketing (C- or higher)
BUS 275 Applied Business Analysis (C- or higher)
BUS 280 Legal Environment of Business (C- or higher)
BUS 340 Managing Organizational Behavior (C or higher)
BUS 345 Information Technology/Management Information Systems (C or higher)
BUS 370 Management Science (C or higher)
BUS 375 Production/Operations Management (C or higher)
BUS 450 Business Policy and Strategy (C or higher)
FIN 320 Basic Financial Management (C or higher)
Select one of the following international courses:
- BUS 335 International Business (C or higher)
- BUS 361 International Marketing (C or higher)
- BUS 382 International Business Law (C or higher)
- FIN 330 International Financial Management (C or higher)

Major Requirements (15 credits)

At least 50 percent of credit hours applied to the major must be taken at USM. No more than 3 credits of internship can count toward the major. See descriptions below for specific requirements of each major. Students must earn a grade point average of 2.33 or higher in the 15 credits applied toward the major.

Marketing Major Requirements:
- BUS 360 Marketing Strategy
- BUS 365 Consumer Behavior
- BUS 369 Marketing Research

Select an applied Marketing course:
- BUS 358 E-commerce
- BUS 362 Market Opportunity Analysis
- BUS 367 Marketing Management
- BUS 392 Internship in Marketing
- BUS 398 Marketing Practicum

Select a 3-credit 300-level or higher Marketing elective:
- BUS 311 Sport Marketing
- BUS 358 E-commerce
- BUS 361 International Marketing (only if not used to fulfill your international requirement in the Business Core)
- BUS 362 Market Opportunity Analysis
- BUS 363 Advertising
- BUS 364 Professional Selling
- BUS 366 Retail Management
- BUS 367 Marketing Management
- BUS 392 Internship in Marketing
- BUS 398 Marketing Practicum

General Electives (remaining credits for 120 credit minimum)

The exact number of general elective credits varies and is dependent upon choices made in University core requirements.

BS in Business Administration - Sport Management Major

Description

The sport management major (27 credits) prepares students for careers in the dynamic, global, and multimillion-dollar sport industry. Sport business professionals must understand the complexities of this competitive industry and develop strategies for personal and organizational success. The sport management major is designed to meet the needs of these managers in a range of sport industry settings, and recognizes the essential business foundations required to be successful in the field. Academic and practical experiences are combined to prepare students to gain successful employment in a range of sport industry settings. The sport management coursework provides students with the skills to be successful in a variety of areas including professional and amateur sports organizations, event management, sport marketing agencies, sport facility management, sporting goods manufacturing, and collegiate athletics.

Sport Management Internships and Advanced Experience

Meet the Sport Management Faculty

Program Requirements
In addition to meeting all University requirements, students must earn a minimum grade of C- in 100-200 level courses, and a C in 300-400 level courses in all Business Core courses applied toward the degree. To ensure that students graduate with a current understanding of their field, upper-level courses taken more than 10 years before the degree is awarded must have Departmental approval for use in the Business Core or the major.

Students may declare or change a major by completing a form available at the School office. Double majors are possible as long as the courses applied toward one major are not applied toward the second major. Under no circumstances can credits be double-counted for two program options (e.g., major, minor, track, or concentration) within the School of Business. Before enrolling in their first School of Business course (ACC, BUS, FIN, or RMI designations) requiring junior standing, students majoring in a School of Business major must have junior standing (54 credits completed) and a minimum grade point average of 2.33 in USM courses. This minimum GPA requirement supersedes any course-specific GPA requirement lower than 2.33.

Overview of course requirements

- Core Curriculum (USM requirement)
- Non-Business Core (School requirement)
- Business Core (School requirement)
- Major Requirements
- General Electives

USM Core Curriculum Requirements

(up to 45 credits, minus credit counted elsewhere) please see USM Core Curriculum section of this catalog for details. School of Business specific Core courses are noted below.

- Entry Year Experience – EYE required for students entering with fewer than 24 credit hours; May be fulfilled with EYE 125/128 Getting Down to Business
- College Writing
- Quantitative Reasoning: MAT 210 Business Statistics (credits counted in the non-business core).
- Creative Expression: THE 170 Public Speaking (credits counted in the non-business core).
- Socio-cultural Analysis: ECO 101 Macroeconomics (credits counted in the non-business Core)
- Cultural Interpretation
- Science Exploration
- Ethical Inquiry, Social Responsibility, and Citizenship; May be fulfilled with BUS 347 Triple Bottom Line Business
- Diversity
- International: May be fulfilled and double counted in the Business Core section by successful completion of BUS 335 International Business or BUS 361 International Marketing.
- Thematic Cluster or a minor of 15 credits or more or a double major of 15 or more unique credits (Note: The Professional Practices Cluster includes Business Core courses; one of which may be counted in the Business Core and in the Professional Practices Cluster.)
- Capstone: BUS 450 Business Policy and Strategy (credits counted in the Business Core)

Non-business Core Requirements (17 credits)

Spreadsheet proficiency: demonstrated by passing ABU 190 Spreadsheets and Problem Solving with a grade of C or higher, or by successfully passing a School of Business spreadsheet proficiency exam. Proficiency must be demonstrated to graduate.

ECO 101 Introduction to Macroeconomics
ECO 102 Introduction to Microeconomics
MAT 108 College Algebra with C- or higher grade

Substitutes include a C- or higher grade in MAT 140 or approved higher level math course or passing a CLEP exam
MAT 210 Business Statistics with C-or higher grade
or C- or higher grade in prior credit for MAT 120 or other approved statistics course (http://usm.maine.edu/sb/stats).
THE 170 Public Speaking
or other course by permission

Business Core Requirements (36 credits)

A minimum of 50 percent of business core courses must be taken at USM, and the student must achieve a minimum grade in each course (listed below).

ACC 110 Financial Accounting Information for Decision Making (C- or higher)
ACC 211 Managerial Accounting Information for Decision Making (C- or higher)
BUS 260 Marketing (C- or higher)
BUS 275 Applied Business Analysis (C- or higher)
BUS 280 Legal Environment of Business (C- or higher)
BUS 340 Managing Organizational Behavior (C or higher)
BUS 345 Information Technology/Management Information Systems (C or higher)
BUS 370 Management Science (C or higher)
BUS 375 Production/Operations Management (C or higher)
BUS 450 Business Policy and Strategy (C or higher)
FIN 320 Basic Financial Management (C or higher)

Select one of the following international courses:
  - BUS 335 International Business (C or higher)
  - BUS 361 International Marketing (C or higher)
  - BUS 382 International Business Law (C or higher)
  - FIN 330 International Financial Management (C or higher)

**Internship Track Major Requirements (27 credits)**

At least 50 percent of credit hours applied to the major must be taken at USM. No more than 6 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 27 credits applied toward the major.

**Sport Management Requirements**
- BUS 210 Introduction to Sport Management
- BUS 311 Sport Marketing
- BUS 312 Sport Law
- BUS 315 Sport Finance
- BUS 415 Sport Management Seminar
- BUS 397 Internship/Advanced Field Experience in Sport Management (6 credits)

**Sport Management Electives (6 credits)**
- BUS 313 Sport Facility Management
- BUS 314 Sport Communication
- BUS 316 Sport Event Management
- BUS 317 Sport Sponsorship and Sales
- BUS 318 Athletic Administration

**General Track Major Requirements (27 credits)**

At least 50 percent of credit hours applied to the major must be taken at USM. No more than 6 credits of internship can count toward the major. Students must earn a grade point average of 2.33 or higher in the 27 credits applied toward the major.

**Sport Management Requirements**
- BUS 210 Introduction to Sport Management
- BUS 311 Sport Marketing
- BUS 312 Sport Law
- BUS 315 Sport Finance
- BUS 415 Sport Management Seminar

**Sport Management Electives (12 credits)**
- BUS 313 Sport Facility Management
- BUS 314 Sport Communication
- BUS 316 Sport Event Management
- BUS 317 Sport Sponsorship and Sales
- BUS 318 Athletic Administration
- BUS 378 Sport Management Practicum

**General Electives (remaining credits for 120 credit minimum)**

The exact number of general elective credits varies and is dependent upon choices made in University core requirements.

**Certificate in Accounting**

**Description**
This certificate program is designed to prepare individuals, who already possess an undergraduate degree in another field of study, for a career or graduate study in accounting.

Program Requirements

The certificate program consists of 16 credit hours in accounting. The certificate is open to individuals who possess: 1) an undergraduate degree with a minimum cumulative GPA of 2.33, or 2) a master's level (or above) degree.

Career changers who already have completed an undergraduate course of study will have earned, at the completion of the certificate program, 136 or more hours of the 150-hour requirement to sit for the CPA exam. Individuals wishing to sit for the CPA exam should also take BUS 280 Legal Environment of Business. Those who need additional credits to meet the 150-hour requirement, and who do not wish to enter a graduate degree program, can take additional accounting electives and/or other business or undergraduate courses of interest to meet the credit-hour requirement to sit for the CPA exam. Matriculated USM students are not eligible to obtain this certificate.

There is a $50 fee to apply for the certificate program. Candidates should apply by submitting: a completed application form; evidence that they meet the minimum education requirement; and the application fee (payable to: USM School of Business) to: Accounting Certificate Coordinator; School of Business; University of Southern Maine; P.O. Box 9300; Portland, ME 04104-9300.

The following foundation courses (six credits) are prerequisites to one or more of the courses included in the accounting certificate.

- ACC 110 Financial Accounting Information for Decision Making (C- or higher)
- ACC 211 Managerial Accounting Information for Decision Making (C- or higher)

The certificate program consists of the following six courses (16 credits). Courses must be taken in the order required by the prerequisite structure in effect.

- ACC 221 The Financial Accounting Cycle* (C- or higher)
- ACC 301 Financial Reporting I (C- or higher)
- ACC 302 Financial Reporting II (C- or higher)
- ACC 329 Accounting Information Systems (C- or higher)
- ACC 410 Auditing and Assurance
- ACC 413 Concepts and Strategies of Taxation

*ACC 221 may be waived by passing an equivalency exam.

Enrollment in specific courses is based on eligibility criteria and availability of space in the courses. Enrollment in some courses may be restricted or prohibited in any given semester due to high demand from degree students. Admission into the certificate program does not guarantee admission into any other USM program or enrollment in any specific course. Students must complete the required 16 credit hours within four years after the application date and must earn a minimum 2.33 cumulative GPA (with a minimum grade of C- in each course) to obtain the certificate. Students may be able to apply earned certificate course credit toward an undergraduate business degree at USM with an accounting major if the minimum GPA requirements are met.

Students who have completed required coursework elsewhere, prior to admission to the certificate program, may petition to substitute up to three credits (one course) of another 400-level ACC course for one of the required courses (a grade of C or better in the course taken elsewhere is required). Non-matriculated students enrolled in this certificate program will not be eligible for financial aid.

Application Information

Application to this certificate program requires the completion of a certificate application form. Admission will be limited to those with either: 1) an undergraduate degree with a minimum cumulative GPA of 2.33, or 2) a masters level (or above) degree. **Non-matriculated students enrolled in this certificate program will not be eligible for financial aid.**

APPLICATION PROCEDURE

The recommended application deadlines for the program are August 15th for the fall semester and January 1st for the spring semester; however, applications will be accepted after those dates.

Application for Admission

Application for Certificate Completion

COST
Tuition is set by the University of Maine System Board of Trustees. The current undergraduate cost per credit hour is $253 (in-state). In addition to the University fees, the School of Business has a $67 per credit hour specialized accreditation fee. Visit the student accounts website for more tuition and fee information.

Certificate in Risk Management and Insurance

Description

The certificate program in risk management and insurance (RMI) is a way for individuals already working in risk management, insurance, and financial services to develop a deeper understanding of the business in which they work without the larger and protracted experience of seeking a complete (or in some cases second) undergraduate degree.

Can courses translate into credit towards a professional designation?

The National Alliance for Insurance Education & Research has agreed to allow students who successfully complete the RMI 350 course (Managing Risk with Property & Liability Insurance) to receive automatic credit for one of the five components of their Certified Risk Managers (“CRM”) designation. Because the National Alliance has a “CRM for CIC” program already in place, credit for the RMI 350 course will at the same time satisfy one of the five parts of the Certified Insurance Counselors (“CIC”) designation.

The National Alliance does not require students to be enrolled in the RMI degree program or the RMI certificate program to benefit from this relationship. Indeed, those already holding the CRM designation can satisfy the full year’s annual update requirement by successfully completing RMI 350.

Program Requirements

One of the three RMI courses (RMI 350) has been approved for automatic credit toward two separate professional designations offered by a national provider of risk management and insurance professional education.

Applications to the program are available online or from the School of Business office and carry a $50 application fee. Applicants to this program must mail completed hard copy application and application fee (payable to: USM School of Business) to RMI Certificate Program, University of Southern Maine, P.O. Box 9300, Portland, ME 04104-9300

Admission to this certificate program will be limited to those with either: 1) a minimum cumulative 2.33 GPA in at least 54 previous semester hours of college credit, or 2) a minimum of three years of risk management, insurance, or other financial services work experience. Applicants relying on the latter admission requirement will need to provide evidence of at least a high school diploma, or its equivalent.

The RMI certificate program is a 15-hour program consisting of three required core courses and two elective courses. There is no particular order in which either core or elective courses must be taken as long as individual course prerequisites are satisfied.

Required Core Courses (9 credit hours):
- RMI 320 Introduction to Risk Management and Insurance
- RMI 330 Health, Life, and Disability Insurance
- RMI 350 Managing Risk with Property and Liability Insurance

Elective Courses (6 credit hours) – choose any two courses:
- ACC 110 Financial Accounting Information for Decision Making
- BUS 200 Introduction to Business
- BUS 201 Personal Finance
- BUS 260 Marketing
- BUS 280 Legal Environment of Business
- BUS 340 Managing Organizational Behavior

Enrollment in specific courses is based on eligibility criteria and availability of space in the courses. Enrollment in some highly demanded courses may be restricted or prohibited in any given semester. Admission into the certificate program does not guarantee admission into any other USM program or enrollment in any specific course.

Students must complete the required 15 credit hours within four years after the application date and must earn a minimum 2.33 cumulative GPA to obtain the certificate. Students may be able to apply earned certificate course credit towards an undergraduate business degree at USM as long as they earn a minimum 2.33 GPA in the certificate program courses.
Related courses previously taken in associate or baccalaureate degree programs at regionally accredited colleges and universities in which a minimum grade of C+ was earned may be applied towards the non-RMI elective courses of the proposed certificate program. Transfer credit will not be permitted for the RMI core courses. Non-matriculated students enrolled in this certificate program are not eligible for financial aid.

Admission Information

Admission to the RMI certificate program requires the completion of a certificate application form and payment of the application fee. Admission is open to those who have completed 54 credit hours with a GPA of 2.33 or higher. Those who have a minimum of three years of risk management, insurance, or other financial services work experience and a high school diploma, or GED may also apply.

Enrollment in specific courses is based on eligibility criteria and availability of space in the courses. Enrollment in some highly demanded courses may be restricted or prohibited in any given semester. Admission into the certificate program does not guarantee admission into any other USM program or enrollment in any specific course.

Non-matriculated students enrolled in this certificate program will not be eligible for financial aid.

Application Procedure

Download an application here. Admissions is rolling; however the recommended application deadlines August 15th for the fall semester and January 1st for the spring semester.

Certificate Completion Application

For more information regarding the RMI Certificate Program contact:
Professor Dana Kerr
(207) 780.4059 - dkerr@usm.maine.edu

Minor in Accounting

Description

The minor in accounting is designed to permit undergraduate majors from outside the School of Business, as well as non-accounting business administration majors within the School, an opportunity to develop a more in-depth knowledge and skill in accounting.

Program Requirements

Students wishing to pursue the minor must obtain a copy of the Authorization for Accounting Minor form from the School of Business, complete and return it to the School of Business advisor, signed by the student's current advisor for his or her major. Completion of at least 12 credits at USM with an overall GPA of 2.33 is required at the time of application. Accounting minors need a 2.33 cumulative grade point average in the five courses taken in the minor. A student may transfer to the minor up to 6 credit hours of comparable accounting courses.

The minor in accounting is 15 credit hours, including 6 credit hours required in:
ACC 110 Financial Accounting Information for Decision Making (C- or higher)
ACC 211 Managerial Accounting Information for Decision Making (C- or higher)

And nine credit hours from the following:
ACC 301 Financial Reporting I*
ACC 302 Financial Reporting II
ACC 329 Accounting Information Systems
ACC 395 Internship I in Accounting
ACC 405 Cost Management Systems
ACC 413 Concepts and Strategies of Taxation
ACC 416 Governmental and Nonprofit Accounting
ACC 418 Principles of Fraud Examination
ACC 499 Special Topics in Accounting

*Students who enroll in ACC 301 are required to complete the prerequisite, ACC 221, The Financial Accounting Cycle with a C (2.0) or higher grade. ACC 221 is a 1-credit hour self-study course and is in addition to the 15 credits for the minor.
Minor in Business Administration

Description

The minor in business administration allows students from a variety of majors across the University to complement their education by enrolling in courses to develop skills in several functional areas of management.

Program Requirements

The minor in business administration (21 credits) is available only to students in majors outside the School. Students who wish to pursue the minor must complete a declaration form available at the School of Business. The requirements for admission to the minor are completion of at least 12 credits at USM and a grade point average of 2.33 or higher. A student may transfer into the minor up to 9 credit hours of acceptable courses. To complete the minor, students must have a grade point average of at least 2.33 in the minor courses. Minimum grades may be required as prerequisite to other minor courses. Check course description for details.

Select 21 credit hours from:
- ACC 110 Financial Accounting Information for Decision Making (C- or higher)
- ACC 211 Managerial Accounting Information for Decision Making (C- or higher)
- BUS 101 Getting Down to Business
- BUS 200 Introduction to Business
- BUS 201 Personal Finance
- BUS 260 Marketing (C- or higher)
- BUS 280 Legal Environment of Business (C- or higher)
- BUS 340 Managing Organizational Behavior (C or higher)
- BUS 345 Information Technology/Management Information Systems (C or higher)
- BUS 395 Internship I
- ECO 101 Introduction to Macroeconomics
- ECO 102 Introduction to Microeconomics
- RMI 320 Introduction to Risk Management and Insurance

Minor in Information Management

Description

The minor in information management allows students from a variety of majors across the University to complement their education by enrolling in courses to develop skills in information analysis, information retrieval, and informed decision making.

Program Requirements

The minor in information management (18 credits) is available to students in majors outside the School, although required courses may not be available at night. Students who wish to pursue the minor must complete a declaration form available at the School of Business. Admission into the minor requires completion of at least 12 credits at USM, a GPA of 2.33 or higher, and spreadsheet proficiency. A student may transfer into the minor up to nine credits of comparable courses. To complete the minor, the student must have a grade point average of at least 2.33 in minor courses:

- BUS 260 Marketing (C- or higher)
- BUS 275 Applied Business Analysis (see course listing for prerequisites; substitutes available for ASET students) (C- or higher)
- BUS 280 Legal Environment of Business
- BUS 345 Information Technology/Management Information Systems (C- or higher)
- BUS 358 E-commerce
- BUS 359 Customer Relationship Management: A Data-based Approach
Minor in Marketing

Description

The marketing minor (15 credits) is recommended for students who may wish to obtain in-depth knowledge and explore career opportunities in marketing and is available only to students in majors outside the School.

Program Requirements

The requirements for admission to the minor are completion of at least 12 credits at USM and a grade point average of 2.33 or higher. A student may transfer into the minor up to six credit hours of acceptable courses. To complete the minor, students must have a grade point average of at least 2.33 in the minor courses.

The required courses for the minor are:

Six required credit hours
- BUS 260 Marketing (C- or higher)
- BUS 365 Consumer Behavior

Select nine credit hours from
- BUS 101 Getting Down to Business
- BUS 311 - Sport Marketing
- BUS 358 - E-commerce
- BUS 360 - Marketing Strategy
- BUS 361 – International Marketing
- BUS 362 - Market Opportunity Analysis
- BUS 363 – Branding and Advertising
- BUS 364 - Professional Selling
- BUS 366 - Retail Management
- BUS 369 - Marketing Research
- BUS 392 - Internship in Marketing
- BUS 398 - Marketing Practicum
- BUS 399 - Special Topics

Minor in Pre-MBA

Description

The pre-MBA minor (29 credits) is recommended for students who may wish to pursue a Master of Business administration and is available only to students in majors outside the School.

Program Requirements

Students who wish to pursue the minor must complete a declaration form available at the School of Business. The requirements for admission to the minor are completion of at least 12 credits at USM and a grade point average of 2.33 or higher. A student may transfer into the minor up to 12 credit hours of acceptable courses. To complete the minor, students must have a grade point average of at least 2.33 in the minor courses. To fulfill MBA foundation requirement, all courses must be completed with a C (2.0) or higher grade.

The required courses (29 credit hours) for the minor are:
- ACC 110 Financial Accounting Information for Decision Making (C or higher)
- ACC 211 Managerial Accounting Information for Decision Making (C or higher)
- BUS 275 Applied Business Analysis (C or higher)
- BUS 340 Managing Organizational Behavior (C or higher)
Course Descriptions

School of Business Undergraduate Course List
School of Business Graduate Course List

2014-2015 Undergraduate Course List

University Course Catalogs

ACC 110 Financial Accounting Information for Decision Making
This course is designed to help students appreciate the role of accountants in providing information helpful to decisions of investors, creditors, government regulators, and others, and how that information can be used. Emphasis is on understanding the meaning and value of the balance sheet, income statement, and statement of cash flows. The role of the auditor, internal controls, and ethical issues are examined. The annual report is used to explore how corporations apply accounting principles in presentations to the public. Prerequisites: minimum of 12 earned credit hours and evidence of successfully meeting the University’s writing and mathematics proficiency requirements. Cr 3.

ACC 211 Managerial Accounting Information for Decision Making
This course will provide students with the opportunity to learn basic concepts and accounting systems involved in the use of managerial accounting information in making planning and control decisions in organizations. Basic concepts include different types of costs (e.g., direct, indirect, fixed, variable, and relevant costs). Basic accounting systems include systems for cost allocation (e.g., job-order costing, activity-based costing), planning (e.g., cost-volume-profit analysis, master budget), and control (e.g., flexible budgets, variance analysis, responsibility accounting, performance measurement). Prerequisites: ACC 110 (C- or higher) and sophomore standing. Cr 3.

ACC 221 The Financial Accounting Cycle
This course serves as a “bridge” between the introductory level (user-focused) financial accounting course and Financial Reporting I, which is required for the accounting major. The course reviews the accounting cycle: the journal entries for typical business transactions including adjusting and closing entries, and the preparation of accounting statements including preparation of a complete accounting cycle exercise. The course must be completed prior to enrollment in ACC 301/501. Prerequisite: ACC 110 (C- or higher) or MBA 502. Cr 1.

ACC 301 Financial Reporting I
An examination of the conceptual framework, the primary financial statements, and the methods and rationale for recording and reporting assets. Emphasis is on the effect of present and potential economic events on the financial statements. The course discusses the advantages, limitations and deficiencies associated with generally accepted principles in connection with presenting decision-useful information. Prerequisites: ACC 110 (C- or higher), ACC 211 (C- or higher), ACC 221 (with a grade of C or higher), and junior standing. Cr 3.

ACC 302 Financial Reporting II
An examination of the methods and rationale for recording liabilities and equity. The course also examines the statement of cash flows. Emphasis is on the effect of present and potential economic events on the primary financial statements. The course discusses the advantages, limitations, and deficiencies associated with generally accepted principles in connection with presenting decision-useful information. Prerequisites: ACC 301 and junior standing. Cr 3.

ACC 329 Accounting Information Systems
This course explores the theory and tools needed to select, use, set up internal controls for, and obtain information from accounting systems. The basic debits and credits of double-entry accounting are reviewed using a manual practice set that includes preparing typical business documents. The business activities performed in the expenditure, production, and revenue cycles are covered together with the documents, internal controls, and reporting needs relevant to each cycle. Significant emphasis is placed on the effects of error on financial reports, the controls needed to prevent and detect errors in accounting systems, and the correction of system errors. The use of small business accounting software is introduced. Students use accounting software to set up accounts, process transactions, and produce managerial and standard financial accounting reports. Prerequisites: ACC 211 (C- or higher), ACC 301 (or concurrent), and junior standing. Spring only. Cr 3.

ACC 395 Internship I
The first internship course in accounting is described in the general School of Business catalog text. Prerequisites: junior standing, 2.5 GPA or higher, and permission of a School of Business advisor and instructor. Enrollment is normally limited to accounting majors or minors who have not completed degree requirements. Pass/fail. Cr 3.
ACC 396 Internship II
This is the second internship course in accounting. Prerequisites: 2.5 GPA or higher, and permission of a School of Business advisor and instructor. May petition Department to take concurrently with ACC 395. Enrollment is normally limited to accounting majors who have not completed degree requirements. Credits from this course count as general electives only. Pass/fail. Cr 3.

ACC 405 Cost Management Systems
This course is designed to explore how cost management systems can be used to support competitive strategy in global markets. This is accomplished by providing an understanding of the underlying and fundamental concepts in cost accounting. Group activities and writing are an integral part of this course. Prerequisites: ACC 211 (C- or higher), ACC 221 (C or higher), and junior standing. Spring only. Cr 3.

ACC 410 Auditing and Assurance
This course examines the public accounting profession, auditing standards, and professional ethics. The course explores the process by which an auditor forms an opinion as to the “fairness of presentation” of financial statements, giving an overview of audit evidence and audit evidence accumulation methodology. The course exposes students both to the demand for and supply of the profession’s flagship service, financial statement audits, and to the nature of the value-added assurance and attestation services decision makers demand in the information age. The course illustrates with real companies, links class discussion and assignments to student skills, and encourages unstructured problem solving. This course provides an opportunity for students to study auditing concepts and theory at an advanced level by examining a number of issues, with extensive reading from the auditing research literature, in addition to the textbook material. Prerequisites: ACC 302 (or concurrent), ACC 329, and senior standing. Fall only. Cr 3.

ACC 413 Concepts and Strategies of Taxation
This course provides a conceptual understanding of the federal tax system, and its impact on individuals, corporations, and partnerships. The primary emphasis is on fundamental income tax concepts and principles, with an overview of other taxes. Detailed technical coverage and return preparation are minimized. The economic, political, social, and judicial reasoning underlying tax provisions are explored. Tax issues and changes under current consideration at the national, state, local and international levels are discussed. Basic research skills and methodology are introduced. Prerequisites: ACC 110 (C- or higher) and junior standing. Fall only. Cr 3.

ACC 416 Governmental and Nonprofit Accounting
An analysis of the environment and characteristics of government and nonprofit organizations, with an in-depth study of the basic concepts and standards of financial reporting for such entities. Financial management and accountability considerations specific to government and nonprofit organizations are emphasized. Prerequisites: ACC 301 and junior standing. Limited offerings. Cr 3.

ACC 418 Principles of Fraud Examination
This course examines the subject of fraud from both management and accounting perspectives. Utilizing a variety of techniques including text, lecture, case studies, guest speakers, and occasional videos, the course seeks to familiarize students with the conditions that facilitate fraud; the profile of the fraud perpetrator; common types of fraud; and methods of prevention, detection, and resolution. Numerous historical cases of fraud are examined. Students are brought to appreciate the prevalence of fraud in current society as well as the almost innumerable ways in which it can be committed. Students entering the business world are provided a perspective for understanding. Prerequisites: ACC 110 (C- or higher) and junior standing. Limited offerings. Cr 3.

ACC 490 Independent Study in Accounting
Selected topics in the various areas of accounting, auditing, and income taxes may be studied and researched on an independent basis. Enrollment is normally limited to accounting and finance degree candidates. Prerequisites: permission of instructor and program chair and senior standing. Cr 1-3.

ACC 499 Special Topics in Accounting
Prerequisites vary by topic. Cr 1-3.

BUS 101 Getting Down to Business
This course is an integrated, comprehensive overview of the way a business operates and what it takes to manage one. It introduces students to the basic, interdisciplinary knowledge used to run a business—such as finance, marketing, and management—by giving students an extended opportunity to manage a business in a simulated business environment. Students also get experience with, and enhance their ability to work in, self-managed teams. The course is strongly recommended as a first business course for all first-year students who are, or are considering, a major or minor in the School of Business. The course is designed to, in part, acclimate the recent high school graduate to USM. It is open to all University students, except those with more than 23 credits or credit for an introductory business course such as BUS 200. Cr 3.

BUS 200 Introduction to Business
This course is designed to introduce the student to the contemporary business environment and the variety of typical activities engaged in by business professionals. It explores how different business functions are integrated to accomplish the goals of the business within an increasingly competitive business environment. It is designed for anyone interested in becoming knowledgeable about successful business practices. Students with credit for BUS 101 or other introductory business course may not enroll. This course is intended for non-majors, and is restricted to students with fewer than 9 credits in business, finance, and accounting. Business and accounting majors may not enroll without the approval of their academic advisor. Those with credit for BUS 101 may not enroll. Prerequisites: Fewer than nine credits in BUS, FIN and ACC. Limited
offerings. Cr 3.

BUS 201 Personal Finance
Primary emphasis is to teach students how to become more knowledgeable and independent over money matters. Topics such as obtaining financial aid, managing student loans, career and education planning, budgeting, credit cards, stock market investing, real estate, and insurance will be covered. Upon completing the course, students will be on their way to making better money decisions. This course is open to all USM students. When taken by business or accounting majors, this course will give general elective credit. Limited offerings. Cr 3.

BUS 203 Career Planning and Development
Students in this course identify and develop career goals and plans while improving their writing skills. Students engage in activities relating to personal and professional interest profiling, interest and employment inventories, interview preparation, resume construction, job searches, and business writing. Prerequisites: sophomore standing and ENG 100/101C or equivalent course. Limited offerings. Cr 3.

BUS 210 Introduction to Sport Management
This course provides an overview of the business of sports, including career opportunities. The value of professional management to sports organizations is examined. Cr 3.

BUS 260 Marketing
This course is an introduction to the field of marketing. Topics include marketing strategy for products and services, market segmentation, targeting, and positioning, product issues, pricing, promotion, distribution, consumer behavior, marketing research and information systems, international marketing, and nonprofit marketing. Prerequisite: minimum of 24 earned credit hours. Cr 3.

BUS 275 Applied Business Analysis
This course provides students with an understanding of statistical concepts and tools that are critical in business decision making. The discussion and development of each topic are presented in an application setting, with the statistical results providing insights and solutions to real world problems. The coursework requires extensive use of commercially available statistical software. Prerequisite: ABU 190 (C or higher grade, or test-out option ), MAT 108 (C- or higher grade), and MAT 210 (C- or higher grade) or other approved statistics course (see http://usm.maine.edu/sh/stats for approved courses). Cr 3.

BUS 280 Legal Environment of Business
This course introduces students to the legal system, tort law, product liability, consumer law, labor law, equal employment law, intellectual property law, and other topics. It stresses the social responsibility of business and the legal and ethical framework in which businesses must function. Cr 3.

BUS 311 Sport Marketing
Basic marketing concepts are applied to sport organizations, both amateur and professional. Topics include promotions and public relations, sport consumer behavior, strategic marketing planning, marketing information management, marketing communications, and sponsorship. Prerequisites: BUS 260 (C- or higher). Cr 3.

BUS 312 Sport Law
This course examines the legal system, its terminology, and principles in the context of professional and amateur sports. Emphasis is on identifying and analyzing legal issues, the ramifications of those issues, and the means of limiting the liability of sport organizations. Prerequisites: BUS 280 (C- or higher) and junior standing. Fall only. Cr 3.

BUS 313 Sport Facility Management
An investigation of the functions of sport managers in the design, operation, and financing of facilities and venues. Students will examine the issues pertaining to management of public and private arenas, stadiums, theatres, galleries, festivals, racetracks, and multipurpose facilities. Management of temporary facilities for special events will also be considered. Prerequisite: BUS 311 or BUS 315. Limited offerings. Cr 3.

BUS 314 Sport Communication
This course is designed to introduce the student to the role of effective communication in the sport, art, and entertainment industry settings. The nature and function of communication will be examined in a variety of settings. Emphasis will be placed on interpersonal communications, public relations, mass media relations, public speaking, and innovative technology. Prerequisite: BUS 311. Limited offerings. Cr 3.

BUS 315 Sport Finance
Basic theory in finance and accounting is applied to managerial control of sport organizations. Topics include forms of ownership, taxation, financial analysis, feasibility studies, and economic impact studies. Prerequisites: FIN 320, (C or higher) and junior standing. Spring only. Cr 3.

BUS 316 Sport Event Management
This course is designed to provide practical involvement in managing a sport event. Students will be assigned to committees for which they will plan, organize, publicize and manage all aspects of event operations during the semester. A required component of the course will include a commitment to work with the actual event. Prerequisite: BUS 311 and junior standing. Limited offerings. Cr 3.
BUS 317 Sport Sponsorship and Sales
Overview of all elements of sport sponsorships, including rationale, benefits, proposal development. Sales management strategies will focus specifically on the unique aspects of sport sponsorship environment. Students will create marketing surveys, develop sponsorship proposals, identify and contact potential sponsors, conduct negotiation and sales, learn activation techniques, and evaluate sponsor packages. Prerequisite: BUS 311 or BUS 315. Limited offerings. Cr 3.

BUS 318 Athletics Administration
This course is designed to introduce the student to the management issues faced by administrators within collegiate and high school athletics departments. Students will develop an understanding of issues such as governance, financial considerations, National Collegiate Athletic Association (NCAA) and conference compliance, gender equity and Title IX, conference membership issues and realignment, legislation, and reform. Prerequisite: BUS 311 or BUS 315. Limited offerings. Cr 3.

BUS 321 Independent Projects in Marketing
This course is designed to give marketing students an opportunity to conduct independent research and projects with a faculty mentor. Students will meet regularly with their mentor during the semester to discuss their independent studies progress. At the end of the semester, students submit a written report and present their findings to their faculty mentor and the business client (if applicable). Prerequisites: BUS 260 (C- or higher), junior standing, and instructor permission. Cr 1-4.

BUS 335 International Business
Introduction to the global economy and the political and cultural environments of international business. Topics include financial, marketing, and human resource issues in international business. Prerequisites: ECO 101, ECO 102, and junior standing. Spring only. Cr 3.

BUS 336 Approved International Experience
An educational activity while outside the U.S. that contributes to the student’s understanding of international business and which has been approved by one of the international business faculty members. (See International Business Track for more information.) Prerequisite: junior standing. Cr. 3.

BUS 337 Approved International Business Experience
An educational activity while outside the U.S. that directly contributes to the student’s understanding of international business and has been preapproved by one of the international business faculty members. Normally limited to an upper-level course in a business discipline, including economics and/or law. (See International Business Track for more information.) Prerequisite: junior standing. Cr. 3.

BUS 340 Managing Organizational Behavior
A survey of the disciplines of management and organizational behavior, and of the practices managers employ in planning, organizing, leading, and controlling organizations. Topics include self-awareness, perception and decision making, individual differences and diversity, motivation, group dynamics, communication, stress, power and politics, organizational design, and change. The environmental context, workforce diversity, the global economy, and managerial ethics are core integrating themes. Prerequisite: junior standing. Cr 3.

BUS 342 Leadership
The purpose of this course is to help students be more effective exercising leadership. To do this, the course will first teach the distinction among leadership, authority, and management, and also among different leadership situations. The course will then provide experiential exercises and exposure to tools and techniques appropriate to the various challenges. Prerequisites: BUS 340 (C or higher) and junior standing. Limited offerings. Cr 3.

BUS 345 Information Technology/Management Information Systems
Surveys information/systems technology for the management of corporate information as a resource. Managerial and technical dimensions of information systems are blended in a framework of information technology. Specific topics will evolve with the field but may include data communications, information systems theory, database concepts, and decision support systems. Prerequisite: Sophomore standing. Cr 3.

BUS 346 Human Resource Management
Analysis of professional practice issues in personnel and human resource management. Students will form in-class enterprises to explore topics including: human resource planning, recruitment, staffing, performance appraisal, compensation and reward system design, training and development, employee rights and safety, labor-management relations, and legal and international dimensions of human resource management. Prerequisite: junior standing. Limited offerings. Cr 3.

BUS 347 Triple-Bottom-Line Business
How can firms pursue profits without harming the planet or the ‘way life should be’? This course explores sustainable business strategies and practices that can be used to manage the triple bottom line of financial, environmental, and social performance. Ethical action is a recurring theme. Students with credit for BUS 357 may not enroll. Prerequisites: junior standing, BUS 260 (C- or higher), BUS 280 (C- or higher), or instructor permission. Fall only. Cr 3.

BUS 358 E-Commerce
This course examines various business models used in electronic commerce, provides an understanding of how an e-presence is established, and
explore the strategic use of e-commerce in a global environment. Students will develop skills in establishing a Web presence for a business and business planning. Prerequisites: BUS 260 (C- or higher), BUS 345 (C or higher), and junior standing. Limited offerings. Cr 3.

BUS 359 Customer Relationship Management
Customer relationship management (CRM) is a key strategic process for marketing. This course will examine the importance of customer value and introduce traditional CRM and contemporary social CRM approaches. Students will develop skills to maximize profits and optimize the selection, acquisition, and retention of desired customers. Prerequisites: BUS 260 (C- or higher), BUS 275 (C- or higher), and junior standing. Limited offerings. Cr 3.

BUS 360 Marketing Strategy
This course prepares students to evaluate strategic marketing options, make informed marketing decisions, and formulate strategic marketing policies, based on quantitative and qualitative analysis. Basic skills emphasized in this class are situation analysis, management by profit and loss, implementing marketing strategies, brand management, positioning, and market segmentation. This is a foundation course for marketing majors. Prerequisites: BUS 260 (C- or higher) and sophomore standing. Cr. 3.

BUS 361 International Marketing
This course addresses the critical marketing skills required for business survival in today's world economy. Students learn to apply global marketing and financial management concepts and techniques during a semester-long, simulated global market program. Students analyze and manage international product lines and adapt to cultural differences while working in a computer simulated global marketplace. Prerequisites: BUS 260 (C- or higher) and junior standing. Fall only. Cr 3.

BUS 362 Market Opportunity Analysis
In this course, student teams work with a local business to develop a market opportunity. Areas of analysis include target-market identification, industry trends, demand analysis, capacity and fit issues, competitive analysis, and forecasting. Prerequisites: BUS 260 (C- or higher) and junior standing. Students are encouraged to take BUS 365 and BUS 369 before BUS 362. Cr 3.

BUS 363 Branding and Advertising
This course develops the necessary knowledge and skills to create a clear and compelling portrayal of the brand offering, whether it involves small businesses, entrepreneurial ventures, corporations or not-for-profit organizations. It uses a mix of different marketing communication methods in order to create a sustainable competitive advantage in the marketplace. Prerequisites: BUS 260 (C- or higher) and junior standing. Limited offerings. Cr 3.

BUS 364 Professional Selling
This course is designed to equip students with the fundamental understanding of the role of professional selling within all types of organizations, with an emphasis on development of communication, relationship building, and presentation skills. The course is interactive/“hands on” and will include: video case studies, role playing, sales presentations, guest lectures, use of PowerPoint, use of sales management software, group presentations, mini lectures, and Internet research. Prerequisites: BUS 260 (C- or higher) and junior standing. Limited offerings. Cr 3.

BUS 365 Consumer Behavior
This course examines alternative explanations of consumer behavior. Emphasis is placed on cultural, sociological, and psychological influences on consumption. Other topics include consumer decision processes and the way managers use consumer characteristics to segment the market and develop marketing plans. Prerequisites: BUS 260 (C- or higher) and junior standing. Students with credit for BUS 165 may not enroll. Cr 3.

BUS 366 Retail Management
Students examine the use of merchandise and service to satisfy the needs of targeted consumers in a competitive retail environment. Topics include marketing strategy, merchandising, location, store management, non-store retailing, pricing and financial analysis, organizational structure and human resources, and information systems. Prerequisites: ACC 110 (C- or higher), BUS 260 (C- or higher) or instructor permission, and junior standing. Limited offerings. Cr 3.

BUS 367 Marketing Management
Students gain experience making marketing decisions as members of teams. The emphasis is on applying a management perspective to marketing decision making. Students must integrate knowledge from other functional disciplines into a strategic marketing planning framework. Prerequisites: BUS 260 (C- or higher), any 300-level marketing course, and junior standing. Spring only. Cr 3.

BUS 369 Marketing Research
Students learn the process of marketing research as they work on a semester-long project with community businesses and organizations. Students learn how to produce a secondary data report, how to design and conduct a qualitative research study, and how to design and analyze the results of an online survey. Students will also acquire key secondary data research techniques, one-on-one interview skills, questionnaire design principles, and data analysis skills. The course has a significant PC lab component to encourage hands-on learning. Prerequisites: MAT 210 (C- or higher) or other approved statistics course (see http://usm.maine.edu/sb/stats for approved courses)(or concurrent), BUS 260 (C- or higher), and junior standing. Spring only. Cr 3.

BUS 370 Management Science
This course examines the role, perspective, and commonly used tools of quantitative analysis in business decision making. Emphasis is placed upon developing students’ abilities to recognize the need for quantification; formulate business problems quantitatively; select and test computer-based, decision-support system models; collect meaningful data; and interpret the implications of analysis results. Prerequisites: ABU 190 (C or higher grade, or test-out option), BUS 275 (C- or higher) or MAT 212, and junior standing. Students with credit for BUS 270 or BUS 371 may not enroll. Cr 3.

BUS 375 Production/Operations Management
An examination of the role of operations within manufacturing and service organizations. Emphasis is placed upon recognizing operational opportunities and tradeoffs, and employing quantitative and qualitative tools and decision-support systems to assist strategic and operational decision making. Topics include: process design, quality management, capacity planning, supply chain management, and production planning. Prerequisites: ABU 190 (C or higher) or test-out option, BUS 275 (C- or higher) or MAT 212, BUS 370 (C or higher), and junior standing. Cr 3.

BUS 377 Information Visualization
In this course, students will learn to create charts, maps, and other visualizations to tell stories and to create effective graphical displays of evidence. Students will learn to critically evaluate examples from print media and the internet after learning the foundations of information visualization. Prerequisites: BUS 275 (B- or higher) or other approved course (see: usm.maine.edu/sh/vis.html for approved courses) and junior standing. Spring only. Cr 3.

BUS 378 Sport Management Practicum
This course provides students with the opportunity to apply learned sport management skills, theories, and ideas in a sport industry setting. The course will allow a student to bridge the gap between classroom learning and practical application. This course is optional. The practicum will be a minimum of 200 hours and may be completed full or part-time. This course is open to students in the Sport Management General Track Major only who have not completed degree requirements. Prerequisites: BUS 311, junior standing and permission of a School of Business advisor and instructor. May not be taken pass/fail. Cr 3.

BUS 380 Advanced Legal Issues in Business
This course will cover negotiable instruments, contract law, trusts and estates, property law, and other legal topics. This course is intended to provide detailed study of many important legal issues facing businesses. Prerequisite: BUS 280 (C- or higher), junior standing, or permission of the instructor. Limited offerings. Cr 3.

BUS 382 International Business Law
An examination of legal issues affecting international business transactions. Topics include contracts, sale of goods, letters of credit, regulation of imports and exports, business competition law, protection of intellectual property rights, and ethical issues. Prerequisites: BUS 280 (C- or higher) or equivalent, and junior standing. Spring only. Cr 3.

BUS 385 Entrepreneurship and Venture Creation
This course is about starting a business and about the benefits and costs, both personal and professional, of an entrepreneurial career. Students learn how to establish start-up teams, identify opportunities, and obtain resources. The course involves written self-appraisals, case analyses, teamwork, and presentations of comprehensive business plans. Prerequisites: ACC 110 (C- or higher), ACC 211 (C- or higher) or permission, BUS 362 or BUS 369 (or permission), and junior standing. Fall only. Cr 3.

BUS 391 Internship in Sustainable Business
See BUS 395 description for requirements. Cr 3.

BUS 392 Internship in Marketing
See BUS 395 description for requirements. Cr 3.

BUS 393 Internship in Sport Management
(Limited to students in General Management Major, Sport Management Track – 2007 and 2008 catalogs only.) See BUS 395 description for requirements. Cr 3.

BUS 394 Internship in International Business
See BUS 395 description for requirements. Cr 3.

BUS 395 Internship I
This is the first internship course in business administration. Prerequisites: junior standing, 2.33 GPA or higher, and permission of a School of Business advisor and instructor. Enrollment is limited to School of Business majors and minors who have not completed degree requirements. Majors are limited to a maximum of six internship credits toward the degree; minors are limited to a maximum of three internship credit hours. Cr 3.

BUS 396 Internship II
This is the second internship course in business administration. Prerequisites: BUS 395, 2.33 GPA or higher, and permission of a School of
BUS 397 Internship in Sport Management/Advance Field Experience
The internship requirement is considered to be one of the most critical components of the Sport Management Program. Students will undertake a 12-15 week, full-time (40 hours per week) supervised internship. This opportunity is expected to enhance the student’s academic experiences via a required industry analysis paper, a research project, weekly logs and a portfolio, as well as provide additional work experience and networking opportunities. Internship experiences may take place in any of the varied sport industry settings. Students may obtain internships in any region of the country and in some cases may receive financial compensation. Prerequisite: junior standing, BUS 311, 2.33 GPA or higher and permission of a School of Business advisor and instructor. Enrollment is normally limited to sport management (internship track) majors who have not completed degree requirements. May not be taken Pass/Fail. Cr 6.

BUS 398 Marketing Practicum
Working in self-directed teams, students carry out a marketing project to meet the goals of a partner in the business community. As part of the course, students are to generate publicity for the school and formally present the results of the project to their external partners. The course emphasizes problem-based learning and the development of professional skills. If more than 3 credits are earned, the extra credits count as general electives. Students are encouraged to take BUS 365 and BUS 369 before this course. Prerequisites: BUS 260 (C- or higher), any 300-level marketing course, GPA of 2.5 or higher, junior standing, or instructor permission. Limited offerings. Cr 3.

BUS 399 Special Topics in Business
Prerequisites vary. Limited offerings. Cr 1-3.

BUS 415 Sport Management Seminar
This capstone sport management course is designed to integrate the academic work studied throughout the curriculum. Critique of governance issues and policy development in a range of sport organizations will be considered. Students will participate in decision making and strategic planning cases. Emphasis will focus on the strategic, profit-oriented, and ethical decision making that is necessary for upper level sport managers to be successful. Students will conduct in-depth analysis of a specific area of the field. Prerequisite: BUS 311, BUS 312, BUS 315. Spring only. Cr 3.

BUS 450 Business Policy and Strategy
An in-depth examination of the strategic management process in large complex organizations. This course uses case study analysis, discussion and integrative capstone projects to provide students with opportunities to learn and to apply strategic management theories and concepts. These include competitive analysis, value-chain analysis, generic business strategies, corporate strategy, and global strategy. The course fulfills the capstone requirement of the USM Core. Prerequisites: BUS 260 (C- or higher), BUS 340 (C or higher), FIN 320 (C or higher), GPA 2.0 or higher, and senior standing. Students matriculating fall 2011 and later must fulfill the University Core Requirement of “Ethical Inquiry, Social Responsibility and Citizenship” prior to enrollment. Cr 3.

BUS 485 Managing the Growing Entrepreneurial Venture
An interdisciplinary course emphasizing the application of entrepreneurial management concepts and strategies to the growth-oriented small business beyond the start-up stage to eventual maturity and harvest. Topics include venture opportunity analysis, stages of small business growth, making the transition from entrepreneur to entrepreneurial manager, formulating and implementing growth strategies, building an effective organization, marshaling organizational and financial resources for growth, managing under adversity, and managing rapid growth. Prerequisites: BUS 260 (C- or higher), BUS 340 (C or higher), FIN 320 (C or higher), and senior standing. Spring only. Cr 3.

BUS 490 Independent Study
Selected topics in business administration may be studied and researched on an independent basis. Enrollment is normally limited to business administration degree candidates. Prerequisites: junior standing and permission of instructor and Department chair. Cr 1-6.

FIN 320 Basic Financial Management
This course is a balanced introduction to the theory and practice of financial management. It prepares students to make basic financial decisions and understand the decisions of others. Topics include time value of money, capital markets, risk and return, stock and bond valuation, capital budgeting, capital structure, and working capital management. Prerequisites: ACC 110 (C- or higher), ECO 101 or ECO 102, MAT 210 (C- or higher) or other approved statistics course (see http://usm.maine.edu/sb/stats for approved courses), and junior standing. Cr 3.

FIN 321 Personal Financial Planning
This course begins to prepare students for a career as a professional financial planner by providing fundamental concepts and principles of personal financial planning, applied with a quantifiable approach to achieving client objectives. Topics include general principles of financial planning, the changing nature of the financial services environment, code of ethics and professional responsibility, credit and debt management, budgeting, personal taxes, employee benefit planning, goal attainment, investment planning, risk management through the purchase of insurance, retirement planning, and estate planning. The course will include casework and current financial planning problem scenarios. Prerequisites: FIN 320 (C or higher) and junior standing. Cr 3.

FIN 323 Derivatives: Options, Futures, and Swaps
This course explores the markets and valuations techniques for futures, options, and swaps contracts. Hedging and speculating techniques using derivatives are stressed. Financial engineering techniques are developed using derivatives which can adjust the risk and return offered by traditional assets. Topics include: Forward contracts, stock futures, interest rate futures, stock index futures, stock options, interest rate options, and swaps. Prerequisites: FIN 320 (C or higher) and junior standing. Spring only. Cr 3.

FIN 326 Financial Modeling
Introduces principles and techniques for building and implementing financial models. Topics are drawn from a variety of areas: financial planning, investments, derivatives, and corporate finance. The course emphasizes the application of financial modeling techniques in identifying and implementing business solutions. The course will be of special interest to students seeking hands-on experience constructing financial models. Prerequisites: FIN 320 (C or higher) and junior standing. Fall only. Cr 3.

FIN 327 Investment Management
Introduction to the securities markets, investment media, and strategies for managing individual and institutional investment portfolios. Special attention is directed to the risk and rate-of-return aspects of corporate stocks and bonds, government bonds, options, futures, and mutual funds. Prerequisites: FIN 320 (C or higher) and junior standing. Spring only. Cr 3.

FIN 330 International Financial Management
This course focuses upon financial management of the multinational corporation with assets domiciled abroad. The financial dimensions of multinationals require extensive knowledge of how to manage foreign exchange-denominated assets and liabilities and how to borrow money and issue stock in foreign countries. Thus, a basic overview of foreign exchange theory, balance of payments adjustment mechanisms, and international trade theory is provided. Other topics include: international import and export financing, international working capital management, multinational capital budgeting, and international cost of capital. Prerequisites: FIN 320 (C or higher) and junior standing. Limited offerings. Cr 3.

FIN 395 Internship I
The first internship course in finance is described in the general School of Business catalog text. Prerequisites: junior standing, 2.5 GPA or higher, and permission of a School of Business advisor and instructor. Enrollment is normally limited to finance majors who have not completed degree requirements. Majors are limited to a maximum of six internship credits toward the degree. Pass/fail. Cr 3.

FIN 396 Internship II
This is the second internship course in finance. Prerequisites: 2.5 GPA or higher, and permission of a School of Business advisor and instructor. May petition Department to take concurrently with FIN 395. Enrollment is normally limited to accounting and finance majors who have not completed degree requirements. Majors are limited to a maximum of six internship credits toward the degree. Credits from this course count as general electives only. Pass/fail. Cr 3.

FIN 490 Independent Study in Finance
Selected topics in the various areas of finance may be studied and researched on an independent basis. Enrollment is normally limited to accounting and finance degree candidates. Prerequisites: permission of instructor and program chair and senior standing. Cr 1-3.

FIN 399 Special Topics in Finance
Prerequisites vary by topic. Cr 1-3.

FIN 499 Special Topics in Finance
Prerequisites vary by topic. Cr 1-3.

RMI 320 Introduction to Risk Management and Insurance
This course introduces students to the nature of risk, risk identification, general risk management techniques, and the management of risk through insurance. It covers why the individual or corporation purchases insurance, what constitutes an intelligent insurance plan, and what products are available in the insurance marketplace. This course is designed for non-majors and is a prerequisite for more advanced risk management and insurance courses. Prerequisites: sophomore standing and successful completion of the University’s Core requirement in quantitative reasoning. Cr 3.

RMI 330 Health, Life, and Disability Insurance
This course covers health, life, and disability insurances from the perspective of insurance providers, employers, and consumers. Individual and group health insurance product management and the relationship between product characteristics and insurance company investments, financing, and marketing decisions are discussed. Managed care techniques, benefit package design, and cost sharing mechanisms are assessed in the context of resolving incentive conflicts and meeting cost-containment objectives. The basic principles underlying life insurance are covered as well as the various types and policy provisions for life insurance. Short-term and long-term disability insurance, definitions of disability, and various policy provisions for individual and employer provided group disability insurance are discussed. Evaluation of insurance company financial strength and the impact of regulation on company management and behavior are considered. Prerequisite: RMI 320. Spring only. Cr 3.

RMI 350 Managing Risk with Property and Liability Insurance
This course examines the many commercial property and liability exposures faced by businesses. An emphasis is placed on using commercial
property and liability insurance as a method of reducing, managing, and transferring business risk. Topics include commercial general liability, business automobile, workers’ compensation, commercial property, business income, and business owner’s insurance. The legal environment of property and liability insurance and risk financing are considered. The fundamental structure and business of property casualty insurance are discussed. Prerequisite: RMI 320. Fall only. Cr 3.

RMI 395 Internship I
The first internship course in risk management and insurance is described in the general School of Business catalog text. Prerequisites: junior standing, 2.33 GPA or higher, and permission of a School of Business advisor and instructor. Enrollment is normally limited to general management majors in the risk management and insurance track who have not completed degree requirements. Majors are limited to a maximum of six internship credits toward the degree. Pass/fail. Cr 3.

RMI 396 Internship II
This is the second internship course in risk management and insurance. Prerequisites: 2.33 GPA or higher, and permission of a School of Business advisor and instructor. May petition Department to take concurrently with RMI 395. Enrollment is normally limited to general management majors in the risk management and insurance track who have not completed degree requirements. Majors are limited to a maximum of six internship credits toward the degree. Credits from this course count as general electives only. Pass/fail. Cr 3.

2014-2015 Graduate Course List

ACC 630 Management Accounting Systems
This course examines how management accounting systems can be used to establish and maintain competitive advantages in an increasingly competitive global economy. Emphasis is on designing management accounting systems which: (1) support both the operational and strategic goals of the organization, (2) provide feedback to senior management about organizational units’ performance, and (3) serve as the linkage between the strategy of the organization and the execution of that strategy in individual operating units. A blend of contemporary theory with practical applications and actual company experiences will be utilized to accomplish the course objectives. Prerequisites: MBA 501, MBA 502. Cr 3.

ACC 631 Current Issues in Accounting
This course examines current issues and developments in the accounting profession. Coverage includes discussion of issues in auditing and assurance, financial accounting, taxation, and other relevant areas. Prerequisite: ACC 410 and ACC 413. Cr.3.

ACC 633 Tax Policy and Administration
This course examines tax policy, including such topics as how taxes affect the economy, guidelines for evaluating tax systems, and proposals to replace or reform tax systems. Tax administration process and professional tax practice will also be discussed. Course emphasis will be on federal taxes, with some exposure to state taxes. Prerequisite: MBA 501 or equivalent. Cr 3.

ACC 634 Advanced Business Taxation
This course begins with concepts of Federal tax research methodology including communication of research results. The second section of the course considers corporate tax topics including income taxation of corporations, pass-through entities (S corporations and partnerships), multistate taxation and tax-exempt organizations. Students will write tax research memoranda and client letters as well as prepare relevant tax returns. Prerequisite: ACC 413 or equivalent. Cr 3.

ACC 635 Advanced Individual Taxation
This course begins with a review of Federal tax research methodology including the communication of research results. Then, the course considers topics in advanced individual taxation such as AMT issues, like-kind exchanges, and installment sales. The final section of the course considers family tax planning issues including federal estate and gift taxation and the income taxation of trusts and estates. Students will write tax research memoranda and client letters as well as prepare relevant tax returns. Prerequisite: ACC 413 or equivalent. Cr 3.

ACC 641 Advanced Financial Accounting Topics
This course explores a variety of advanced financial accounting topics such as the theoretical and practical concepts of business combinations, partnerships, foreign currency, and other issues. Prerequisite: ACC 302. Cr. 3.

ACC 691 Independent Study in Accounting
Selected topics in the areas of accounting may be studied and researched on an independent basis. Enrollment is normally limited to degree candidates concentrating in accounting. Prerequisites: permission of instructor and curriculum chair. Cr 1-3.

ACC 695 Internship in Accounting
This internship education course is described in the preceding text. Prerequisites: completion of foundation courses, 3.0 GPA or higher, and permission of instructor and curriculum chair. Enrollment is normally limited to degree candidates concentrating in accounting. A maximum of three credits of ACC 695 may be used toward the degree. Cr 1-3.
ACC 699 Special Topics in Accounting
Prerequisites vary. Cr 3.

MBA 501 Economic Analysis
An intensive survey of microeconomic theory and macroeconomic theory. Economic problems such as price and output decisions, resource allocations, inflation, and unemployment are analyzed. Cr 3.

MBA 502 Accounting Concepts
The financial accounting component of this course will focus on the meaning and value of the balance sheet, income statement, and statement of cash flows, and the roles of auditor, internal controls and ethics. The managerial accounting component will focus on cost behavior and the related topics of cost-volume-profit analysis, relevant costs, cost allocation, budgeting and performance measurement. Cr 3.

MBA 504 Probability and Statistics for Business Decision Making
An introduction to the concepts and use of probability and statistics as tools for business decision making. Cr 3.

MBA 505 Financial Management
The primary objective of this course is to provide a balanced introduction to the theory and practice of financial management. Emphasis is placed on the management of capital to enhance shareholder wealth. Topics include time value of money, risk and return, stock and bond valuation, capital budgeting, and cost of capital. Prerequisites: MBA 501, MBA 502, MBA 504. Cr 3.

MBA 611 Introduction to Organizational Change
This course focuses on understanding the nature of organizational change. Process consulting forms the basis for much of the course. Prerequisite: EDU 671 or BUS 340. Cr 3.

MBA 612 Topics in International Business
This course is taught by professors with different specialties and consists of two parts: (1) core topics that are included every time the course is taught, and (2) coverage of other topics in international business using either: (a) a multidisciplinary approach, (b) a legal approach, or (c) a marketing approach. Prerequisites: legal approach—none; multidisciplinary approach—MBA 501; marketing approach—MBA 660. Cr 3.

MBA 615 Ethical and Legal Issues in Business
This course examines business ethics and attempts to develop practical solutions to ethical issues that confront today’s global managers. This course also examines legal issues including such topics as drug testing in the workplace, an employee’s right to privacy, sexual harassment, and the rights and responsibilities of officers and directors. Cr 3.

MBA 623 Derivatives
This course explores the markets and valuation for options, futures, and swap contracts. Hedging and speculating techniques using derivatives are stressed. Financial engineering techniques are developed that can adjust the risk and return offered by traditional assets. Cash and carry, binomial option pricing, and the Black-Scholes option pricing models are covered. Topics include: Forward contracts, stock futures, interest rate futures, stock index futures, stock options, interest rate options, and various swap contracts. Prerequisite: MBA 505. Cr 3.

MBA 625 International Finance
This course is intended to give students a solid introduction to the very important field of international finance. It offers a rigorous examination of and the financial management of the multinational corporation and of international financial markets. Intensive coverage of foreign exchange markets and methods of managing exchange rate risk are emphasized. Topics include currency derivative markets and risk management, arbitrage and international parity conditions, market efficiency, short- and long-term asset management, and capital budgeting. Prerequisite: MBA 505 or equivalent. Cr 3.

MBA 626 Strategic Valuation
This is the M.B.A. corporate finance course, focusing on strategic and quantitative analyses of complex, real asset investments. It prepares students for making investment decisions and evaluating investment decisions made by others. Topics include incremental cash flows, traditional capital budgeting, capital structure, required rates of return, real options, and valuation of business entities for purposes of acquisition or divestiture. Prerequisite: MBA 505. Cr 3.

MBA 627 Investment Management
An introduction to the various investment media and financial markets from the viewpoint of institutional investors. The course provides an in-depth analysis of the nature, problems, and process of evaluating securities and managing portfolios. Emphasis is placed on the structure of the securities markets, portfolio theory, and trading strategies of portfolio managers. Theoretical and empirical research addressing recent developments in portfolio management will be examined. Prerequisite: MBA 505. Cr 3.

MBA 629 Financial Modeling
Introduces principles and techniques for building financial models, in an uncertainty framework. Finance topics are drawn from a variety of areas: personal financial planning, investments, derivatives, and corporate finance. The course will integrate financial, accounting, and statistical concepts and techniques to construct financial models and to perform analyses using MS Excel. Emphasizes the application of financial modeling
techniques in identifying and implementing business solutions. The course will be of special interest to students seeking more hands-on experience in constructing financial models. Prerequisite: MBA 505. Cr 3.

MBA 631 Financial Accounting
The objective of this course is to provide an understanding of financial accounting fundamentals for prospective users of corporate financial information. The course initially demonstrates the accounting process and the resulting generation of financial statements. The focus then turns to the analysis and use of financial accounting information in the evaluation of corporate performance. Emphases are placed on comparative accounting standards, managerial incentives, differences between income and cash flow, and basic financial statement analysis. Prerequisites: MBA 502 (revised), or completion of both ACC 110 and 211.

MBA 642 Leadership
The course integrates five perspectives of leadership: individual differences and diversity; transactional leadership; power and politics; transformational leadership; and the physical, psychological, and spiritual dimensions of leader well-being. Prerequisite: EDU 671 or BUS 340. Cr 3.

MBA 643 Creative Problem Solving
This course provides an applications-oriented understanding of the creative problem-solving process. Students will learn how to be more creative at the individual, group, and organizational levels. This course focuses on divergent and convergent creativity techniques together with various models of creativity. Prerequisite: EDU 671 or BUS 340. Cr 3.

MBA 644 Strategic Management of Technology and Innovation
Focuses on the strategic management of technology-based innovation in the firm. Specific topics include assessing the innovative capabilities of the firm, managing the corporate R&D function, managing the interfaces between functional groups in the development process, managing the new business development function in the firm, understanding and managing technical entrepreneurs, building technology-based distinctive competencies and competitive advantages, technological leadership versus followership in competitive strategy, institutionalizing innovation, and attracting and keeping corporate entrepreneurs. Prerequisite: EDU 671 or BUS 340. Cr 3.

MBA 646 Negotiation and Conflict Management
This course focuses on negotiation and conflict management theory and practice. Students are expected to develop negotiation and conflict management skills by participating in experiential exercises both inside and outside of class as well as to develop a personal negotiation and conflict management style designed to successfully meet the challenges of common conflict and negotiation situations. Cr 3.

MBA 647 Organizational Strategy
Using strategic tools such as competitive analysis and the value chain, this course provides an in-depth examination of the resource-based view of the firm. Emphasizes entrepreneurial strategy approaches in high-velocity business environments. Prerequisites: MBA 615 (or concurrent), MBA 505 and EDU 671 (or BUS 340). Cr 3.

MBA 649 Special Topics in Management: Introduction to System Dynamics
An examination of how the world can be understood through dynamic processes controlled by positive and negative feedback links. A general introduction to systems thinking that draws on system dynamics, a computer-based technique for modeling systematically created problems. Requires an understanding of algebra. Prerequisite: EDU 671 or BUS 340. Cr 3.

MBA 657 Socially Responsible Business Marketing
How can firms pursue profits without harming the planet or “the way life should be”? This course explores sustainable business strategies and practices that can be used to manage the triple bottom line of financial, environmental, and social performance. Prerequisites: an introductory marketing class (BUS 260, or MBA 660) or instructor permission. Students will benefit if they have prior knowledge of economics (MBA 501) and cost accounting (ACC 211). Cr 3.

MBA 660 Managerial Marketing
This course has a decision-based perspective, relying heavily on the case approach. It focuses on the logical development of market-driven strategies and assessment of their impact on other marketing functions within the organization. Students will gain experience in analyzing complex market behavior, recommending changes in marketing strategy, and articulating the development, implementation, and control of marketing plans. Prerequisite: MBA 502. Cr 3.

MBA 665 Consumer Behavior
Examines three aspects of consumer behavior: 1) cultural, sociological, and psychological influences on consumer motivation; 2) consumer acquisition of product information and formation of attitudes; and 3) the process consumers use to make consumption decisions. Implications for marketing strategy and segmentation will be discussed and students will apply marketing research techniques to analyze consumer behavior. Prerequisite: basic marketing course or instructor permission. Cr 3.

MBA 669 Advanced Marketing Research
This course focuses on the application of multivariate statistical methods in the development of marketing strategy and the investigation of marketing problems. Building of descriptive and predictive models using multi-dimensional techniques such as factor analysis, regression analysis, cluster analysis, analysis of variance, conjoint analysis, and perceptual mapping. Use of statistical packages. Prerequisite: MBA 504. Cr 3.

**MBA 670 Management Science**
This course examines the role, perspective, and commonly used tools of quantitative analysis in business decision making. Emphasis is placed on developing students’ abilities to recognize the need for quantification, to formulate business problems quantitatively, to select and test computer-based decision-support system models, to collect meaningful data, and to interpret the implications of analysis results. Prerequisite: MBA 504. Cr 3.

**MBA 672 Supply Chain Management**
This course examines supply chain concepts and current practice in the context of just-in-time production, total quality management, and continuous productivity improvement. Using practical applications, the focus is on the proactive management of movement and coordination of goods and services, and information, from raw material to end user through the value chain. Other topics include understanding the nature of demand for goods and services within business markets and the process of building relationships with suppliers. System-oriented managerial tools, models, and techniques are considered for their value-adding potential. Directed projects of the students’ choosing are used to address specific, company-based supply-chain problem situations. Prerequisites: MBA 670. Cr 3.

**MBA 674 Topics in Information Systems Management**
A topics course exploring major issues in the management of information technology. Students completing this course should have acquired an understanding of the strategic, tactical, and operational importance of information systems within an organization, and an understanding of how to leverage information technology in the management of an organization. Topics include, but are not limited to: strategic use of information technology, emerging technologies, systems development and project management, managing information systems resources, and knowledge management. Cr 3.

**MBA 675 Production/Operations Management**
An examination of the role of operations within manufacturing and service organizations. Emphasis is placed upon recognizing operational opportunities and tradeoffs, and employing computer simulation and other quantitative tools and decision support systems to assist strategic and operational decision making. Topics include: quality management, capacity management, process design, facility location, layout, production planning, and manufacturing philosophies such as group technology, the theory-of-constraints, and just-in-time. Prerequisite: MBA 670. Cr 3.

**MBA 677 Information Visualization**
In this course, students will learn to create charts, maps, and other visualizations to tell stories and to create effective graphical displays of evidence. Students will learn to critically evaluate examples from print media and the internet after learning the foundations of information visualization. Prerequisites: MBA 670. Spring only. Cr 3.

**MBA 691 Independent Study**
Selected topics in the areas of business and/or administration may be studied and researched on an independent basis. Enrollment is normally limited to M.B.A. degree candidates. Prerequisites: permission of the instructor and curriculum chair. Cr 1-3.

**MBA 695 Internship**
This internship education course is described in the preceding text. Prerequisites: completion of foundation courses, 3.0 GPA or higher, and permission of the instructor and curriculum chair. Enrollment is normally limited to M.B.A. majors who have not completed their degree requirements. A maximum of three credits of MBA 695 may be used toward the degree. Cr 1-3.

**MBA 698 Practicum**
This course is organized around projects provided by organizations in the southern Maine business community. Working with a faculty coach, teams of three to five MBA students work in organizations as consultants. The student teams analyze their assigned projects and recommend courses of action. Business leaders help with the identification of problems and evaluate the team’s analysis and recommendations. In addition, students attend discussion sessions designed to allow all the teams to discuss with and seek advice from other teams. This course is usually taken in a student’s final semester. Prerequisites: MBA 611, MBA 674, and any MBA marketing course. Cr 3.

**MBA 699 Special Topics - Data Analytics**
Data Analytics course is designed to give students an exposure to the sophisticated data analysis tools and techniques and will prepare them for highly sought after careers such as data and research analysts. The course will primarily demonstrate SAS software and also introduce other popular statistical software like SPSS, JMP and R. This course is designed to be a fast paced & case study based program. The curriculum includes case studies with real data analysis issues taken from topic areas such as business, public health, clinical trials, and sports etc. Some of the topics will include but not limited to data construction, cleaning and management, missing values and multiple imputations, Monte Carlo random simulations, statistical modeling, non-parametric testing, characteristic profiling, pattern recognition, and longitudinal data analysis. Prerequisite: MBA 504. Cr 3.

**MBA 699 Special Topics**
Prerequisites vary. Cr 3.
The School of Education and Human Development (SEHD), a division of the College of Management and Human Service, is proud to continue the strong commitment to education and service demonstrated by USM's predecessor institutions, beginning with Gorham Normal School in 1878. The School provides for the preparation and professional growth of educators and human development professionals through collaborative efforts with schools and agencies; other colleges at USM; local, state, and national educational networks; and the communities of southern Maine.

The School of Education and Human Development is comprised of seven programs: Adult and Higher Education, Counselor Education, Educational Leadership, Educational Psychology and School Psychology, Literacy Education and ESL, Special Education, and Teacher Education. Through each of these programs, the School prepares professionals for teaching, counseling, school psychology, administration, and teacher leadership. The content knowledge, skills, and understandings needed for these areas form the heart of our programs. Common to all of these fields is an emphasis on connections and partnerships, reflection and critical inquiry, diversity, and performance assessment.

USM's School of Education and Human Development degree programs are accredited by the Teacher Education Accreditation Council (TEAC), the Council for Accreditation of Counseling and Related Education Programs (CACREP), the Council on Rehabilitation Education (CORE), and the National Association of School Psychologists (NASP).

Undergraduate Teacher Education Programs at USM

With an historic dedication to teacher education dating back to 1878, the School of Education & Human Development, in partnership with colleges throughout the university, offers students the opportunity to earn a teaching certificate while still pursuing their specific major and academic goals.

USM undergraduate students pursue their major through a college, and then choose the content area for their teaching based on the major. The colleges that offer this teacher education option are Lewiston-Auburn; Management and Human Service; Arts, Humanities and Social Sciences; and Science, Technology and Health.

In addition to completing the major, students also take the courses defined by their content area. This includes introduction to education, teaching methods, and student teaching. Students identify early in their major if they also want to pursue teacher certification. At the end of the student's undergraduate career at USM, he or she will have a bachelor's degree, major, and teacher certification in a content area related to their major.

Tk20 Online Data Management System for Educator Preparation Programs and Pathways

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are
required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: http://usm.maine.edu/educatorpreparation

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed with in the context of the Unit’s data management system (i.e., Tk20).

Educator Preparation Programs and Pathways

Undergraduate:

- Elementary Education, English major
- Secondary Education, English major
- Elementary Education, History major
- Secondary Education, History major
- Elementary Education, Geography-Anthropology major
- Secondary Education, Geography-Anthropology major
- Secondary Education, Math major
- K-12 Music Education major
- K-12 Education, Studio Arts major
- K-12 Education, French major
- K-12 Education, Hispanic Studies major
- K-12 Education, Classics major
- Elementary Education, Arts and Humanities major at LAC
- Secondary Education, Arts and Humanities major at LAC
- Elementary Education, Natural and Applied Science major at LAC
- Secondary Education, Natural and Applied Science major at LAC
- Early Childhood Education, Social and Behavioral Sciences major at LAC

Graduate:

EETP

- K-8 General Elementary Teacher Education
- Secondary Teacher Certification, 7-12, (English, Foreign Language, Math, Science, Social Studies)

Counselor Education

- Clinical Mental Health Counseling (LCPC) (Licensure)
- Rehabilitation Counseling (CRC)
- School Counseling, K-12

Literacy, Language, and Culture

- K-12 Literacy Specialist
- TESOL (Teaching English to Speakers of Other Languages)

Educational Leadership

- Assistant Principalship
- Curriculum Coordinator
- School Administration
- Special Education Administration

School Psychology (Licensure)

Special Education

- Teaching Students with Mild to Severe Disabilities Concentration: Initial Teacher Certification in Special Education
Inservice Teacher Strand for currently certified teachers

In addition to educator preparation programs, the School of Education and Human Development offers degrees and certificate programs in the following areas of study.

SEHD Degrees and Certificates

Undergraduate:

- Certificate in Athletic Coaching
- Minor in Athletic Coaching
- Minor in Educational Studies (does not lead to teacher certification)

Graduate Programs:

Adult Education

- Master of Science in Adult and Higher Education
- Post-Master’s Certificate of Advanced Study in Adult Learning

Counseling

- Master of Science in Counseling with concentrations in:
  - Clinical Mental Health
    - Substance Abuse Counseling Expertise Area
  - Rehabilitation
    - Psychiatric Rehabilitation Expertise Area
  - School
- Post-Master’s Certificate of Advanced Study in Counseling
- Mental Health Rehabilitation Technician/Community Certificate

Educational Leadership

- Master of Science in Education in Educational Leadership
- Master of Science in Education: Professional Educator
- Post-Master’s Certificate of Advanced Study in Educational Leadership
- Certificate of Graduate Study in Assistant Principal

Educational Psychology

- Master of Science in Educational Psychology with a concentration in Applied Behavior Analysis
- Certificate in Applied Behavior Analysis (Post-master’s)

Literacy, Language, and Culture

- Master of Science in Education in Applied Literacy (for ETEP, TEAMS only)
- Master of Science in Education in Literacy Education
- Master of Science in Education in Teaching English to Speakers of Other Languages (TESOL)
- Post-Master’s Certificate of Advanced Study in Literacy Education
- Post-Master’s Certificate of Advanced Study in English as a Second Language
- Certificate of Graduate Study in English as a Second Language
- Certificate of Graduate Study in Literacy

School Psychology

- Doctor of Psychology in School Psychology

Special Education

- Master of Science in Special Education, with concentrations in:
  - In-Service (for already certified teachers)
  - Teaching Students with Mild to Moderate Disabilities (for initial teacher certification in 282 or 286)
- Certificate of Graduate Study in Gifted and Talented
• Certificate of Graduate Study in Teaching ALL Students
• Certificate of Graduate Study in Youth with Moderate to Severe Disabilities

Teacher Education

• Master of Science in Education in Teaching and Learning (ETEP, TEAMS)
• Master of Science in Education in Teaching and Learning – Montessori

School-Wide Certificate Program

• Certificate of Graduate Study in Culturally Responsive Practices in Education and Human Development

Professional Licensure and Certification Notice

Students who are pursuing degrees leading to application for professional licensure or certification, and/or who will be participating in clinical placements, internships, or practica through their USM program should be aware that their host facility may require a criminal background check, finger printing, or drug screening. In such situations, each student is responsible for obtaining and paying for the background check or other screening process and for delivering required documentation to the facility. Although the University will make reasonable efforts to place admitted students in field experiences and internships, it will be up to the host facility to determine whether a student will be allowed to work at that facility. Students should further be aware that a criminal record may jeopardize licensure by the state certification body. Students may consult the certification body corresponding to their intended occupation for more details. Successful completion of a program of study at USM does not guarantee licensure, certification, or employment in the relevant occupation.

Scholarships

The School of Education and Human Development has limited tuition scholarships available for continuing SEHD students. Awards are based on academic merit, professional promise, and financial need. Recipients must be currently matriculated students or applicants intending to take six or more credits per semester during the following year. Applications for graduate scholarships are available each January from the SEHD, 8 Bailey Hall, and are due March 1.

Centers/Programs

The School of Education and Human Development houses the following centers:

Assessment Center

Coordinator: Rachel Brown

The Assessment Center is a resource for SEHD faculty and students. Staffed by a graduate assistant, under the supervision of faculty from the counselor education, school psychology, and special education programs, the Assessment Center lends assessment materials to students and faculty for course assignments and training activities. The Assessment Center has a collection of over 300 achievement, behavior, cognitive, and personality tests. For additional information and hours of operation, contact the Assessment Center at 407 Bailey Hall, Gorham, ME 04038; (207) 780- 5671 or (207) 780-5220; assessment.center@maine.edu.

Center for Education Policy, Applied Research, and Evaluation

Director: David L. Silvernail

The mission of the Center for Education Policy, Applied Research, and Evaluation (CEPARE) is to provide independent, not partisan research to inform education policy and practice, and to systematically identify, analyze, and continually evaluate education strategies that significantly improve education outcomes. CEPARE assists school districts, agencies, organizations, and University faculty by conducting studies on contemporary issues. In addition, CEPARE co-directs the Maine Education Policy Research Institute (MEPRI), an institute jointly funded by the Maine State Legislature and the University of Maine System. This institute was established to conduct studies on Maine education policy and the Maine public education system for the Maine Legislature.

More information can be found on the Center’s Web site at http://www.usm.maine.edu/cepare or by contacting CEPARE at the University of Southern Maine, 140 School Street, Gorham, ME 04038; (207) 780-5044.
Office of Educator Preparation

Director: Jean Whitney

The Office of Educator Preparation is the professional education unit responsible for oversight and administration of Educator Preparation at the University. The Office of Educator Preparation is responsible for:

- Leading USM faculty in strategic educator preparation program planning at the undergraduate and graduate levels;
- Fostering the conceptual framework, core values and core practices of USM educator preparation programs;
- Managing the educator preparation assessment system;
- Coordinating field experiences, practica, and internships in collaboration with educator programs and partner schools and agencies;
- Collaborating with the Director of the Southern Maine Partnership and educator preparation program faculty to develop and maintain educator preparation partnerships;
- Coordinating state program approval for professional educator preparation and national accreditation for teacher education, including the analysis, synthesis and dissemination of data for state and national reports;
- Representing USM educator preparation in state and national projects and initiatives.

Educator Preparation serves as liaison to Maine Department of Education's offices of Certification and Higher Education on matters pertaining to certification and program approval requirements and advises program faculty as needed for compliance with state regulations.

For additional information and hours of operation contact the Office of Educator Preparation at 8 Bailey Hall, Gorham, ME 04038; (207) 780-5772; cpleau@usm.maine.edu or visit http://www.usm.maine.edu/educatorpreparation

English for Speakers of Other Languages (ESOL)

Director: Arthus (Bart) Weyand

Intensive English Language Program (IELP)
The Intensive English Language Program (IELP), located on the USM Portland campus, is designed to meet the English language needs of international students whose first language is not English and who wish to study at USM or other universities in the United States. The primary focus is to help students improve their skills in academic reading, writing, speaking and listening. The program also focuses on study skills and provides the cultural orientation necessary for success at the university level. Course work includes reading authentic materials, journal writing, essay writing, group work, interviews with native English speakers, pronunciation practice and TOEFL preparation. All IELP classes are taught by qualified faculty with at least a Master's Degree. Because all classes are small (10-15 students), each student receives individualized attention. All instruction is based on learning English through communicative teaching approaches and classes are highly interactive.

English Language Bridge Program (ELB)
The English Language Bridge (ELB) program is an academic support program offered through the University of Southern Maine’s English for Speakers of Other Languages (ESOL) department. Students in the ELB program are nonnative English speakers who have met USM’s admission requirements, but whose TOEFL, IELTS or SAT scores fall below the required level or who have taken ESOL courses at USM. All ELB students meet with an academic advisor to select courses which offer key elements to aid in that student’s academic success. Students in the ELB program take both ESOL and non-ESOL classes during their first semester or year at USM. Once students have completed the ELB program, they may declare a major.

Conditional Admission
International students who are seeking an undergraduate degree at USM and are academically qualified but cannot supply a TOEFL, IELTS, or SAT score may be considered for Conditional Admission. Conditionally admitted students will enroll in one or two semester of the IELP in order to achieve language proficiency. Students admitted as conditional will be issued an I-20 with a major of “general studies”.

For more information contact: (207) 780-4419, usmiec@usm.maine.edu. Or visit http://usm.maine.edu/esol

Professional Development Center
The Professional Development Center (PDC) is the administrative unit for outreach and professional development services of the School of Education and Human Development (SEHD). Its mission is to provide sustained, high-quality professional development that enables K-12 educators and human resource professionals to continue learning throughout their careers. The PDC works collaboratively with SEHD departments, programs, and other centers to complement their outreach missions and support coordinated efforts; the Maine Department of Education to provide resources for teacher re-certification and endorsement; K-12 schools to design and deliver professional development tailored to school district’s specific needs; human resource organizations to offer professional development opportunities for counselors, school psychologists, and adult educators; and nonprofit organizations and professional associations. The PDC works with SEHD and school partners to develop, deliver, and administer credit and noncredit courses, workshops, and conferences. To learn more about services provided by the
TRIO Programs at USM

Executive Director: Laurie J. Davis

Upward Bound at USM

TRIO Coordinators: Christopher Turner and Alyssa West

TRIO Advisors: Daniel Barton and Scott Redpath

Upward Bound at USM is funded through the U.S. Department of Education’s TRIO program. It is a sponsored program of the School of Education and Human Development. Upward Bound at USM assists high school students who are income eligible and/or first-generation-to-college succeed in high school and to prepare for postsecondary education. Upward Bound at USM serves 127 students enrolled at five high schools in southern Maine including Biddeford, Bonny Eagle, Massabesic, Sacopee Valley, and Sanford high schools. During the academic year, Upward Bound staff members provide academic and college counseling to students enrolled at participating schools; coordinate college campus visits; and assist students and their families with college and financial aid applications. During the summer, USM hosts a six-week summer residential program at USM. The summer program includes academic coursework, career and college exploration, community service and service learning, recreation, and cultural activities.

For information, go to www.usm.maine.edu/upwardbound, or visit the TRIO Programs office at 7 College Ave House, Gorham, or call (207) 780-5203.

Student Support Services at USM

TRIO Coordinator: Gail Minichiello

TRiO Advisors: Kathleen Haggerty and Aubrey Seppa-Hodgkins

Student Support Services at USM is funded through the U.S. Department of Education’s TRIO program. It is a sponsored program of the Student Success Centers. Student Support Services at USM assist 140 USM students who are income eligible, are first generation college students, meet academic need criteria, and/or are disabled to persist in college, maintain good academic standing and graduate from college within six years. The Student Support Services program serves students on the Portland, Gorham, and Lewiston/Auburn campuses. For information, go to www.usm.maine.edu/studentsupportservices, or visit the ‘TRIO Programs’ office at 7 College Ave House, Gorham, or call (207) 780-5203.

SEHD Course Descriptions

- Undergraduate
  - ADS
  - ECE
  - FDU
  - ESL
  - HRD
  - PHE
  - SED
- Graduate
  - ECE
  - FDU
  - HCE
  - HRD
  - SED
  - SPY

Undergraduate

ADS 300 Ethics and Youth with Exceptionalities
There are two major outliers when discussing youth: youth with disabilities and youth who are gifted and talented. In addition, there is a fascinating subset of these two groups, which is youth who are dually exceptional, having both a disability and gifts and talents. Through the use of case studies and court decision analysis, panel discussions, and reflections this course will focus on these three groups of youth and how they are marginalized in general society, and in educational settings. This course will explore why and how these youth are marginalized and how the marginalization of them is continued in mainstream society and by others, many times unconsciously. This course requires a four-hour field placement working with youth with exceptionalities. Cr 3.

ECE 310 Children’s Literature for Diverse Young Learners

This course will focus on and lead students to critically examine the wide array of multicultural literature available to share with young children 0-5 years. Students will analyze the quality and appropriateness of children’s literature based on current theories and research pertaining to culturally responsive pedagogy, aspects of reading aloud, and story reading’s implications on phonemic awareness, vocabulary acquisition, and comprehension. Students will be involved in analytic discussions to extend their thinking and literary understanding as it pertains to young learners of diverse cultural and linguistic backgrounds and with different abilities and interests. Cr 3.

EDU 100 Exploring Teaching as a Profession

An introduction to the study of education and teaching, this course provides opportunities for students to examine and evaluate their interest in and aptitude for a career in teaching. The structure of the course combines faculty-directed seminars with coordinated field-based experiences in school settings. In addition to examining and reflecting upon their field-based classroom experiences in their seminar sessions, students will examine the following topics: current initiatives and issues in education and teaching, the diverse needs of students, the multiple roles of teachers, the professional and ethical expectations of teachers, school curriculum, culture and organization, and teacher certification programs and professional development options. Part of the course will be field based school experiences. Cr 3.

EDU 200 Education in the United States

This course engages students in the study of U.S. education, schooling, and teaching from social, historical, political, and legal perspectives. Special emphasis is placed on identifying pivotal issues and problems with which our public educational system has grappled both in the past and in the present. Through research initiatives and related investigations, students develop the necessary background to analyze and evaluate topics under study, and formulate and defend positions on educational issues. Prerequisite: None. Cr 3.

EDU 210 Theoretical Foundations of Learning

This course is intended for those exploring teaching as a career, providing an examination of theories of learning and their application to teaching. Prerequisite: None, HRD/SBS 200 recommended. Cr 3.

EDU 230 Teaching Through the Arts

This course focuses on integrating art-based teaching and learning across the p-12 curriculum. It will give insight to comprehending a visual language in both students and teachers, by using developmentally appropriate art practices, which foster creative connections and studio habits of mind. This course requires arts-based field experiences to be arranged during the semester. Prerequisite: EYE course. Cr 3

EDU 300 Educational Media and Technology

An examination of educational media and technology with special emphasis on school-based developments and applications. Cr 3.

EDU 305 Foundations of Cultural and Linguistic Diversity

This course supports students in exploring and critically analyzing topics, themes, and issues related to cultural and linguistic diversity and helps them build a strong theoretical and practical foundation for becoming successful multicultural educators. 12 hours of fieldwork will be required. Prerequisites: HRD 200: Multicultural Human Development. Cr 3.

EDU 310 What is the Purpose of Schooling in a Democracy?

This course explores the role of public schooling in the United States and world with respect to ethical dimensions of equity and justice. Using a framework of education rights for a democracy, students analyze ethical dilemmas found in texts, videos, and personal stories, engage in multicultural field experiences, and present grounded perspectives in response to the question in the course title. A 12 hour field placement is required for this course. Prerequisites: any EYE, ENG 100 or ENG 104. Cr 3.

EDU 323 Independent Study in Teacher Education

This course provides students the opportunity to pursue a project independently, planning and exploring an area of interest within the field of teacher education. Most independent study projects are library based; all are intellectually sound and reflect a high caliber of performance. Specific content and methods of evaluation are determined in conjunction with the instructor. An approved proposal is a necessary prerequisite to registration. Prerequisite: matriculation in an education program and junior or senior standing. Cr 1-3.

EDU 324 Student Teaching

For students matriculated in a USM undergraduate teacher education program in music education, technology education, or art education, a supervised student teaching experience of one full semester, carried out in an off-campus field setting, is required. Students must have met their program's requirements to register for student teaching. Prerequisites: vary according to major. This course requires health insurance. Cr 12.
EDU 336 Children's Literature
This course is a survey of children's literature with special emphasis on the selection of appropriate books for children from preschool through the elementary school years. Cr 3.

EDU 405 Teaching Mathematics K-8
This course provides experiences to develop and apply mathematical content knowledge and pedagogical skills in elementary and middle school classrooms. Major areas of focus include: how students learn mathematics, conceptual development of mathematical understandings, problem-solving instructional strategies, appropriate and effective uses of tools and technology, assessment of student learning, and providing equitable access to learning for all students. Prerequisite: open to students matriculated in the undergraduate teacher education pathways. Cr 3.

EDU 441 Seminar in Teaching, Learning, and Assessment I
The primary purpose of this course is to build a learning community where members of the cohort are supported in their internship through the assessment system. The assessment system includes the video reflections and journals as well as a sequential system of conferences, a collection of evidence, and observations. This course is based on helping the participants develop their personal philosophy of teaching and perfect their craft through ongoing discourse, reflection, and inquiry. Specific topics include instruction, lesson and unit planning, classroom management, assessment, diversity, technology, and professionalism. Prerequisite: open to students matriculated in the undergraduate teacher education pathways. Co-requisite: EDU 444. Cr 3.

EDU 442 Seminar in Teaching, Learning, and Assessment II
The primary purpose of Seminar II is to sustain a learning community where members of the cohort are supported in their internship through the assessment system. This course is based on helping the participants develop their personal philosophy of teaching and professional portfolio. Participants perfect their craft through ongoing discourse, reflection, and inquiry. Specific topics include instruction, lesson and unit planning, classroom management, assessment, diversity, technology, and professionalism. Prerequisite: open to students matriculated in the undergraduate teacher education pathways. Co-requisite: EDU 324. Cr 3.

EDU 444 Applied Pedagogy
This course is a part-time, supervised internship experience in applying knowledge and skills under study in coursework to the practice of teaching. An intern completes a semester-long classroom placement in which she/he is assigned to a mentor teacher in an elementary, middle, or secondary classroom in a school. The intern completes a minimum of one week of lead teaching. Prerequisite: open to students matriculated in the undergraduate teacher education pathways. Co-requisite: EDU 441. Cr 3.

EDU 451 Teaching Social Studies K-8
This course is designed to provide students with a general understanding of the guiding principles and the strands of social studies. Students will gain a working knowledge of the best practices in social studies instruction and the goals of social studies education. Students will create lesson plans and incorporate appropriate instructional methods and materials as part of the course requirements. Prerequisite: open to students matriculated in the undergraduate teacher education pathways. Cr 3.

EDU 452 Teaching Science K-8
The course has an interactive laboratory/discussion field-based approach, modeling and focusing on the teaching and learning aspects of science in the elementary and middle school. The emphasis is on content, process, and methodology. The course will be framed by the Department of Teacher Education's Core Practices, Maine's Learning Results, the National Science Education Standards, and students' goals about the teaching and learning of science. Students will learn strategies for planning and providing core academic and behavioral experiences to all learners and differentiated academic and behavioral experiences for learners with special needs. Prerequisite: open to students matriculated in the undergraduate teacher education pathways. Cr 3.

EDU 465 Teaching Reading in Grades K-8
In this course students will learn to use evidence-based instruction to teach reading in grades K-8. Students will examine theories and current research on reading development and process in order to effectively instruct and assess all readers, including students with special needs and from culturally and linguistically diverse backgrounds. Students will learn how to implement multiple strategies to support reading development and promote children’s proficiency in state standards. Additionally, digital literacies, reading across the curriculum, and ways to engage and motivate readers will be emphasized. Prerequisite: Admission to candidacy (must be concurrently enrolled in a student teaching internship), or LLC Department approval. Cr 3.

EDU 466 Teaching Writing in Grades K-8
In this course students will learn to use evidence-based instruction to teach writing in grades K-8. Students will examine theories and current research on writing development and process in order to effectively instruct and assess all writers, including students with special needs and from culturally and linguistically diverse backgrounds. Students will learn how to implement multiple writing strategies across various genres to support writing development and promote children’s proficiency in state standards. Additionally, students will explore the use of technology and participate in writing sessions to develop as writers and teachers of writing. Prerequisite: Admission to candidacy (must be concurrently enrolled in a student teaching internship), or LLC Department approval. Cr 3.

ESL 006/016 Intensive Grammar
This course (3-4 sections) focuses on building a stronger foundation in the grammatical skills necessary for more natural and accurate English,
both oral and written. Through a series of grammatical exercises, meaningful drilling, and analysis of the structure of the English language, students will become more adept at producing a wider variety of language with a higher knowledge of use and form. The course will not only introduce new structures in language but also review and expand upon those already learned. (The credit for this course does not apply toward a baccalaureate or an associate’s degree.) Prerequisite: instructor permission. Cr 1.5.

**ESL 007/017 Listening and Oral Communication**

This course (2 sections) focuses on the improvement of the listening and oral skills that are necessary for the university classroom. The primary goals of the course are to assist students in recognizing a variety of spoken English, to help them achieve comprehensible pronunciation, and to discuss and respond to the issues that arise in class discussion. Students will also be exposed to a wide variety of vocabulary and grammatical structures in context. (The credit for this course does not apply toward a baccalaureate or an associate degree.) Prerequisite: instructor permission. Cr 1.5.

**ESL 008/018 Reading, Writing & Vocabulary**

This course (4-5 sections) focuses on the improvement of the reading and writing skills that are necessary for the university classroom. The readings are from authentic sources and promote use of strategies for writing short reaction papers, summaries, and essays which are based on these readings. Informal journal writing is an integral part of the course. Students will also be exposed to a wide vocabulary and systematic overview of grammatical structure. (The credit for this course does not apply toward a baccalaureate or an associate degree.) Prerequisite: instructor permission. Cr 1.5.

**ESL 009/019 Intensive Reading and Speaking Fluency**

Intensive Reading and Speaking Fluency (2 sections) is part of the Intensive English Language Program. This course focuses on improving students’ fluency in both reading and speaking while learning about topics in United States culture, history and current events. Emphasis is on developing speed and comprehension in reading and listening to material drawn from texts, news sources, film and popular culture. Students will learn strategies for speaking in front of a group, compensating for accent, and conducting informational interviews. (The credit for this course does not apply toward a baccalaureate or an associate degree.) Prerequisite: instructor permission. Cr 1.5.

**ESL 009  Language Bridge Level I: Intermediate Grammar and Writing**

This is an intermediate-level English language course for English Language Bridge (ELB) students whose first language is not English. This is a developmental course that will enable students to benefit from a stronger foundation in understanding and using English grammar correctly. Emphasis is on understanding the meaning, use, and form of common grammar structures needed for academic writing. Students will have a basic knowledge of English grammar, but will need more work on accurate production of English, both oral and written, through a series of grammatical, written, and oral exercises. This course prepares students for the more advanced ESL 102. (The credit for this course does not apply toward a baccalaureate or an associate degree.) Prerequisite: instructor permission. Cr 3.

**ESL 099  Language Bridge Level I: Intermediate Reading, Writing, and Vocabulary**

This is an intermediate-level English language course for English Language Bridge (ELB) students whose first language is not English. This is a developmental ESL course designed to help students compose fluent and accurate writing as used in academic settings. Students will develop a greater sense of confidence in using written English as a method of communication. Emphasis will be placed on achieving unity and coherence in written compositions and on understanding the mechanical aspects of the essay. Students will learn to read for meaning and to analyze authentic texts. Through reading, writing, and specific exercises, students will expand their grasp of vocabulary and idiom needed for academic work and progress into ESL 103. (The credit for this course does not apply toward a baccalaureate or an associate degree.) Prerequisite: instructor permission. Cr 3.

**ESL 100 College Writing**

This is a section of College Writing (ENG 100) which is intended for non-native speakers of English only. Students read expository writing from diverse sources, engage in critical thinking, and utilize the writing process to compose essays and summaries. Coursework includes significant opportunities to improve grammar and usage, build academic vocabulary, and practice techniques involved in conducting secondary research, including using databases and MLA documentation. Successful completion of ESL 100 fulfills the College Writing CORE requirement and is the final course in the English Language Bridge sequence. Prerequisite: ESL 104 or college readiness in writing. Cr 3.

**ESL 102 English Language Bridge Level II: Advanced Grammar and Writing**

This is an advanced-level English language course for English Language Bridge (ELB) students whose first language is not English. This focuses on building a stronger foundation of grammatical skills that will aid students in producing more natural and accurate writing skills in the English language. Emphasis is placed on understanding and using grammar structures needed for academic writing and discussion at the university level. Through a series of grammatical exercises, meaningful drilling, both written and oral, short essay writing, and analysis of the structure of English, students will improve their academic writing skills. Prerequisite: ESL 98 or instructor permission. Cr 3.

**ESL 103  Language Bridge Level II: Higher Intermediate Reading, Writing, and Vocabulary**

This is a higher intermediate-level English language course for English Language Bridge (ELB) students whose first language is not English that focuses on helping students produce grammatical, well-constructed, coherent English, in both written and spoken form. Based on the writing process, students will write and rewrite paragraphs and essays drawn from topical and academic reading, works of fiction, and class discussion. Students learn to read and analyze for content and style a variety of authentic works of fiction and non-fiction. A strong focus will be on...
enhancing the students’ academic vocabulary. Prerequisite: ESL 99 or instructor permission. Cr 3.

ESL 104 English Language Bridge Level III: Advanced Reading, Writing, and Vocabulary
This is an advanced-level English language course for English Language Bridge (ELB) students whose first language is not English that focuses on fine-tuning their reading and writing skills prior to taking College Writing. Much of the work done in this class will focus on reading academic literature, fiction and non-fiction, as well as on mastering the academic writing skills necessary for university work. Additional focus will be on vocabulary extension and the use of idiom. Students will be required to write short essays, keep a written journal, and make oral presentations in class. Prerequisite: ESL 103 or instructor permission. Cr 3.

HRD 110 Choices, Changes, and Careers
The focus of this course is on self and career exploration and the critical role of personal decision making in identifying and pursuing fields of interest. Students will learn to understand their own decision-making process and the factors that influence this process. Course activities will include assessments of self, assessments of interest, and explorations of the world of work. Throughout the course, students will be introduced to available resources and support systems and be engaged in activities that will help them become involved in the University community. Prerequisite: fewer than 45 earned credit hours. Cr 3.

HRD 200 Multicultural Human Development
This course introduces developmental theory and research that encompasses the entire lifespan. Emphasis will be on prenatal development through adolescence, with an overview of adult development. A multi-disciplinary and multicultural view of human development will be taken by examining theories from a socio-cultural context and in consideration of change as well as stability throughout the life cycle. The interaction of hereditary, environmental, and socio-cultural factors will be considered in studying physical, cognitive, and psychosocial development. Prerequisite: Second semester freshmen or above; must have completed College Writing and EYE course. Cross-listed with SBS 200. Cr 3.

HRD 310/510 Aging and the Search for Meaning
This course explores psychosocial and spiritual aspects of successful human aging. Multidisciplinary perspectives on aging will be examined including historical, psychological, sociological, cultural, and religious. Learners will discuss key issues related to aging and the search for meaning through the lens of various genres (e.g., research, theory, fiction) as well as their own personal experiences. Prerequisite: HRD 310 students will be expected to have taken one college-level writing course and one sociology or psychology course. Cr 3.

HRD 312 The Spiritual Challenges and Opportunities of Aging
This course explores the dynamic role spirituality plays in navigating the aging process. Within a holistic context spirituality provides a frame of reference for understanding both who we are and how we fit into the world around us. Learners will develop a basic frame of reference for the nature of spiritual experience, including theory of adult spiritual development. But given the subjective nature of spirituality, it will be important for learners to develop tools for assessing the role spirituality plays in providing meaning for people as they age as individuals. Learners will begin this process by examining their own spiritual journey from psychosocial, cultural and religious perspectives. They will then use a parallel process to interview an older individual and assess the role spirituality plays in their aging process. Prerequisite: HRD 312 students will be expected to have taken one college-level writing course and one sociology or psychology course. Cr 3.

HRD 337 Peer Leadership Seminar
This course is intended for students who participate in organized student leadership programs or are interested in learning more about leadership within higher education organizations. The course examines the nature of higher education organizations, leadership theory, college student development theory, as well as both interpersonal and group communication skills. Through written and oral projects students learn how to integrate theory with practice. Assignments and projects draw their focus from the individual's particular interests regarding student leadership. Cr 2.

PHE 106 NCAA Life Choices
This course is designed for student athletes in their first or second year at USM. The goal of the course is to enable students to develop their academic potential and to realize their personal and athletic goals during their college experience. Through large and small group work, topical readings, and community service projects, students will clarify goals, values, healthy lifestyles, leadership, and study skills. Prerequisite: open to first- and second-year students only. Cr 3.

PHE 198 Physiology of Health Fitness
The purpose of this course is to provide the student with a scientific background in exercise physiology and health concepts in order to develop and maintain a lifetime program of high-level physical fitness and quality health. Cr 3.

PHE 203 Athletic Training
This introductory course in sports medicine/athletic training will provide the student with information about prevention and management of sports-related injuries. The course is geared toward individuals involved in or pursuing allied health professions as well as coaching or teaching fields. Pertinent anatomy and common injuries will be discussed. This course will also include topics prescribed by the American Red Cross including respiratory emergencies, artificial respiration, wounds, poisoning, water accidents, drugs, burns, sport safety issues, and CPR. Successful completion will result in First Aid & CPR/AED certification. 3 cr.

PHE 302 Coaching Philosophy and Fundamentals
This course covers various approaches to planning, organizing, and implementing practice sessions in preparation for athletic competition. The psychological and emotional aspects of coaching are also investigated. One segment of the course will be concerned with society's view of coaching as illustrated by today's literature. Cr 3.

PHE 303 Coaching and Officiating Basketball
Coaching philosophy, coaching style, choosing a team, individual fundamentals, team play development, and the ability to organize and maintain a quality program will be stressed. The course will also cover rules of basketball and techniques of officiating. Cr 3.

PHE 309 Coaching and Officiating Track and Field
Part of the University of Southern Maine's coaching certification program, this course is designed to prepare students for track and field, and cross country coaching at the high school and/or middle school levels. Particular aspects of the sport will not be discussed in detail. Rather, the course is intended as an overview of coaching philosophies, sports science, and the training required for each event. Students will have an opportunity to explore areas of interest in depth. Cr 3.

PHE 310 Experiential Learning: Logistics and Skills
Construction and Use
Participants may expect to gain hands-on knowledge and experience through participation in all phases of course construction, maintenance, and operation. Learning outcomes include the importance of operational safety considerations and appropriate selection of materials. Cr 3-6.

Sea Kayaking
Designed to provide sea kayak paddling and rescue instruction, chart reading, and basic navigational techniques combined with team building concepts. Includes expedition planning, low/no-impact island camping, and coastal/estuary exploration. Fee course. Cr 3.

PHE 311 Coaching and Officiating Soccer
The course will cover individual techniques and team tactics, drills to implement these techniques and tactics, practice and season organization and methods of starting, maintaining and improving programs at various levels. The course will also cover rules of soccer and techniques of officiating. Cr 3.

PHE 312 Coaching and Officiating Football
Emphasis on the methods of teaching and coaching football. Offense and defense, player-coach relationship, team selections, planning of practice sessions and game situations will be areas of concentration. The course will also cover rules of football and techniques of officiating. Cr 3.

PHE 314 Organization and Administration of Athletics
This course covers the principles and practices of athletic administration as related to middle schools, junior, and senior high schools. Cr 3.

PHE 315 Coaching and Officiating Field Hockey
Emphasis on the methods of teaching and coaching field hockey. Offense and defense, player-coach relationship, team selections, planning of practice sessions, and game situations will be areas of concentration. The course will also cover rules of field hockey and techniques of officiating. Cr 3.

PHE 316 Coaching and Officiating Volleyball
Emphasis on the methods of teaching and coaching volleyball. Offense and defense, player-coach relationship, team selections, planning of practice sessions, and game situations will be areas of concentration. The course will also cover rules of volleyball and techniques of officiating. Cr 3.

PHE 335 Coaching and Officiating Baseball and Softball
The course will cover individual and team techniques, drills to implement these techniques, practice organization and methods of starting, maintaining and improving programs at various levels. The course will also cover rules of baseball and softball plus techniques of umpiring. Cr 3.

PHE 391 Field Experience/Internship
Practical field work in a coaching area. The student will be assigned as an assistant coach in a sport for a season. Supervision, evaluation, and guidance of the student will be provided by a staff member who is responsible for that coaching area. Prerequisites: PHE 203, PHE 302, PHE 314. Restricted to students in coaching certificate program. Cr 1-6.

PHE 398 Independent Study in Physical Education
Provides students who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest, bearing upon it previous course experience and emerging with an intellectually sound, coherent synthesis reflecting a high caliber of performance. Prerequisite: permission of instructor. Cr 1-6.

SED 335 Students with Exceptionalities in General Education
The primary goal of this course is to construct an understanding and knowledge of the range of exceptionalities, including students with disabilities and those identified as gifted and talented. The course is based on the premise that students with exceptionalities should be educated
This includes developing skills using direct observation as a tool for studying children, and socially interact to the greatest extent possible with their peers in the general education curriculum and program. The general educator's role in teaching learners who are exceptional will be emphasized. Topics include characteristics of areas of exceptionality; classroom management; assistive technology; state and federal legislation regarding exceptional students; Response to Intervention (RtI); Universal Design for Learning (UDL); individual education plans (IEP); building relationships with parents; students who are culturally and linguistically diverse; and inclusion and collaboration philosophy and practices. This course includes a 24-hour field experience. Prerequisite: SED 335 or instructor permission. Cr 3.

**SED 420 Multi-Tiered Systems Support (MTSS) in Education**

This course introduces participants to the concepts of multi-tiered systems of academic and behavioral support, from the schoolwide to the classroom perspective, including students with suspected or identified disabilities. Participants will develop an understanding of the defining characteristics of MTSS at Tiers 1 and 2: prevention-based, focus on student performance both academically and behaviorally, data-based decision making and problem solving, continuous progress monitoring, and using a continuum of evidence-based interventions. Students will develop classroom design strategies for establishing a productive learning environment including establishing and teaching expectations, structuring the classroom, creating a system to acknowledge behavior and to address minor problem behavior. The course includes an applied project as part of a 24-hour school-based field experience. Prerequisite: SED 335 or instructor permission. Cr 3.

**ECE 510 Practical Applications of the Montessori Method for Students with Exceptionalities**

This course offers an overview of the philosophy and methods of Montessori education in early childhood settings, with particular attention to the needs, services, and creation of inclusive environments for children with disabilities. In this interactive format, participants will explore the possibilities of utilizing the elements of the Montessori model for practical applications for all children, including those with disabilities, in their classroom environments. Teachers will have the opportunity to connect Montessori theory and practices, gain an understanding of policy and legal mandates for young students with disabilities and their families; become familiar with the principles of universal design; strategies for working with families, assistive technology, and the transition from pre-school to school-aged services.

**ECE 511 Classroom Leadership and Environmental Design in an Early Childhood Montessori Classroom**

This course covers Montessori's theory of the interrelated curriculum, as it relates to strategies of classroom leadership and strategies that gain the child's confidence, cooperation and attention, thereby helping to develop a pattern of respect for authority. Environmental design techniques that can be applied to the physical environment and their application to classroom management are also discussed. Prerequisites: Open to matriculated students in the Montessori Early Childhood Teacher Education Program (MECTEP), or by instructor permission. Cr 3.

**ECE 512 Montessori Principles and Philosophy**

Through a series of readings, lectures, class discussion, writing assignments, and evaluations this course will discuss Maria Montessori's life, the beginning of the Montessori Method and theory of the interrelated curriculum as developed by Maria Montessori in the early 1900's, its growth over the years, and the specifics of the Montessori Philosophy (i.e., absorbent mind, sensitive periods, logical-mathematical mind, spiritual and moral development of the child, etc.). It will also look at how the Montessori principles, materials, teacher, and environment relate to and respect the developing child from birth through 6 years. Prerequisites: Open to matriculated students in the Montessori Early Childhood Teacher Education Program (MECTEP) or by instructor permission. Cr 3.

**ECE 513 Child Development, Family, and Community in an Early Childhood Montessori Classroom**

This course examines Montessori's theory of the interrelated curriculum, in a study of the developmental patterns of young children. The major emphasis is on the intellectual and emotional development of children during the first six years of life. Major topics covered in this course are the writings and philosophies of past and current theorists; current trends in family dynamics; and local community resources. This course also looks at the interactions among children, family, school, peers, media, and community, with an emphasis on ethnic and ability/learning diversity, social class, gender roles, and their impact on behavior, values, morals, and attitudes. Prerequisites: Open to matriculated students in the Montessori Early Childhood Teacher Education Program (MECTEP) or by instructor permission. Cr 3.

**ECE 514 Practical Life and Daily Living in an Early Childhood Montessori Classroom**

This course examines Montessori's theory of the interrelated curriculum, as it relates to strategies of classroom leadership and strategies that gain the child's confidence, cooperation and attention, thereby helping to develop a pattern of respect for authority. Environmental design techniques that can be applied to the physical environment and their application to classroom management are also discussed. Prerequisites: Open to matriculated students in the Montessori Early Childhood Teacher Education Program (MECTEP) or by instructor permission. Cr 3.

**ECE 515 Sensorial in the Early Childhood Montessori Classroom**

This course examines Montessori's theory of the interrelated curriculum, as it relates to the philosophy and rationale of the sensorial area and presentation of the sensorial materials aiding the development and refinement of the senses. Prerequisites: Open to matriculated students in the Montessori Early Childhood Teacher Education Program (MECTEP), or by instructor permission. Cr 3.

**ECE 516 Assessment and Observation in an Early Childhood Montessori Classroom**

This course provides a framework for studying Montessori's theory of interrelated curriculum, by examining the formative use of classroom assessment in an early childhood Montessori classroom. This includes developing skills using direct observation as a tool for studying children,
ECE 526 Early Childhood Internship in a Montessori Classroom
This course is a full-time, supervised internship experience in applying knowledge and skills to the practice of teaching in an early childhood Montessori classroom. The purpose of the internship is to provide the intern with the opportunity for personal and practical experiences in a teaching / learning experience as an Early Childhood Montessori teacher with children ages 2 1/2 through 6 year age. It also provides a period of observation, internalization, and further study, to bring together the theory and practice of Montessori education. This course is intended to allow the student time to experiment with teaching the cosmic lessons, develop new curriculum materials, as well as manage the daily routines of an early childhood classroom. Prerequisites: Open to matriculated students in the Montessori Early Childhood Teacher Education Program (MECTEP), or by instructor permission. Cr 3.

EDU 501 Secondary Science Methods
The course has an interactive laboratory/discussion field-based approach, modeling and focusing on the teaching and learning aspects of science in the high school and middle school. The emphasis is on content, process, and methodology and will help interns develop knowledge of how to teach (pedagogy) and, more specifically, knowledge of how to teach science (pedagogical content knowledge). Students will learn strategies for planning and providing core academic and behavioral experiences to all learners. Prerequisites: Open to matriculated interns in the ETEP program or by Teacher Education Department permission. Cr 3.

EDU 502 Secondary English Methods
This course focuses on ways to organize and teach English classes at the middle school and high school levels based upon current research in literacy and national and state standards in English Language Arts. Various strategies involved in designing and managing a student-centered literacy program will be presented. Different theories for teaching English will serve as a backdrop for creating classroom activities that connect
EDU 503 Foreign Languages Methods
This course provides an introduction to the theory and practice of teaching and learning foreign languages at the middle and high school based upon current research and national and state standards with a central focus on communicative language teaching. Students examine theories of second language acquisition, techniques for teaching interpersonal, interpretive, and presentational modes of communication, as well as literature and culture. The course explores task-based instruction, the use of culturally authentic materials, the integration of technology as well as means of performance-based assessment and grading. Prerequisite: Open to matriculated students in ETEP, the Modern and Classical Languages and Literature Education TED Pathway or by Teacher Education Program permission. Cr 3.

EDU 504 Secondary Social Studies Methods
This course focuses on ways to organize and teach social studies classes at the middle school and high school levels. Various theories for teaching social studies, national and state standards, and current research work to serve as the backdrop for creating classroom activities that connect the topics to the students' lives. The instructor will demonstrate various strategies involved in designing and managing a student-centered curriculum. Prerequisite: Open to matriculated ETEP students or by permission of the Teacher Education Program. Cr 3.

EDU 505 Teaching Mathematics K-8
This course, intended for those preparing to be K-8 teachers, provides experiences to develop, critique, and apply knowledge, skills, and research findings in mathematics, pedagogy, and mathematical learning theory in elementary and middle school classrooms. Major areas of focus include learning and assessment of all children, instruction to support all students' mathematical understanding, reasoning, communication, and collaboration; standards (national, state, and local); content integration; resources; issues; and the discipline's philosophical framework. Prerequisite: ETEP program admission. Cr 3.

EDU 511 Children's Literature
This course is designed for teachers who wish to develop a deeper understanding of the literature written for children ages 4-12 and who want to become competent and creative catalysts in bringing children to books. Attention is given to standards of selection, curriculum implications, and methods of using books to individualize reading instruction. Students are expected to read widely in juvenile collections in order to establish a basis for selecting appropriate literary fare. Cr 3.

EDU 513 Adolescent Literature
This course is designed for middle or secondary teachers who wish to develop a deeper understanding of literature for adolescents and who needs to learn how to help young people read widely. Attention will be given to the dynamics of adolescence, individualizing reading, standards of selection, and creative methods of introducing books. Cr 3.

EDU 514 Improving Teaching in Content Areas through Literacy
This course explores literacy techniques and processes that can be applied by content teachers to enhance learning. Emphasis is on competencies that students use in content areas and strategies for teaching them how to apply them—a process of integrating the teaching of reading, writing, and study skills while teaching subject matter. The course has practical application for all classroom teachers. Cr 3.

EDU 521 Digital Literacies and Education
In this course, students explore the use of technology in K-12 education with a focus on literacy in the 21st century. Learners gain insight and experience in the effective integration of technology in literacy education through experiential learning, discussion, readings, and design of lessons and activities. Students examine related educational and societal issues through both academic and mainstream lenses in the context of relevant standards. Cr 3.

EDU 541: Seminar I: Understanding Diversity, Diverse Learners and Equitable Teaching Practices
This seminar, the first in a three-course sequence, helps students build a professional learning community in which they can explore how they promote equitable and engaging teaching practices. They will explore frameworks for understanding how diversity and inequity affect teaching and learning in today's schools. Students will begin to analyze how their own cultural backgrounds and those of school communities influence educational practices and understand the principles of universal design in education, differentiation, and culturally responsive pedagogy for lesson planning. Prerequisites: Open to matriculated students in the MSEd in Teaching and Learning or by Teacher Education Program permission. Cr 3.

EDU 542 Seminar II: Supporting Diverse Learners through Equitable Teaching and Assessment
The second in a three-course series of seminars, the course focuses on students honing their instructional and curriculum planning practices in support of equitable and engaging teaching. Students will develop their personal philosophy of teaching and perfect their craft through ongoing discourse, reflection and inquiry. Specific topics include methods for knowing learners, instruction strategies based on the practices of universal design for learning, differentiation, and culturally responsive teaching, lesson and mini-unit planning, classroom management, basic assessment practices, and technology integration. Prerequisites: Open to matriculated students in the MSEd in Teaching and Learning, or by Teacher Education Program permission. Co-requisite: EDU 544, EDU 644 or EDU 613. Cr 3.

EDU 544 Applied Pedagogy
This course is a part-time, supervised internship experience in applying knowledge and skills under study in their coursework to the practice of
EDU 545 Seminar III: Supporting Diverse Learners through Equitable Teaching and Assessment
This seminar, the final in a 3-seminar series, focuses on deepening students' practice of equitable teaching. Through this course students will continue to understand the diversity of students, specifically learners' readiness for curriculum and setting demands, and the instructional and assessment practices that support students. Students will continue to assess and demonstrate their professional competence and develop their teaching practice through ongoing discourse, reflection and inquiry. Specific topics will include curriculum barrier /learner readiness analysis; application of universal design for learning, differentiation and culturally responsive teaching practices in unit planning, assessment and grading practices and professionalism. Prerequisites: Open to matriculated students in the MSEd in Teaching and Learning, or by Teacher Education Program permission. Co-requisite: EDU 613 or EDU 644. Cr 3.

EDU 550 Instructional Strategies for Secondary Teaching
This course explores the historical, philosophical and political foundations of contemporary secondary schools, pedagogy and curriculum as means to understand how instructional and curricular choices are made. It also assists students in developing a repertoire of instructional strategies through modeling, practice, and reflection. Students hone their skill in choosing and using student-centered, thinking-orientated instructional strategies, addressing students' diverse learning needs through varied learning activities. Open to matriculated students in the Secondary Mathematics Education Teacher Education Pathway Cr 3.

EDU 551 Teaching Social Studies K-8
This course is designed to provide students with a general understanding of the guiding principles and the strands of social studies. Students will gain a working knowledge of the best practices in social studies instruction and the goals of social studies education. Students will create lesson plans and incorporate appropriate instructional methods and materials as part of the course requirements. Prerequisites: Open to matriculated interns in the ETEP or by permission of the Teacher Education Program. Cr 3.

EDU 552 Teaching Science K-8
This course has an interactive laboratory/discussion field-based approach, modeling and focusing on the teaching and learning aspects of science in the elementary and middle school. The emphasis is on content, process, and methodology. The course will be framed by the Department of Teacher Education's Core Practices, Maines Learning Results, the National Science Education Standards, and by the students' goals about the teaching and learning of science. Students will learn strategies for planning and providing core academic and behavioral experiences to all learners and differentiated academic and behavioral experiences for learners with special needs. Prerequisites: Open to matriculated students in the ETEP by Teacher Education Program permission. Cr 3.

EDU 554 Secondary Mathematics Methods
This course, intended for those preparing to teach mathematics at the 7-12 level in the state of Maine, provides experiences to develop and apply mathematical content knowledge and pedagogical skills in middle and secondary school classrooms. Major areas of focus include: how students learn mathematics, conceptual development of mathematical understandings, problem-solving instructional strategies, appropriate and effective uses of tools and technology, assessment of student learning, and providing equitable access to learning for all students. Prerequisites: Open to matriculated students in ETEP, the Secondary Mathematics Education Teacher Education Pathway, or by Teacher Education Program permission. Cr 3.

EDU 557 Teaching Writing to Multilingual Learners
This course focuses on developing and improving writing skills for English language learners (ELLs), by examining second language acquisition and writing theories and how they inform classroom practice. It is designed to equip teachers with the dispositions, knowledge, skills and strategies to implement writing instruction for ELLs at all levels of proficiency. Students gain firsthand experience using the writing process. They will draw on current research, theory, and classroom practice, leading to the development of instructional programs that will meet the needs of their ELLs. Cr 3.

EDU 558 Content-Based Curriculum for English Language Learners
This course focuses on the factors necessary for the development and implementation of relevant content learning for second language students of all age and proficiency levels in the public school setting. The course explores the theoretical background and models of strategies for insuring competent delivery of appropriate language and content in a multilingual context. A co-construction approach incorporating the backgrounds and experiences of course participants is the principle methodological approach. The framework of the course is a pedagogical focus that incorporates scaffolding, differentiated instruction, independent learning strategies, critical thinking, and assessment. Cr 3.

EDU 559 Aspects of Reading for Multilingual Learners
This course examines the role of literacy in the K-12 and adult classroom for linguistically and culturally diverse learners in local and global contexts. A critical analysis of the developmental nature of the reading process as it applies to young learners, as well as application to older learners with varying degrees of first language literacy, is a major emphasis. An examination of first language and cultural and linguistic diversity influences on reading in a second language and multiliteracies in the light of current applied linguistics research is also a major emphasis. Cr 3.

EDU 561 Aspects of the English Language
This is a practical course for the prospective or continuing ESL teacher which will examine the various linguistic elements of the English language and their relevance to the teaching process of English as a Second or Other Language. We will be focusing on analyzing the grammatical and phonological aspects of the English language as well as looking at morphology and lexis, semantics, and such social aspects of the language as register and speech variation. Primary emphasis will be placed on a better understanding of English through class discussion, oral presentations, and practical application for teaching in the ESL classroom. Cr 3.

**EDU 562 Linguistic and Cultural Diversity in the Classroom**
This course examines the nature of language and cultural differences among learners of various ethnic and racial backgrounds. The exploration of diversity provides opportunities for participants to develop a personal awareness of the role of cultural conditioning in classroom encounters; to reflect on and to confront personal biases as they relate to teaching; to acquire the skills and resources for an ethno-relative approach to delivering instruction; and to make language- and topic-related choices compatible with learner differences. Cr 3.

**EDU 563 ESL Testing and Assessment**
The focus of this course is on learner-centered approaches to constructive evaluation of language and content. Emphasis is predominantly on authentic, performance-based assessment practices but also include the role of criterion-and norm-based formal testing procedures within a holistic evaluation framework. Comprehensive evaluation of language involves the whole learner, including an integrated approach incorporating socio-cultural, academic, and cognitive perspectives. Also included is an understanding of biases influencing formalized second language testing. Cr 3.

**EDU 565 Teaching Reading in Grades K-8**
In this course students will learn to use evidence-based instruction to teach reading in grades K-8. Students will examine theories and current research on reading development and process in order to effectively instruct and assess all readers, including students with special needs and from culturally and linguistically diverse backgrounds. Students will learn how to implement multiple strategies to support reading development and promote children’s proficiency in state standards. Additionally, digital literacies, reading across the curriculum, and ways to engage and motivate readers will be emphasized. Prerequisite: Admission to candidacy (must be concurrently enrolled in a student teaching internship), or LLC program approval. Cr 3.

**EDU 566 Teaching Writing in Grades K-8**
In this course students will learn to use evidence-based instruction to teach writing in grades K-8. Students will examine theories and current research on writing development and process in order to effectively instruct and assess all writers, including students with special needs and from culturally and linguistically diverse backgrounds. Students will learn how to implement multiple writing strategies across various genres to support writing development and promote children’s proficiency in state standards. Additionally, students will explore the use of technology and participate in writing sessions to develop as writers and teachers of writing. Prerequisite: Admission to candidacy (must be concurrently enrolled in a student teaching internship), or LLC program approval. Cr 3.

**EDU 599 Independent Study in Teacher Education**
This course provides students the opportunity to pursue a project independently, planning and exploring an area of interest within the field of teacher education. Most independent study projects are library based; all are intellectually sound and reflect a high caliber of performance. Specific content and methods of evaluation are determined in conjunction with the instructor. An approved proposal is a necessary prerequisite to registration. Prerequisite: Matriculation into MTL program. Cr 3.

**EDU 600 Research Methods and Techniques**
This course studies the concepts, principles, and techniques of educational research with an emphasis on scientific inquiry and problem solving, designed for both the producer and consumer of educational research. Individual critiques and research reviews are completed. Prerequisite: open to matriculated students only. Cr 3.

**EDU 601 Naturalistic Inquiry and Qualitative Research**
This course introduces students to an approach to educational research that studies schools as natural settings. Depending largely on qualitative methods, students learn the assumptions underlying field research and develop the ability to read qualitative/naturalistic studies critically and to do small site-based research projects. Prerequisite: EDU 600 or permission of instructor. Cr 3.

**EDU 603 Analysis of Teaching**
This course provides an opportunity to view teaching from the perspective of selected conceptual frameworks and research findings in the theory and practice of teaching. Analysis of individual teaching behavior is an important aspect of this course. Cr 3.

**EDU 604 Curriculum Development**
This course provides students with an understanding of curriculum and curriculum development. Using a collaborative approach, teachers and administrators plan the design of a curriculum consistent with personal ideals and a given context. Students analyze the curriculum in terms of knowledge, skills, learning processes, and affective dimensions. Special emphasis is given to the processes of curriculum implementation and curriculum evaluation. Cr 3.

**EDU 605 Teaching, Learning, and Assessment**
This course develops students' knowledge of testing and assessment and provides opportunities for students to apply that knowledge to instruction.
EDU 607 Teacher Research in Literacy
One type of research that now largely informs our knowledge of literacy learning and instruction is ethnographic in nature. More and more of it is the work of teacher researchers. The purpose of this course is to enable students to become generators of new contextualized knowledge through their own classroom-based research and inquiry. Students will be introduced to major research paradigms and will learn and practice techniques of data collection and analysis. Naturalistic methods of studying literacy learning in real classroom contexts will be emphasized. During the course of the semester each student will generate a research question, design an action research study or piece of naturalistic inquiry that will help answer the question, collect and analyze sample data, and summarize findings or revisions necessary to improve the study. The class will function as a community of researchers; a substantial portion of class time will be spent working in small groups. Prerequisites: EDU 565, EDU 620, or EDU 559 and EDU 566, EDU 626 or EDU 557. Open to matriculated students only. Cr 3.

EDU 612 Practicum/Seminar
This practicum/seminar, for experienced teachers in the teacher leadership program, is a two-semester, field-based project and concurrent seminar requiring a culminating activity in which the student utilizes the major learnings from the program in identifying and applying problem-solving strategies to a specific area of concern in a field setting. A written practicum report will be presented and discussed in an open forum. Cr 6 (3 credits each semester).

EDU 613 Professional Internship in Secondary Education
This course is a full-time, supervised internship experience in applying knowledge and skills to the practice of teaching. An intern completes a semester-long classroom internship in which she/he is assigned to a mentor teacher and classroom. The intern completes a minimum of two weeks of lead teaching. Prerequisites: Open to matriculated interns in ETEP or by Teacher Education Program permission. Cr variable (1 – 6).

EDU 615 Middle Level Curriculum Organization
This course provides an opportunity to examine realities and possibilities of middle school curriculum design and content and to explore various longstanding controversies about the relationship between curriculum and the world, curriculum and learners, curriculum and the academic disciplines, and curriculum and educational aims. Moreover, it delves into conceptions of knowledge, knowing, and learning and into who has access to all three. The course investigates both middle school curriculum theory and curriculum practices, invites students to critique current and past approaches, and then develop a curricular approach of their own. It looks closely at the impact of curricular practices on the welfare of students and society. An important goal of the course is to provide opportunities for students to develop their own standards and naming the institutional contexts necessary for supporting those standards. Students should leave the course with a clear idea about what curricular approaches they think serve the welfare of middle school students and the larger society. Cr 3.

EDU 617 Teaching at the Middle Level
This course provides an understanding of the role the teacher plays in the intellectual, social, emotional, and personal development of young adolescents. Students investigate, try out, and evaluate responsive teaching strategies and explore the design and structure of advisor/advisee programs and curricula. Cr 3.

EDU 620 Reading Development and Instruction
Becoming a skilled reader is a developmental process. Although literacy acquisition is continuous, distinct stages of reading growth may be discerned as students become accomplished readers. The course provides a theoretical framework for sound instructional practices based on a cognitive, developmental perspective. Major emphasis is on using literature-based instruction. Current issues in the teaching of reading will be examined and the application of literacy practices to ESL, adult basic education, and special needs populations will be addressed. Suggested readings represent current research and practice. In addition to the texts, students are expected to read professional books and journal articles, synthesize information from readings, and generate implications for literacy instruction. Case studies and simulation exercises will be used to provide practical applications of the course content. This course is intended for classroom teachers, administrators, and other educators. Cr 3.

EDU 621 Literacy Problems: Assessment and Instruction
This course conceptualizes reading assessment as a process of becoming informed about learners. The course focuses on the development of diagnostic insights and corrective strategies for struggling readers of all ages. Current trends from research and practice are explored. Case studies and in-class practica help teachers implement effective procedures in the classroom. Cr 3.

EDU 622 Designing and Managing Literacy Instruction, PS-3
This course focuses on the development of language (both oral and written) in children 3-8 years of age. Content includes the characteristics of language learners, the conditions that promote emergent literacy, and organization and management of literacy instruction in the primary grades. Cr 3.

EDU 623 TESOL Practicum
The practicum in Teaching English to Speakers of Other Languages is designed to accommodate students in the TESOL program who are ESL teachers, mainstream teachers working on getting ESL-endorsed by the state, international students, and adult educators. In this course, students
acquire practical ESL/EFL teaching experience in the field while applying knowledge gained through coursework and research. The course is aligned with the TESOL standards. Prerequisite: Matriculated students who have completed 24 credit hours of program course work. Cr 3.

EDU 624 Schools and the Classroom
This course relates cultural, historical, philosophical, sociological, and curricular foundations of education. Students study how schools work as organizational cultures and how classrooms function as learning environments through an analysis of personal teaching contexts. Prerequisites: Completion of one of the following teacher certification programs: TEAMs, ETEP, CLASS, the Secondary Mathematics Education TED Pathway, or the Modern Classical Language and Literature Education TED Pathway. Cr 3.

EDU 626 The Writing Process
This course focuses on the study of writing development in children and how teachers can facilitate writing through a process approach. Many writing strategies for the classroom and the individual writer will be modeled and put into practice. In addition, students will investigate specific areas of interest to improve their own writing and writing instruction. Through participation in writing lessons and workshops, students will develop their own pieces of writing, examine the needs of diverse learners, design instruction for varying developmental stages of writers, explore the use of technology, and understand the implications of national, state, and local standards. This course is intended for classroom teachers, administrators, and other educators. Cr 3.

EDU 633 Special Applications in Literacy
Independent study opportunities to apply course experiences in field-based situations are encouraged. Considerable latitude is possible in pursuing options of professional interest with approval of an advisor. Examples of activities include: writing project (meeting standards of professional journals), intensive clinical experiences, educational consultation and research. Independent options must be approved in writing by the program coordinator. Cr 1-6.

EDU 634 Seminar in Literacy Research
The course provides a cultural-historical lens to literacy and reviews current research trends in literacy theory and practice. Students will review and analyze contemporary research. This course is intended to be the last class in the literacy education master's sequence (except EDU 639); CAS students may request permission to enroll. Prerequisites: By program permission. Cr 3.

EDU 635 Seminar in Second Language Literacy
This course integrates the knowledge base acquired in core ESL courses by focusing on the characteristics of a fluent second language reader and writer. There will be an analysis of first language reading models and their relevance to literacy acquisition in English as a second language. The impact of variables such as native language proficiency, perception, lexical knowledge, cognition, metacognition, and culture will be examined. This course is intended to be the last class in the TESOL master's sequence (except EDU 623); CAS students may request permission to enroll. Prerequisites: By program permission. Cr 3.

EDU 636, Teaching Adolescent Writing
This course focuses on the writing needs of the adolescent learner. Students will extend their knowledge of process writing, examine the role of the writing teacher across disciplines, and consider going beyond formula to include multiple genres in all subjects. In addition, students will deconstruct texts for writing instruction, examining voice, style, structure, values, and authority. The role of technology for gathering and sharing information and alternative assessments will be included. Prerequisites: One course from the following list: EDU 566, EDU 557, EDU 626, EPB 596, EPA 509; or instructor permission. Cr 3.

EDU 638 Advanced Second Language Acquisition
This course examines a broad range of second language acquisition (SLA) theories and applies them to English as a Second Language (ESL) pedagogy. This advanced course focuses on the exploration of second language acquisition as a complex phenomenon and aims to generate in the students a personally meaningful, context-relevant understanding of the phenomenon. Students will be able to relate current theories of SLA and existing empirical research to their daily needs as teachers. Prerequisites: EDU 561 Aspects of the English Language. Cr 3.

EDU 639 Practicum in Literacy Education
The Practicum in Literacy Education is designed to be an intense capstone experience that prepares candidates for endorsement as a literacy specialist. According to the International Reading Association, literacy specialists are responsible for 1) developing, leading, or evaluating the school or district pre-K–12 reading and writing program, 2) supporting teacher learning, and 3) working with students who struggle with reading. The practicum is intended to model an effective literacy program where graduate students assume these responsibilities and are expected to meet the competencies set forth by the International Reading Association. Prerequisite: 21 credits in literacy coursework including the following literacy content courses: EDU 566 or EDU 620, and EDU 566 or EDU 626, and EDU 511 or EDU 513, and EDU 514, and EDU 621, and permission of the instructor. Cr 6.

EDU 642 Classroom Assessment
This course focuses on the formative use of classroom assessment, including developing a repertoire of valid and reliable assessment methods, communicating clear expectations, giving meaningful feedback, and involving students in assessment. Students share experiences and practices with each other, discuss and reflect upon relevant readings, apply learning in classroom settings. The course is not recommended for first-year teachers or those who have just completed the certification program and are still seeking employment as teachers. There is a practicum requirement for those who are not employed as teachers or education technicians. Prerequisites: Completion of ETEP or TEAMs teacher
EDU 643 Inquiry in Education
This course focuses on inquiry in the field of education, including the development, implementation and evaluation of research project focused on classroom practice or educational policy issues. This course is designed as a capstone for the master's in Teaching and Learning and is taken in the last semester of the MTL program. Candidates completing special education or ESL certification will conduct research in their respective field. Prerequisites: Completion of ETEP or TEAMS teacher certification internship and EDU 600; or by special permission of the instructor. Cr 3.

EDU 644 Professional Internship in Elementary Education
This course is a full-time, supervised internship experience in applying knowledge and skills to the practice of teaching. An intern completes a semester-long classroom internship in which she/he is assigned to a mentor teacher and classroom. The intern completes a minimum of two weeks of lead teaching. Prerequisites: Open to matriculated interns in ETEP or by Teacher Education Program permission. Cr variable (1-6).

EDU 651 Instructional Strategies for Secondary Teaching
This course explores the historical, philosophical, and political foundations of contemporary secondary schools, pedagogy, and curriculum as a means to understand how instructional and curricular choices are made. It also assists students in developing a repertoire of instructional strategies through modeling, practice, and reflection. Students hone their skill in choosing and using student-centered, thinking-oriented instructional strategies, addressing students' diverse learning needs through varied learning activities. Prerequisites: Open to matriculated ETEP interns and by Teacher Education Program permission. Cr 3.

EDU 652 Curriculum Design
This course is designed to develop an understanding of the levels of policy decisions about curriculum selection and implementation and how teachers develop curriculum for units, grade levels, and subject areas. Major areas of focus include the governance of curriculum, backward planning design process, curriculum mapping, and the development of a conceptual framework which demonstrates the interconnections of curriculum, instruction, and assessment. Prerequisites: matriculation in ETEP, or by Teacher Education Program permission. Cr 3.

EDU 665 CAS Directed Study
This course provides CAS students with an opportunity to focus on long-term applied research projects near the beginning of their programs of study, rather than wait until they have completed their regular CAS coursework. Some students enter the program having embarked upon long-term projects that will positively impact their schools or school systems. This capstone option gives them the opportunity to combine work on those projects at the same time that they take other graduate courses in their individual CAS programs. This project will be carried out through the program, but the culminating synthesis should take place in the last academic year of the program. Cr 3-6.

EDU 667 Professional Educator Capstone
This course is designed for students who are completing the Professional Educator program. It provides students with the opportunity to conduct an action research project in which they develop strategies to solve a problem of practice. Students will identify a problem that present barriers to student learning, conduct a review of relevant literature, collect and analyze data, devise a solution or intervention, and present findings to an authentic audience. The course takes the form of a professional community where students engage in collegial interaction, peer learning, and reciprocal feedback. Prerequisite: completion of 30 credits towards the M.S. Ed: Professional Educator. Cr. 3

EDU 670 Introduction to Educational Leadership
This course is designed to be the first course taken in the educational leadership program which may lead to certification as a principal, special education director, or curriculum coordinator. The course has two major foci: the characteristics of good leadership and the skills of effective educational leadership. Since many students who enroll in this course are exploring a career transition into administration, a goal of the course is to give participants a clear understanding of the decisions faced by educational leaders, the skills and knowledge necessary to perform effectively, and to give participants an opportunity to explore strategies for balancing the demands of the job, personal commitments, and responsibilities. Cr 3.

EDU 671 Organizational Behavior
This course will explore the interactions between individuals and the systems in which they live and work. Organizational behavior is the utilization of theory and methods of academic disciplines for understanding and influencing behavior in people in organizations. Individual and group level of analysis are included in covering such topics as diversity, perception, communication, motivation, power, group development and performance, innovation, quality, individual effectiveness and development, leadership, and intergroup behavior. Cr 3.

EDU 672 Political and Community Leadership
Educational leaders must be influential beyond the school system as well as within it. Distribution of power and influence across interrelated social systems is seldom equal leading to competition for bases of influence. This course examines the ramifications of this social circumstance for education with emphasis on administrative decision making. Cr 3.

EDU 677 Seminar in School Management
This course, through the use of case studies, simulations, readings, presentations, and discussions will focus on students: (1) learning the nuts and bolts needed for daily management, (2) examining current issues facing the principalship, (3) learning strategies for managing and understanding...
oneself within the principal's role, (4) studying specific financial skills required of the principal and, (5) articulating positions on current educational practices, and developing an educational leadership philosophy. Prerequisite: instructor permission. Cr 3.

EDU 678 School Law
This course acquaints students with general principles of school law as found in the interpretation of constitutional and statutory provisions by the higher courts. Laws governing pupils, teaching personnel, and boards of education and special education will be stressed with particular emphasis on Maine school law. Cr 3.

EDU 679 Evaluation and Supervision of Teaching
This is an introductory course focused on evaluating and supervising teaching performance. As the teaching students may supervise ranges from preschool through adult education in a variety of subject areas, this course offers a framework of supervisory concepts and asks students to apply these concepts to the settings and clientele they would likely encounter. The major product of this course is a platform for articulating one's beliefs and espoused practices for evaluating and supervising teaching in a setting specified by the student. Cr 3.

EDU 680 Professional Learning in Schools
This course is designed for students in administration and teacher leadership and examines the theory and practice of staff development in schools and other human service settings. Building on current research on adult development, organizational analysis, and school improvement, students develop an understanding about the structure and process of staff development planning, programming, implementation, and evaluation. A final project applying class learnings to a work setting is required. Cr 3.

EDU 683 School Finance
This course provides a working knowledge and understanding of Maine state law and of school system finances and the funding process. An historical perspective is explored as well as current issues and problems on a statewide and national level. Specific emphasis is given to revenue generation and distribution, state and federal influences, local tax issues, budget development, budget management, and budget administration and control. Cr 3.

EDU 685 Internship in School Administration
This three-semester, nine-credit course (three credit hours each semester) combines the 240-hour internship field experience with the development of an applied research project in educational administration. The early focus of the course is on the internship in a school setting designed jointly by the student, the internship supervisor, and a school-based field supervisor. The internship is designed to encourage application of formal coursework to the management issues that face school leaders in the workplace. Out of the internship activities students complete a journal, develop a leadership platform (portfolio), conduct an investigation on an aspect of financial management and a study of community demographics and formulate a leadership project based on an issue of importance to the school. Each student will be required to produce a written report on the project and to defend it verbally at the conclusion of this course. Prerequisite: Instructor permission. Cr 9.

EDU 686 Internship in Special Education Administration
This three-semester nine-credit course (three credit hours each semester) serves as the capstone experience in the educational administration program for aspiring special education directors. The internship is designed to immerse the student in the everyday tasks of the special education director, providing an opportunity for the student to actually apply the skills and knowledge gained throughout the educational leadership program. The early focus of the course is on the internship in a district setting designed jointly by the student, the internship supervisor, and a district special education director. Out of the internship activities students complete a journal, develop a leadership platform (portfolio), conduct an investigation on an aspect of financial management related to special education and a study of community demographics/child find and formulate a leadership project based on an issue of importance in special education at the school or district level. Each student is required to produce a written report on the leadership project and to present it at the conclusion of the course. Prerequisite: Instructor permission. Taken at the conclusion of a student's program. Cr 9.

EDU 687 Internship in the Superintendency
This two-semester, six-credit course (three credits each semester) is designed to immerse the student in the everyday tasks of the superintendent of schools providing an opportunity for the student to actually apply the skills and knowledge gained throughout the educational leadership program. This course, made up of field experiences in the school superintendent, is designed to meet certification requirements and to prepare individuals for the position. The internship is designed to encourage application of formal coursework to the leadership and management issues that face superintendents in the workplace. Out of the internship experience, students will develop a project, in which they will be expected to take a leadership role in designing, implementing, and assessing a project that addresses an important district-wide educational issue. Prerequisite: Instructor permission. Program capstone. Cr 6.

EDU 688 Internship in Curriculum Administration
This three-semester, nine-credit course (three credits each semester) serves as the capstone experience in the educational leadership program for aspiring curriculum coordinators. The internship is designed to immerse the student in the everyday tasks of the curriculum coordinator, proving an opportunity for the student to actually apply the skills and knowledge gained throughout the program. The early focus of the course is on the internship in a district/central office setting designed jointly by the student, the internship supervisor, and a curriculum coordinator. Out of the internship activities, students complete a journal, develop a leadership platform (portfolio), conduct an investigation on an aspect of financial management related to special education and a study of community demographics and formulate a leadership project based on an issue of curriculum/instructional importance to the district/school. Each student is required to produce a written report on the leadership project and to
EDU 690 Introduction to Athletic Administration
The course will give students an overview of the roles and responsibilities of athletic administrators and the knowledge and skills necessary to become effective athletic program leaders. In addition, students will gain understandings of themselves and of their potentials to function as effective leaders within federal, state, and local regulatory frameworks. Cr 3.

EDU 691 Sports Law and Regulation Compliance
The course will give students an overview of the roles and responsibilities of athletic administrators and the knowledge and skills necessary to become effective educational leaders. In addition, students will gain understandings of themselves and of their potentials to function as effective leaders within federal, state and local statutory and regulatory frameworks. Cr 3.

EDU 695 Topics in Professional Education
This course is a Foundations Course that is designed for students who are beginning the Professional Educator Program. It will serve students who enroll in a cohort concentration through the Professional Educator, providing them with the opportunity to become familiar with a topic of common interest or concern (example STEM education, English education, etc.) that lays the foundation for future study. The course takes the form of a professional community where students and the instructor engage in collegial interaction, peer learning, and reciprocal feedback. Prerequisite: Enrollment in a cohort concentration of the Ms. Ed in Professional Educator. Cr 3.

EDU 697/SPY 698 Statistics I
This course provides training in the knowledge and skills necessary to select and use a range of statistical methods for educational and psychological research. Students will learn and use basic parametric and non-parametric statistical procedures, including Chi Square, t-tests, and Analysis of Variance. Prerequisites: EDU 600 or equivalent and permission of instructor. Cr 3.

EDU 698/SPY 698 Statistics II
This course provides training in advanced applications of statistical methods for educational and psychological research. Students will learn and use complex statistical procedures, such as Multiple Analysis of Variance, multiple regression, and structural equation modeling. Prerequisites: EDU 697 and permission of instructor. Cr 3.

EDU 699 Independent Study
This course provides an opportunity for students to pursue a topic of interest on an independent basis. The specific content and evaluation procedures are arranged with an instructor. Prerequisite: Permission of supervising instructor and the department chair. Cr var.

EDU 701 Foundations of Education Policy and Research
This six hour, two-semester course follows PPM 707. It focuses on selected educational reform policies from historical, social, and political perspectives and the research designs that are appropriate for studying them empirically. Students will engage in careful readings and critical analyses of primary, empirical, and peer-reviewed studies of educational reform policy formation and implementation, and they will examine appropriate designs for doctoral research along these lines. The reform policies that will be considered will reflect recurring issues and the dilemmas they pose for educational leaders. These include, but are not limited to: multiple and conflicting educational aims and purposes, upgrading the teaching profession (preparation, recruitment, retention, development), evaluating student achievement and teaching effectiveness, reducing inequalities in student opportunities and outcomes, and the interplay between corporate and non-corporate models of schooling. The following research designs will be emphasized: qualitative and mixed methods case studies, interview studies, content analyses, survey research, correlation studies, experimental studies, and ex-post /causal comparative studies. As part of the course, students will be introduced to doctoral faculty and their areas of research. Prerequisites: Acceptance into the Ph.D. program and successful completion of PPM 707. Cr 6 (three each semester).

EDU 702: Contemporary Issues in Education Policy and Leadership
This course builds on EDU 701 and examines the role of the local, state, and federal government in creating educational policy to address contemporary education-related issues, and the impacts and challenges they pose for leadership in the context of federal, state, and local environments. As a group and individually, students will engage in careful readings and critical analyses of position papers, primary, empirical, and peer-reviewed studies that deal with current issues in educational policy drawn from various topics and from diverse political paradigms. Prerequisites: Successful completion of EDU 701. Cr 3.

EDU 705 Data Collection and Analysis in Education Research
This six hour, two-semester course follows EDU 701. This course focuses on mixed methods for conducting research in education policy and leadership. The course’s emphasis is on the quantitative and qualitative methods of data collection and analysis that are appropriate for studying issues in the fields of education policy and leadership. Students will develop research questions and appropriate data collection and analysis methods for studying these questions. The following research designs will be emphasized: qualitative and mixed methods case studies, interview studies, survey research, correlation studies, experimental studies, and ex-post /causal comparative studies. Prerequisites: Acceptance into the Ph.D. program and successful completion of EDU 701. Cr 6 (three each semester).

EDU 706 Evidence Based Analysis: Policy, Programs, and Accountability Systems
This course focuses on conducting evidence-based reviews and analyses of the design, implementation, and impacts of current international, national, and state education policy, policy initiatives, and education reforms. Using the frameworks articulated by researchers and policy analysts such as Canon, Rushcamp & Freeman (1990), Spillane (1996), Hill (2001), students will analyze approaches countries, states, and school districts take in implementing education policy. Phase I of the course will focus on an analysis of educational reform efforts in American states as well as comparisons of US national efforts with those of other countries. Review of international assessment systems and educational commentary will be examined in light of reform efforts. Phase II of the course will focus on using evidence from Phase I to construct accountability systems for monitoring and assessing the impacts of reform efforts both nationally and in Maine. Students will examine state and local policy implementation, develop accountability systems, and present their reports to state policy makers. Prerequisites: Successful completion of EDU 701. Cr 6, three each semester.

EDU 708 Dissertation Proposal Seminar
This course is designed to lead students through the process of completing a dissertation proposal. At the end of the course, students will have completed a dissertation proposal that includes: a problem statement, complete research review, a research question, hypotheses, if appropriate and a methodology section. The course will address each of the proposal components in a recursive fashion, developing, sharing, and refining of content. Students will be expected to work closely with their dissertation chair in finalizing the proposal. Successful completion and dissertation committee approval of the proposal are prerequisites for continuation toward the dissertation. Prerequisites: Successful completion of EDU 706 and EDU 707. Cr 3.

EDU 799 Dissertation in Education
This course is designed to lead students through the process of completing a dissertation. At the end of the course, students will have completed a dissertation that includes: a problem statement and research questions, a review of research, data collection and analysis, findings and implications. The course will address each of the components in a dissertation in a recursive fashion, developing, sharing, and refining of content. Students will be expected to work closely with their dissertation chair and other committee members in finalizing the dissertation. Students must register for a total of nine dissertation credits to graduate. Successful completion of the dissertation and oral presentation to the dissertation committee and their approval are prerequisites for completing the Ph.D. (9 credits required). Prerequisites: Successful completion of EDU 708. Variable credit of 1-6 for a total of 9 credits.

HCE 500 Orientation to the Counseling Profession
This introductory course is designed to acquaint individuals who are preparing to enter the counseling profession with a broad overview of the profession's historical and theoretical foundations and to begin the development of their professional identities. This course must be taken the first semester following matriculation. Cr 3.

HCE 507 Spirituality and Religion in Counseling
This course will address, in an ecumenical and inclusive format, the growing renaissance in the psychotherapeutic community and in the larger American society of the integration of spirituality and religious values. Various aspects of spirituality and religion will be explored as they relate to the counseling process. The course will seek to increase the awareness of counselors to potential areas of client concern, including spiritual journeys, early religious training, search for meaning, personal relationship with the divine, and death and bereavement. Participants will explore various religious and spiritual practices, including, but not limited to, Islam, Buddhism, Native American beliefs, Hinduism, Christianity, and Judaism. Cr 3.

HCE 510 Introduction to Rehabilitation Counseling and Services
This course will provide an orientation to the counseling profession, focusing on rehabilitation concepts, services, and settings. Included will be: history, trends, and related legislation; critical components of the rehabilitation process; contemporary counselor roles and functions; professional education, associations, standards, and credentials; ethical and legal issues; technology issues and practices; and rehabilitation agencies and services. Field visits and the examination of rehabilitation services from various participant perspectives will be required. Cr 3.

HCE 514 Principles of Psychiatric Rehabilitation: Evidence-Based Practices
The purpose of this course is to understand the origins, philosophies, contexts, and methods of mental health services referred to as psychiatric rehabilitation. Content will include dissonant and changing mental health definitions, historical emergence of psychiatric rehabilitation, promising and evidence-based practice, consumer-survivor movement and impact, concepts of recovery, empowerment, and community, family issues and roles, societal myths and stigma, and varied professional functions. PSR models that are proven effective are integrating treatment with rehabilitation, are now being acknowledged as evidence-based practices by SAMHSA. The course will also address how psychiatric rehabilitation is applied in situations involving housing, education, social relationships, substance abuse, and community membership. Cr 3

HCE 520 Expressive Arts in Counseling
This course will provide an introduction to the Expressive Arts modalities within a wide range of counseling contexts, with an emphasis on dance therapy, music therapy, art therapy, and psychodrama. The focus of the course will be on practical applications of arts modalities, as well as the integration of these modalities with verbal counseling approaches. Cr 3.

HCE 604 Career Development
This course examines the ways in which counselors assist people of all ages in their life/career development. Emphasis will be on understanding theories, information systems, materials, activities, and techniques for fostering career awareness exploration, decision making, and preparation. The interrelationships among work, family, and other life roles, including multicultural and gender issues, will also be addressed. Cr 3.
HCE 605 Psychological Measurement and Evaluation
This course focuses on group tests and related measurement techniques. The course content includes a review of the history of testing, current issues, fundamental statistics for understanding, evaluating, and using tests, including selected aptitude, intelligence, achievement, interest, and personality tests. A variety of standardized and non-standardized evaluation measures will be reviewed. Cr 3.

HCE 606 Counseling Services for Students with Exceptional Needs
This course will meet the needs of graduate students who will be counseling in schools or agencies with children and adolescents who may have special needs. The course will provide an overview of exceptionalities. In addition to this overview, it will provide a basis for consultation, collaboration and counseling in both individual and small groups. This course will meet the state requirement for certification for the professional school counselor. Prerequisites: Open to matriculated students in Counselor Education, Special Education and School Psychology or by permission of instructor. Cr 3.

HCE 607 School Guidance Programs and Services
This course is intended for those preparing to be school counselors. It considers the conceptual framework for comprehensive developmental guidance and counseling practices in elementary and secondary schools. Major areas of focus include program management, guidance curricula, individual planning and advising, and responsive services that are organized to meet the educational, personal, and career needs of students. Prerequisites: HCE 609, matriculation in the counselor education program or by permission of the instructor. Cr 3.

HCE 609 The Practice of School Counseling
This course will provide students with an introduction to the practices of consultation and large group guidance for counselors working within a developmental model of school counseling. Assignments will incorporate field experiences that promote reflective learning and skill building. Prerequisite: open to matriculated students or by permission of instructor. Cr 3.

HCE 611 Medical and Psychological Aspects of Disability and Rehabilitation
This course explores the medical and psychological issues surrounding the concepts of disability and rehabilitation. Particular emphasis will be given to examining: a) the medical model as an organizing framework for viewing disability and rehabilitation; b) the diagnoses and treatment of various physical, developmental, sensory, and emotional conditions; c) the perspectives and responses of people with disabilities toward their diagnosed conditions and prescribed treatments; d) the principles and practice of functional assessment; and e) the ethical issues surrounding medical and rehabilitation services. Also examined will be psychological explanations of disability, their applications, and their implications for rehabilitation practice. A primary focus throughout the course will be on highlighting the perspectives that people with disabilities hold toward their life situations as well as the medical and rehabilitation settings and professionals they encounter. Cr 3.

HCE 612 Multicultural Counseling: Social & Cultural Foundations of Helping Diverse Families
This course focuses on developing multicultural awareness, understanding influences of culture and worldviews across the life cycle, examining issues of diversity, i.e., race, ethnicity, gender, age and disability in human interactions and recognizing attitudes and perceptions of diverse populations. The effects of developmental, bio-psychosocial changes including disability on individuals and their families within a cultural context are explored. The course examines worldviews, values and beliefs about diverse groups reflecting differences in race, ethnicity, gender, age and disability and family dynamics within a pluralistic society. Students will develop multicultural awareness of counseling competencies relative to diversity including disability, within rehabilitation and counseling practice. The course also introduces cultural foundations of human growth and development, and effects of cultural values and traditions across the lifespan. Implications for counseling the culturally different introduces a framework to guide rehabilitation and counseling professionals in serving diverse populations and their families, inclusive of differences in race, ethnicity, gender, age and disability. A field experience of between 5-10 hours with an associated report is required. Cr 3.

HCE 615 Vocational Counseling and Placement in Rehabilitation
This course encompasses the theoretical foundations of vocational counseling, the vocational implications of disability, the application of occupational and labor market data, and vocational choice with rehabilitation consumers. The use of job selection, analysis, and modification, and matching skills in the development of work and career options for persons with disabilities is included. The course also presents the role, functions, and strategies used by rehabilitation professionals in job placement and the supported employment of persons with severe disabilities. Accommodation of rehabilitation consumers in accordance with federal statutes, such as the Americans with Disabilities Act (ADA), is examined in the context of a multicultural society. Cr 3.

HCE 619 Recovery-Oriented Origins of Psychiatric Rehabilitation Practice
This course covers the historical, scientific, professional, and societal beliefs that have surrounded diagnostic psychiatry and the concepts of recovery from mental illness. Particular emphasis is given to recovery-oriented standards of care, ex-patients movement, legal rights and protections, medications, alternative treatments, trauma, and ethical issues in service delivery. Students will also explore their own values and motives for entering the field and examine the strengths and liabilities they may bring to their work. Cr 3.

HCE 620 Fundamentals of Counseling Theories
This course is for those who are or will be engaged in counseling in an educational or mental health setting. Selected theories and related techniques are closely examined. Research literature that has a bearing on the effectiveness and noneffectiveness of counseling is reviewed. Cr 3.

HCE 621 Fundamentals of Counseling Skills
This course emphasizes the development of fundamental counseling skills, such as attending behavior, listening, reflection of feeling,
paraphrasing, and questioning. The course examines the process and content of the counseling interview as well as verbal and nonverbal factors that influence the interactions within the counseling relationship. The primary focus is to help the student develop greater self-knowledge and skills in interpersonal communication within the counseling relationship. Prerequisite: HCE 500 and HCE 621. Cr 3.

**HCE 622 Counseling Children and Adolescents**
This course examines selected theories, related techniques, and skills for counseling children and adolescents. Attention is given to examining personal philosophies about working with children and adolescents and to the exploration of possible interventions for various counseling situations with these populations. Counselor effectiveness literature is reviewed. Prerequisites: matriculation in counselor education or school psychology and HCE 620 and HRD 688 (HRD 688 may be taken concurrently with permission of the instructor). Cr 3.

**HCE 623 Theories and Applications of Play Therapy: Summer Institute**
This intensive, one-week summer institute presents an overview of the various theories of play therapy and examines them in the social, cultural, and economic contexts in which they were first implemented. Applications of the theories to special settings and with special populations are explored. The course is an introductory course and is one of the required courses for becoming a registered play therapist. Prerequisite: none. Cr 3.

**HCE 624 Child-Centered Play Therapy**
This course is intended for students who wish to use a child-centered theory of play therapy in counseling children. It presents the theoretical framework of a child-centered approach to working with children and begins the necessary training for skill development in using this theory. Prerequisites: HCE 621 and HCE 622. Cr 3.

**HCE 625 Adlerian Play Therapy**
This course will examine Adlerian theory as it applies to clinical work with children and adolescents. Topics will include an overview of Adlerian theory and of play therapy, consultation with parents and teachers, encouragement, setting limits, understanding the goals of discouraged children, phases of therapy, and ethical and legal implications. Classes will include brief lectures, skill building exercises, discussion, and reflection. Prerequisite: graduate-level status. Cr 3.

**HCE 626 Group Process and Procedures**
This course focuses on basic principles of group development and on dynamics of group interaction. The improvement of facilitative skills is emphasized. Open to matriculated graduate students only. Cr 3.

**HCE 627 Group Counseling Practicum**
This course focuses on the development of concepts, attitudes, and skills necessary to lead counseling groups effectively in a variety of settings. Integration of group dynamics with counseling theory and group techniques is emphasized. Additionally, the behavior of the leader and participants is analyzed to promote a deeper understanding of group roles and functions. Prerequisites: HCE 621 and HCE 626 or by permission of the instructor. Cr 3.

**HCE 640 Professional Issues for Mental Health Counselors**
Mental health clinics, hospitals, substance abuse facilities, and social service agencies are among the various organizations involved in helping people through mental health counseling. This course examines the mental health needs of people in rural and urban communities and the views of mental health counseling held by those organizations who serve these people. Students will examine problems that organizations encounter in helping people and the consequences of services that interfere with helping. Attention is given to interprofessional and interorganizational approaches to improving the quality of mental health counseling. Mental health counselor roles, functions, professional associations, credentialing, and ethical standards will also be examined. A special emphasis of the course is on examining mental health counseling from an historical, ethical, legal, philosophical, and developmental perspective. Cr 3.

**HCE 641 Mind/Body Techniques**
This course addresses the relationship between cognitive processes and physiology from a healing/personal wellness perspective. Various aspects of Eastern thought/religion, as well as Western behavioral medicine are explored in regard to physical health and emotional well-being. Research on the mind/body relationship is reviewed and discussed. Participants will be required to learn and practice meditative and mind/body techniques. Cr 3.

**HCE 642 Perspectives on Chemical Dependency**
This course focuses on the overall dynamics of chemical dependency and will serve as an introduction to understanding the various stages, processes, and effects of such addictions. Specific topics will include social and psychological dynamics of chemical dependency involving family, peers, and co-workers. The roles that professional educators, human service workers, and other helping professionals play in prevention, early intervention, and the various approaches to recovery and aftercare are considered in depth. Cr 3.

**HCE 643: Psychopharmacology, Substance-Related Disorders & Integrated Co-Occurring Treatment**
This course is designed to provide participants from non-scientific backgrounds with a basic understanding of the effects of licit and illicit drugs. In addition, the role of these drugs in distorting brain chemistry and promoting substance-related disorders will be explored. Relationships between co-occurring substance-related disorders and mental illnesses will be explored. Research on effectiveness of treatment and rehabilitation
of persons with co-occurring disorders will be reviewed. Interactions among the biological, psychological/emotional, and behavioral aspects of substance abuse will be examined in relation to symptom reduction and identification, intervention strategies, and the treatment of substance use disorders particularly for people with mental illness. Cr 3

**HCE 644 Crisis Intervention**
This course introduces students to the theory and practice of crisis intervention. A theoretical perspective is established, and short-term crisis counseling strategies are examined. Several different crisis situations will be discussed in relationship to agencies or persons responsible for interventions. Prerequisite: HCE 621 or by permission of the instructor. Cr 3.

**HCE 645 Diagnosis and Treatment Planning**
This course focuses on the diagnostic systems and their use in counseling. The development of treatment plans and the use of related services are reviewed. The roles of assessment, intake interviews, and reports are examined. Prerequisite: HCE 621 or by permission of the instructor. Cr 3.

**HCE 650 Basic Concepts in Couple and Family Counseling**
This course will provide a historical context for the field of family therapy, as well as an exploration of the major theories that inform the current application of family therapy. Cr 3.

**HCE 655 Human Sexuality for Counselors**
This course provides information about human sexuality to heighten individual's awareness of his/her own sexuality and sexual issues, and to integrate this knowledge to improve the overall effectiveness of counseling skills. The course explores a wide spectrum of sexual behaviors and examines the relationships between sexuality, self-esteem, sex roles, and life styles. Emphasis is placed on developing an awareness of personal values associated with human sexuality. Prerequisite: HCE 621 or permission of instructor. Cr 3.

**HCE 668 Human Development**
This course examines the processes underlying growth and development across the life span from conception through childhood, adolescence, adulthood, and aging to death. The interaction of biological, cultural, and environmental factors will be considered in studying physical, cognitive, and psychosocial changes throughout the stages of life. This course includes a field experience. Cr 3.

**HCE 670 Application of Family Systems Theories**
This course is an advanced course focused on the application of family systems theories to several family case presentations. We will be focused on Structural, Bowenian, Communication, Psychodynamic Experiential, Narrative, and Integrative Models. Particular focus will be given to reflection on family-of-origin themes and the ways in which a deepened awareness of these themes can lead to more effective family counseling. Prerequisite: HCE 650 or permission of instructor. Cr 3.

**HCE 681 Clinical Supervision**
This course introduces students to the practice of clinical supervision within the counseling profession. The course focuses on such topics as the history of supervision, supervision models, tasks and functions of supervision, relationships in supervision, supervisory responsibilities, administration, cultural differences, and ethical standards. An organizing principle of this course is to examine these topics from three perspectives: theoretical knowledge, skill development, and self-awareness. Prerequisite: master's degree in counseling, matriculated Psy.D. students, or by permission of the instructor. Cr 3.

**HCE 686 Internship in Counselor Education**
This course provides an opportunity for students to integrate formal coursework with on-the-job experience in selected institutions. Prerequisite: HCE 690. Cr 1-12.

**HCE 687 Internship in Clinical Supervision**
This course provides an opportunity to develop advanced skills in clinical supervision. Interns will be assigned to supervise master's level students in such courses as practicum and internship. Prerequisites: HCE 681 and HCE 694. Cr 3.

**HCE 690 Individual Counseling Practicum Seminar**
Through lecture, discussion, and group supervision students learn to apply professional knowledge and skills to the practice of counseling with individuals. Role playing, video and audio tapes, and demonstrations are used in helping students develop an integrated counseling style. This course is taken concurrently with HCE 691. Prerequisites: HCE 620, HCE 621, HCE 622 (school counseling specialty only), and HCE 626. Cr 3.

**HCE 691 Individual Counseling Practicum Laboratory**
This laboratory is an intensive experience in the direct application of counseling skills and techniques to individual clients within the context of counseling sessions. Audio and video tapes will be reviewed individually with a faculty supervisor. This course must be taken concurrently with HCE 690. Prerequisites: HCE 620, HCE 621, HCE 622 (school counseling specialty only), and HCE 626. Cr 3.

**HCE 692 Advanced Individual Practicum**
This is the advanced course in counseling practicum. In addition to building on the skills developed in HCE 690 (practicum), emphasis is placed on the structural analysis of typical client problems and the use of appropriate strategies of intervention. Other emphases include the staffing of actual cases and knowledge of community resources available to the counseling clientele. Prerequisite: HCE 690. Cr 3.
HCE 694 Practicum in Individual Supervision
This is an intensive supervised experience in applying specialized knowledge and skills to the practice of clinical supervision. Students will be assigned supervisees and through observation, audio/video tapes, and co-counseling, will both supervise and be supervised. Prerequisites: HCE 681 and matriculation in the CAS program. Cr 3.

HCE 695 Practicum in Play Therapy
This course is an intensive supervised experience, applying professional knowledge and skills in the practice of counseling children using play therapy techniques. Role-playing, video tapes, and demonstrations are used in helping each student develop an integrated counseling style. Prerequisites: HCE 621, HCE 622, HCE 623, HCE 624, and HCE 690. Cr 3.

HCE 699 Independent Study in Human Resource Development
This course provides students the opportunity to pursue a project independently, planning, and exploring a topic of interest within the field of human resource development. The project must be library-based, intellectually sound, and reflect a high caliber of performance. Specific content and methods of evaluation will be determined in collaboration with the instructor. An approved proposal is a necessary prerequisite to registration. Cr 1-6.

HRD 500 College Mental Health
This course is focused on college mental health and the application of theory and practice to understand, intervene and enhance student mental health in a college environment. We will focus on mental health through an ecological theoretical model which views sociohistorical conditions, campus community systems, and individual developmental, social and psychological factors as determinants to student growth and success. Particular focus will be given to interrelated protective and risk factors across the various levels of systemic complexity. Individual and wider systemic influences and approaches will be explored. In addition, students will be given an opportunity to contribute to the mental health of the college community through engaging in campus mental health and other related initiatives. This course will be open to: graduate students studying higher education or counselor education, and senior undergraduate students possibly pursuing a career in higher education or counseling. 3 Cr.

HRD 510 Aging and the Search for Meaning
This course explores psychosocial and spiritual aspects of successful human aging. Multidisciplinary perspectives on aging will be examined including historical, psychological, sociological, cultural and religious. Learners will discuss key issues related to aging and the search for meaning through the lens of various genres (e.g., research, theory, fiction) as well as their own personal experiences. Prerequisite: HRD 510 students will be expected to have earned a bachelor's degree. Cr. 3

HRD 545 Gender and Learning
In this course students explore the multiple and complex relationships of gender and learning from diverse theoretical perspectives, including topics such as feminist theories and pedagogies, historical perspectives on gender and education, and identity development. Gender is analyzed from infancy through adulthood in connection with other aspects of identity that impact learning, including race, class, sexual orientation, disability, and ethnicity. Cr 3.

HRD 551 Spirituality in Adult and Higher Education
This course examines the role of spirituality in adult and higher education. Historical and contemporary perspectives on ways in which spiritual issues influence the lives of educators and learners are explored. Questions this course investigates include: What is spirituality? How are core practices in adult and higher education such as learning, facilitating, advising, training, and managing affected by spiritual principles? In what ways has spirituality influenced social change in adult education? How does understanding and practicing spiritual virtues influence the personal and professional lives of educators and learners? Cr 3.

HRD 555 Introduction to Student Affairs in Higher Education
This course provides students with an overview of student affairs in colleges and universities. Particular attention will be given to historical developments as rooted in the emergence of the unique model of higher education in the U.S., to models of student development, to evaluation of the various models of student affairs organizations, and to emerging issues in managing student affairs programs. The intent is to provide students with the information and skills necessary to understand and evaluate the field as well as to assess their own interest and commitment to student affairs. Cr 3.

HRD 556 Summer Institute in Student Affairs
This summer institute is designed to provide students with a week-long immersion experience in a topic selected because of its significance to student affairs in higher education. Topics addressed are those that have been identified as timely by student affairs professional organizations and/or highlighted in recent student affairs literature. The topics for the institute and the faculty to teach it will change each summer. Recent institutes have covered assessment in student affairs, legal issues in student affairs, and academic advising. The institute is required for students concentrating in student affairs as part of their adult education master's program. Cr 3.

HRD 557 The Older Learner
This introductory course examines key issues such as demographic trends, theories of aging, problems and opportunities in later-life learning, productive retirement, and educational opportunities for elders. A major goal of the course is to invite professional educators to explore human
aging with an eye toward improving teaching and/or program development with elder populations. Cr 3.

**HRD 600 History and Philosophy of Adult Education**
This course examines historical and philosophical foundations of adult education. Key trends and theoretical frameworks are explored. Students will be introduced to a range of adult education practice domains in Maine and elsewhere. Creating a "community of learners" and modeling other adult education practices is a central goal of this course. Cr 3.

**HRD 601 Marketing Training and Adult Education**
This course acquaints the student with the purpose, organization, function, methods, tools, and techniques of marketing within the setting of adult education, continuing education, and training programs. Attention is given to the development of a customized marketing plan, focusing on the research and planning phases of the plan. This is an applied course in which students spend a significant amount of time participating in hands-on learning experiences, working in teams. Cr 3.

**HRD 630 Facilitating Adult Learning**
This course examines the theory and practice of facilitating adult learning. The aim of the course is to develop a working knowledge of numerous approaches to facilitation including analysis of students' strengths and weaknesses in particular learning contexts. Special emphasis is placed on developing skills in making presentations and leading group discussions. Cr 3.

**HRD 631 The Adult Learner**
This course examines the social, psychological, economic, and cultural situation of the variety of adults served by adult education programs today. The aim of the course is to develop a theory of learning which is applicable to adults in diverse circumstances and with diverse goals, needs, and styles of learning. Attention is given to stages of adult growth, the development of learning goals, learning environments, and to a variety of theories on learning. Cr 3.

**HRD 633 Managing Adult Education and Human Resource Development**
This course examines the administrative and leadership skills necessary for the development and management of units such as adult education centers, continuing education offices, and training and staff development departments in profit and nonprofit organizations. Particular attention is given to the development of mission statements, the use of advisory boards, community needs assessment approaches, personnel management, and the development of a management style. Cr 3.

**HRD 636 Planning Programs for Adult Learners**
This course presents the purpose, structure, functions, methods and techniques of planning programs for adult learners. The course emphasizes practice, skill acquisition, and competence in curriculum design and program development for adults with diverse needs and in diverse learning environments. The course covers both educational and training programs within organizations with attention given to the strategic role of program design and development in helping organizations achieve their mission and organizational objectives. This is an applied course in which students plan a specific program for adult learners. Cr 3.

**HRD 637 Community Education**
Community education is concerned with major issues and trends affecting the lives of all citizens of a community. It measures well-being by the extent to which people have the opportunity to learn all they need to survive and flourish. It is a philosophy, a movement, an approach to school organization, and a mode of community development. Community education is examined in such forms for relevance to improved practice of educators and other community human resource developers. The course begins with social trends bearing upon the quality of community life as context for analysis of community and community change; then, moves to community education process, program, and skills of delivery as studied in specific community settings. Cr 3.

**HRD 639 The Heart of Teaching**
This course explores the elements of fostering and supporting fundamental changes in adult learners through the process of teaching. Transformational learning theory is examined and applications to teaching are explored through exercises and discussion. Cr 3.

**HRD 643 Multicultural Adult Development**
This course examines adult cognitive and psychosocial developmental theory and practice from a multicultural perspective. It considers multiple identities within different social and cultural populations (gender, ethnicity, sexuality, disability, socioeconomic class), and presents an overview of the multicultural adult development literature intended for masters students preparing to work with young or middle-aged adults in educational, training, or supervisory settings. Cr 3.

**HRD 646 Global Perspectives of Adult Education and Practices**
This course provides students with a broad overview of some of the historical roots and current practices of adult education internationally. It provides information about significant leaders and agencies, as well as subjects such as: women's education, literacy, peace and human rights, research, the environment, and new technology, as they relate to adult education. Cr 3.

**HRD 649 Seminar in Adult Education and Human Resource Development**
This seminar addresses current issues, problems, and topics in adult education and human resource development. Participants are to select, develop, and present topics of interest to them as well as benefit from presentations prepared by the instructor. Usually taken toward the end of
the program, this seminar is an opportunity to apply knowledge and skill to problems of current interest in the field of adult education. Prerequisite: Open to matriculated students. Cr 3.

HRD 653 Consulting: Fundamentals and Practice
This course provides students with an overview of consulting theory and practice. Particular attention is given to understanding a collaborative framework for establishing a consulting practice. Additionally, consulting is explored from a process perspective. This intent is to provide students with the background and skills to work more effectively as clients and as internal consultants. This is an applied course and students will work in teams doing a hands-on consulting project. Cr 3.

HRD 667 Action Research and Evaluation Methodologies
This course provides an overview of the role of action research within organizations and community settings. Techniques in survey development and evaluation strategies are emphasized. A number of methodologies is presented, such as: the normal group, the Delphi technique, assessment centers, performance appraisal, interviews and observation. Cr 3.

HRD 685 CAS Completion Project in Adult Learning
Students will undertake a major project of their own design as a final requirement for completion of the certificate of advanced study in adult learning. Students will participate in a support seminar and will make a formal presentation to an audience of program peers, faculty, colleagues, family, and friends. There are four options for projects: (1) field based study, (2) public policy initiative, (3) publishable theory paper, or (4) personal learning curriculum for adults. Prerequisite: open to graduate students accepted into the CAS in Adult Learning who have completed twenty-four credit hours. Cr 3.

HRD 687 Internship in Adult Education and Human Resource Development
Designed to provide professional experience in the student's selected area of concern. A plan for the internship is presented for approval to the student's advisor. On approval, the intern completes his/her planned program under the supervision and evaluation of a responsible person for the internship assignment. Prerequisite: Open to matriculated graduate students who have taken HRD 605 and with permission of the instructor. Cr 1-9.

HRD 698 Directed Study in Adult Education and Human Resource Development
This course provides students the opportunity to pursue a project independently, planning, and exploring an area of interest within the field of human resource development. The project must be field-based, intellectually sound, and reflect a high caliber of performance. Specific content and methods of evaluation are determined in conjunction with the faculty supervisor. An approved proposal is a necessary prerequisite to registration. Prerequisite: Open to matriculated graduate students who have taken HRD 605 and with permission of instructor. Cr 1-6.

HRD 699 Independent Study in Human Resource Development
This course provides students the opportunity to pursue a project independently, planning, and exploring a topic of interest within the field of human resource development. The project must be library-based, intellectually sound, and reflect a high caliber of performance. Specific content and methods of evaluation will be determined in collaboration with the instructor. An approved proposal is a necessary prerequisite to registration. Cr 1-6.

SED 518 Instructional Strategies for Learners with Special Needs
The primary goal of this course is to learn and analyze principles and skills of teaching and learning that are effective with students with a wide range of abilities. The course will include: (a) applying and analyzing principles of learning in designing, leading, and assessing a learning environment; (b) applying and analyzing assessment strategies in establishing a cycle of continuous improvement and progress for students; (c) applying strategic learning strategies, differentiated instruction and effective instructional strategies. Participants will work individually and cooperatively in reading and analyzing current learning theory; designing, leading, and assessing learning activities. Participants will complete a minimum of 6 hours of practicum experience. Prerequisite: Open to ETEP and TEAMS interns or by Teacher Education Department permission. Cr 3.

SED 527 Understanding and Teaching Students with Diverse Abilities in the General Education Curriculum
This course develops knowledge of the characteristics of students with disabilities, students identified as gifted and talented, and students who are English Language Learners. That knowledge is used to examine cultural, developmental, and instructional issues and practices for providing students equitable access to an appropriate education. Students learn about principles and practices of universal design in learning and culturally responsive pedagogy. Upon completing the developmental, cultural, and learning characteristics of students in their internship placements, students use the principles of culturally responsive pedagogy and universal design in education to create and implement lessons and curriculum in a classroom. Prerequisites: Open to matriculated interns in the ETEP and TEAMS programs or by permission of the Teacher Education Department. Cr 1-3.

SED 539: Early Childhood Youth Who Are Exceptional
This course offers an overview of educating early childhood youth with exceptionalities. Investigation of types of disabilities, learning preferences, instructional practices, accommodations, documentation, evidence based practices, inclusive practices, as well as identification will provide participants with a foundation of methods to provide all students with an appropriate education. Teachers will have the opportunity to explore the history and legal frameworks of early childhood special education, paying special attention to the procedures performed during child find, screenings, referrals and transitions. Through this course students will explore not only the characteristics of young learners with
exceptionalities, but also the potential of classroom environments to assist accessibility and education. Self-reflection and development of an inclusive philosophy will provide teachers with an understanding of their role in the education of young children with exceptionalities. A 12-hour field placement is required for this course. Cr 3.

SED 540 Learners Who Are Exceptional in General Education
The primary goal of this survey course is to construct an understanding and knowledge of the range of exceptionalities, including students with disabilities and those identified as gifted and talented. The course is based on the premise that students in special education and who are gifted and talented should be educated and socially interact to the greatest extent possible with their peers engaging in the general education curriculum and program. Topics include characteristics of areas of exceptionality; planning and strategies for differentiating instruction and universal design; classroom management; assistive technology; state and federal laws regarding students who are exceptional; working with parents; Response to Intervention (RtI); and inclusion philosophy and practices, including collaboration between general education and special education teachers. Cr 3.

SED 550 Teaching Gifted Students in the Regular Classroom
This course is for teachers who serve gifted/talented students within the structure of the regular classroom. Topics include adapting the "required" curriculum to meet the needs of students; teaching/facilitating independent/small group activities; using learning centers, task cards, and student contracts; working successfully with parents, resource teachers, and administrators; and considering current issues in gifted child education specific to the regular classroom environment. Cr 3.

SED 560 Teaching Exceptional Students within the Mainstream Classroom
This course is designed to assist and instruct educators about working with and supporting students who have moderate-to-severe disabilities. Person-first language and thinking are the basis of this course as different disabilities that fall into the moderate-to severe range are examined with attention to the definition, identification, causalities, needed environmental accommodations and adaptations, and general characteristics. In addition, a focus will be on issues and concerns related to youth with moderate-to-severe disabilities, including person-centered planning, transitioning out of school and into the community, assistive technology, sensory integration, life skills, mobility, assessment, and different therapies will also be investigated and discussed. Different educational approaches that may be used with students with moderate-to-severe disabilities will be examined. In accordance with person-first thinking, this course will use memoirs and autobiographies as the main texts. Cr 3.

SED 570 Positive Behavioral Interventions and Supports
This course examines the foundations and essential features of Positive Behavioral Interventions and Supports (PBIS) at two levels; classroom and individual. Students will gain an understanding of basic principles and measurement of behavior and conduct applied projects that include creating, implementing, and evaluating data-driven intervention plans. Cr 3.

SED 580 Reading Development and Instruction for Students with Moderate to Severe Disabilities
In this online course students will focus on selecting and designing effective reading instruction for K-12 students with moderate to severe disabilities in a range of educational settings. Topics include: the power of students' owning their growth as readers, hooking readers through their interests, reviewing reading programs and designing interventions and curriculum-based probes to assess progress. Prerequisites: EDU 620 and SED 540, or instructor permission. Cr 3.

SED 590 Programming for Learners with Special Needs
This course is for individuals who provide educational services to learners with special needs. This may include learners with mild handicapping conditions and/or students with academic gifts and talents. Participants will learn strategies for planning and providing differentiated learning experiences within appropriate learning environments. Cr 3.

SED 600 Teaching Functional Life Skills
An education that includes the acquisition of functional life skills is critical for children and young adults with autism, intellectual disabilities, and other developmental disabilities. This course addresses: selection of and teaching methodologies for an array of functional life skills, including assessment of pre- and post- intervention skill levels, data collection and the selection of evidence-based methodologies to enhance student learning. Cr 3.

SED 653/SPY 672 Assessment of Academic Achievement
This course is designed to prepare special educators, school psychologists, and other professionals who work in schools to select, administer, score, and interpret measures of academic achievement. Numerous measures of academic achievement, including published norm-referenced tests, criterion-referenced tests, curriculum-based assessment and measurement, and performance-based assessments will be studied. Students will develop an understanding of how to use measures of academic achievement as part of a comprehensive problem-solving process that fits with responsive interventions in schools. Prerequisites: Open to matriculated USM school psychology, special education, ETEP, and TEAMS students or with permission of an instructor. School psychology students must complete EDU 600 and HCE 605 prior to taking SED 653/SPY 672. Cr 3.

SED 659 Education of the Gifted/Talented
This course is for individuals responsible for initiating, mainstreaming, and/or extending services for gifted/talented students. Topics for study include: a) identification procedures, b) curriculum development and implementation, c) administration and classroom management, d) staff development and community involvement, and e) evaluation of student growth and program effectiveness. Cr 3.
SED 660 Curriculum and Methods for Teaching the Gifted
This course is for individuals responsible for a) developing or modifying learning experiences for gifted/talented students at the elementary or secondary school level, b) implementing differentiated learning experiences within the regular classroom or through a special grouping arrangement, and/or c) creating/selecting instructional materials to support the implementation of differentiated learning experiences. Cr 3.

SED 662 Productive Thinking and the Gifted Learner
This course is for individuals responsible for a) identifying creative potential within students, b) planning and implementing learning experiences for nurturing creative thinking, c) selecting or developing instructional materials for enhancing creativity, d) establishing learning environments conducive to creativity, and/or e) evaluating program effectiveness and student growth in creativity training. Cr 3.

SED 664 Gifted Students in Special Populations
This course is for individuals responsible for identifying and serving gifted students from special populations. These populations include underachievers, females, culturally diverse and/or economically deprived, rurally isolated, bilingual, artistic, creative, physically challenged, and highly gifted. Cr 3.

SED 665 Institute for Program Planners in Education of the Gifted/Talented
This course is for individuals and teams of individuals responsible for planning district-wide programs for gifted and talented students. Participants develop a procedural written plan of action for guiding the development and the implementation of programs. Planning areas include: a) identification, b) curriculum, c) administration, d) staff development, and e) evaluation. Cr 3.

SED 666 Models in Education of the Gifted
This course is for individuals responsible for choosing, adapting, or designing a model to serve gifted/talented students. Selected models prominent in the field are reviewed and critiqued. Prerequisite: SED 659 or SED 660 or permission of instructor. Cr 3.

SED 667 Social/Emotional Needs of the Gifted
This course is for classroom teachers, program coordinators, parents, and other individuals who interact with gifted and talented students. Topics for examination include: a) factors affecting social and emotional development, b) achievement and underachievement, c) curriculum and the affective domain, and d) resources/strategies for responding to the needs of the gifted/talented. Cr 3.

SED 670 Secondary Programs for the Gifted/Talented
This course is for administrators, program coordinators, and teachers who are responsible for planning, implementing, maintaining, and/or extending programs for gifted and talented students at the secondary school level. Cr 3.

SED 679 Consultation and Special Education
This course is for individuals who are responsible for the planning and the coordination of programs for exceptional learners. The focus of the course is on utilizing a non-categorical, process-oriented approach to providing services for students. Cr 3.

SED 682 Special Education Law
This course will review the statutory and regulatory foundations of U.S. public policies pertaining to children and youth with disabilities. Key judicial interpretations of those policies will also be reviewed. The course will provide comprehensive overviews of The Individuals with Disabilities Education Improvement Act and other relevant federal and state legislation, regulations, and policy. Cr 3.

SED 684 Introduction to Special Education Administration
This course is designed to offer experience in administering special education programs. The course emphasizes the organization and administration of special education programs. A goal of the course is to give participants clear understandings of the decisions faced by regular and special educational leaders and of the skills and knowledge base necessary to perform effectively as leaders. Prerequisite: SED 540 or permission of instructor. Cr 3.

SED 687 Technology for Learning and Communicating
This course introduces students to the use of technology, including assistive technology, with all students, including those individuals with special learning and communication needs. A range of technologies will be examined from "low tech" devices such as simple switches to computers, adaptive devices, and software appropriate for individuals with disabilities. A variety of equipment, materials, software, and hardware will be available for student use. Cr 3.

SED 688 Internship in Teaching Students with Mild to Moderate Disabilities
Interns complete a 15 week semester-long or part-time equivalent mentored internship in special education services for students with mild or moderate disabilities in accordance with the Maine Teacher Certification Standards. A successful review of all the teaching standards is required for a passing grade for internship. Pre-requisites: Open to matriculated candidates in the Teaching Students with Mild to Severe Disabilities program or by permission of the Department of Educational Psychology and Exceptionality. Cr 3

SED 693 Transitions Among Agency, School, and Community
This course introduces participants to the concepts of transition in four phases of special education services: (a) birth to five child development services to school programs, (b) special purpose schools and related services to school programs, (c) between schools in a school district, and (d)
from school programs to post-secondary education and community life. Students develop knowledge of services and resources provided by agencies and special purpose schools birth to adult and skills in multi-disciplinary team planning. Prerequisite: one special education course or permission of instructor Cr 3

SED 695 Internship in Teaching Students with Severe Disabilities
Interns complete a 15 week semester-long or part-time equivalent mentored internship in special education services for students with severe disabilities in accordance with the Maine Teacher Certification Standards. A successful review of all the teaching standards is required for a passing grade for internship. Pre-requisites: Open to matriculated candidates in the Teaching Students with Mild to Severe Disabilities program or by permission of the Department of Educational Psychology and Exceptionality. Cr 3

SED 697 Universal Design Implementation
This is a capstone course for different programs in special education. Through the use of Universal Design, this course brings together all of the different ways students have learned to work with and support students in learning. Students will use Universal Design to create lessons and curriculums, and then will implement them in a classroom. Students will also analyze the effectiveness of their lessons and curriculums in terms of meeting the goals of these curriculums and lessons, and in supporting all students in the classroom as well as others that may have other differences in learning. Prerequisites: EDU 600, SED 601, SED 614, SED 615, SED 679 or 687, SED 550, SED 659, SED 662, EDU 559, EDU 561, EDU 562, EDU 563, or by permission of program coordinator. Cr 3.

SED 699 Directed Study
This course is an opportunity to gain, apply, and integrate knowledge and skill in exceptionality by planning and conducting a project. The project must be intellectually sound, have direct applicability to the student, and produce a high quality product. Specific content and methods of evaluation are determined in conjunction with instructor. Prerequisites: EDU 600, matriculated students only, and program permission. Cr var.

SPY 601 Behavioral Principles of Learning
This course provides a comprehensive review of the psychological principles of learning derived from experimental research and validated by applied experimental/empirical studies. General topics include the nature of learning, behavior without learning, learning without words, and learning with words. Specific topics covered include types of behavior, motivational influences on behavior, respondent behavior and conditioning, operant behavior and conditioning, stimulus control, schedule influences on behavior, observational learning, verbal behavior and rule-governed behavior, and behavioral accounts of language and cognition. The course is designed to give students a good grounding for assessment and intervention courses with a behavior analytic orientation. This course emphasizes the dynamic relationships of social-emotional, academic, behavioral, and adaptive behavior functioning of students within educational and clinical settings, including ones that serve students with suspected and identified disabilities. Prerequisites: None. Cr 3.

SPY 602 Clinical Research Methods
This course is designed to introduce students to research designs used in school and clinical settings. This course will emphasize methods for evaluating the effectiveness of behavioral interventions with individuals from birth through age 21 who are receiving special education services. A history of experimental design, types of experimental reasoning, and experimental validity lay the groundwork for understanding how group research and single-case research designs are used to assess the efficacy of applied interventions. Students will learn how to identify and record behaviors, match research designs to the research question and how to flexibly employ research designs in applied settings. Prerequisites: SPY 601 and SPY 605 or instructor permission. CR. 3.

SPY 604 Functional Behavioral Assessment
This course examines a variety of behavior assessment methods addressing behavioral issues. Assessment techniques covered in the course emphasize a functional behavioral assessment methodology including interviews, observations, behavior rating scales, descriptive assessments, and functional analyses. This course includes practica experiences in which students practice in the administration, scoring, and interpretation of assessment procedures. This course emphasizes the dynamic relationships of social-emotional, academic, behavioral, and adaptive behavior functioning of students within educational and clinical settings, including ones that serve students with suspected and identified disabilities. Prerequisites: SPY 601 or instructor permission. Cr 3.

SPY 605 Applied Behavior Analysis
The primary focus of this course is to provide graduate students with exposure to evidence-based systematic instruction methods that are used within school/agency settings. This course will review functional assessment procedures used to identify appropriate educational programs for students/clients. This course will emphasize instruction and practice in implementing instructional methods (e.g., shaping, chaining, discrete trial teaching, task analysis, incidental teaching, functional communication training, among others). Prerequisites: SPY 601 or instructor permission. Cr. 3.

SPY 606 Behavior Therapy
This course emphasizes the application of applied behavior analysis interventions in addressing socially meaningful behaviors within applied settings. This course will focus on the application of behavior analytic principles and procedures addressing both the decrease in disruptive behaviors and the increase in adaptive replacement behaviors. The course includes a blend of assigned readings, lecture, discussion, clinical case examples, and applied learning experiences. This course emphasizes the dynamic relationships of social-emotional, academic, behavioral, and adaptive behavior functioning of students within educational and clinical settings, including ones that serve students with suspected and identified disabilities. Prerequisites: SPY 601 and SPY 605 or instructor permission. Cr. 3.
SPY 607 Consultation in School Psychology
This course examines how school psychologists and behavior analysts provide consultation services in school and clinical settings. A review of research which outlines a variety of consultation roles and procedures with case studies and opportunities to explore the use of consultation as part of a problem-solving, data-based approach to consultation. This course emphasizes behavioral consultation and supervision models. This course emphasizes the dynamic relationships of social-emotional, academic, behavioral, and adaptive behavior functioning of students within educational and clinical settings, including ones that serve students with suspected and identified disabilities. This class includes 10 hours of applied learning experiences. Prerequisites: SPY 601, SPY 602, SPY 604, and SPY 605 or instructor permission. Cr 3.

SPY 608 Professional Ethics in Behavior Analysis
This course provides in-depth preparation for ethical practices in behavior analysis. Drawing from the ethical standards of the Behavior Analyst Certification Board (BACB), the course includes readings and application of ethical standards for clinical and school settings, including the BACB Guidelines for Responsible Conduct and the Professional Disciplinary and Ethical Standards. Prerequisites: Matriculation in the M.S in Educational Psychology with a Concentration in ABA or in the Psy.D. in School Psychology or instructor permission. Cr 3.

SPY 609 Professional Ethics in Psychology
This course provides in-depth preparation for ethical practices in school psychology. Drawing from national and international ethical standards from the American Psychological Association (APA), Association of State and Provincial Psychology Boards (ASPPB), and the National Association of School Psychologists (NASP), the course includes readings and application of ethical standards for school settings. The course is designed to meet the ethics training standards set by APA, ASPPB, NASP, the Maine Board of Examiners of Psychologists, and the Maine Department of Education. Prerequisites: Matriculation in the Psy.D. in School Psychology or instructor permission. Cr 3.

SPY 610 Developing a School-wide System of Behavior Support
Today's schools are charged with improving school climate with a broad range of systemic and individualized strategies for achieving important social and learning outcomes. School-wide support includes procedures and processes that are intended for all students, all staff, and all settings. The school-wide PBIS process emphasizes the creation of systems that support the adoption and durable implementation of evidence-based practices and procedures, and fit within on-going school reform efforts. Participants in this course will work in collaborative groups to gain awareness, knowledge, and skills regarding SW-PBIS and to create action plans to build (or further develop) school-wide leadership teams who want to move more toward a preventative, positive, and educational model of school-wide discipline. Prerequisites: SED 615 and SPY 601, or instructor permission. Cr 3.

SPY 620 Introduction to Multi-Tier Systems of Student Support for General and Special Education
This course provides training in knowledge and skills for the use of Response to Intervention (RTI) methods in school settings. Students learn how to select and use scientifically validated intervention and assessment methods for three distinct instructional levels. Through readings, discussion, and practice, students will develop the skills necessary to design, implement, and evaluate comprehensive RTI programs in school settings. This course is appropriate for general and special educators, school-based specialists (e.g., schools psychologists, speech/language clinicians, and math/reading specialists) as well as other professionals interested in scientifically based methods of learning outcomes for all children. Prerequisites: None. Cr 3.

SPY 625 Multi-Tier Math Instruction and Intervention for General and Special Education
This course includes lectures, discussions, guided practice and applied learning experiences in the scope and sequence of progressively more intensive math instruction for students in kindergarten through grade 12, including students with disabilities. Starting with the five foundations of math instruction (e.g., conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, productive disposition), the course describes the features of universal (e.g., Tier 1) core math instruction then provides guided practice and applied learning experiences to prepare teachers to use progressively more intensive math instruction based on student learning needs. Students will learn how to select and use scientifically validated math instruction practices for students needing supplemental (e.g., Tier 2) and intensive (e.g., Tier 3), and special education mathematics instruction math instruction. The course will review the key features of assessment of math difficulties, as well as prepare teachers to develop data-based math interventions and collect data to determine the effectiveness of interventions for students in general and special education. Prerequisites: None. Cr 3.

SPY 627 Multi-Tier Reading Instruction for General and Special Education
This course includes lectures, discussions, guided practice and applied learning experiences in the scope and sequence of progressively more intensive reading instruction for students in kindergarten through grade 12, including students with disabilities. Starting with the five foundations of reading instruction (e.g., phonemic awareness, alphabetic principle, fluency, vocabulary, and comprehension), the course describes the features of universal (e.g., Tier 1) core reading instruction then provides guided practice and applied learning experiences to prepare teachers to use progressively more intensive reading instruction based on student learning needs. Students will learn how to select and use scientifically validated reading instruction practices for students needing supplemental (e.g., Tier 2), intensive (e.g., Tier 3), and special education reading instruction. The course will review the key features of assessment of reading problems, as well as prepare teachers to develop data-based reading interventions and collect data to determine the effectiveness of interventions for students in general and special education. Prerequisites: None. Cr 3.

SPY 670 Cognitive Affective Bases of Behavior
This course is an introduction to major models of cognition and affective behavior, including perception, attention, memory, information processing, and problem solution. The course addresses features of human learning based on research in the above areas. Prerequisites:
SPY 671 Physical Bases of Behavior
This course examines neural, endocrine, and response systems that are related to attention, motivation, emotion, memory, and psychological and/or learning disorders. It includes consideration of typical and atypical patterns of development and neurological and health problems of children and adolescents. Prerequisites: None. Cr 3.

SPY 672 Assessment of Academic Achievement (co-listed with SED 653)
This course is designed to prepare special educators, school psychologists, and other professionals who work in schools to select, administer, score, and interpret measures of academic achievement. Numerous measures of academic achievement, including published norm-referenced tests, criterion-referenced tests, curriculum-based assessment and measurement, and performance-based assessments will be studied. Students will develop an understanding of how to use measures of academic achievement as part of a comprehensive problem-solving process that fits with responsive interventions in schools. Prerequisites: Matriculation in School Psychology or Special Education or instructor permission. School psychology students must complete EDU 600 and HCE 605 prior to taking SED 653/SPY 672. Cr 3.

SPY 673 Social Foundations of Behavior
This course provides knowledge and skills in the area of social psychology. The course includes an overview of basic social psychology methods and research findings as well as preparation of students to conduct assessment and intervention for social skills problems among school-age children. The course includes discussion of the importance of social skills and provide a rationale for promoting and teaching pro-social behavior. Students review and learn how to administer, score, and interpret both screening level and evaluation-level social skills assessment instruments. In addition, students review a variety of interventions and develop social skills interventions based on assessment information. Prerequisites: None. Cr 3.

SPY 674 Psychopathology
This course acquaints the student with definitions of and development of normal versus abnormal behavior from infancy through adulthood as well as presents common classification systems for psychopathology. Continuity from normal to abnormal behaviors, behavior problems in children as indices of pathology, and the prediction of psychopathology in adolescence and adulthood are also considered. The course takes a developmental orientation to psychopathology and discusses specific disorders in terms of symptoms, age considerations, and family and sociocultural dynamics. Prerequisites: Matriculation in Psy.D. in School Psychology or instructor permission. Cr 3.

SPY 675 Indirect Behavioral Assessment
This course examines a variety of analog behavior assessment methods addressing social-emotional behavior issues. Assessment techniques covered in the course include psychosocial interviews, behavior rating scales, and adaptive behavior assessments. This course includes practica experiences in which students are supervised in the administration, scoring, and interpretation of assessment procedures. Prerequisites: EDU 600, HCE 605 and matriculation in Psy.D. in School Psychology or instructor permission. Cr 3.

SPY 677 Cognitive Assessment
This course is an examination of the historical and theoretical bases of individual differences and intellectual testing. It includes supervised practice in selection, administration, scoring, interpretation, and reporting of cognitive assessment results. Prerequisites: EDU 600, HCE 605 and matriculation in Psy.D. in School Psychology. Cr 3.

SPY 679 Diversity in the Science and Practice of Psychology
This course provides conceptual foundations and skills needed by psychologists to work with diverse client populations. Major topics include the history of psychology's role in diversity practices, building competencies to work with individuals from diverse backgrounds, and the role of research in promoting diversity. Prerequisites: Matriculation in Psy.D. in School Psychology or instructor permission. Cr 3.

SPY 693 School Psychology Practicum I
The 300-clock-hour practicum is an introductory supervised experience within a public school. Practicum I provides the student with introductory experiences in the culture and systems of school settings, instructional methods and materials, and school psychology practices. Graded Pass/Fail. Prerequisites: Matriculation in Psy.D. in School Psychology (Students must complete three credits during the first two years in the program). Cr 1.

SPY 694 School Psychology Practicum II
The 300-clock-hour practicum is an advanced supervised experience within a public school setting. Practicum II provides the student with experiences in psychological assessment, consultation, intervention, and other aspects of school psychology practice. Graded Pass/Fail. Prerequisites: Matriculation in Psy.D. in School Psychology and satisfactory completion of three credits of SPY 693 (Students must complete three credits during the final two years in the program). Cr 1.

SPY 699 Independent Study in School Psychology
This course provides students with opportunity to pursue a project independently, planning and exploring a topic of interest within the field of school psychology. The project must be research-based, intellectually sound, and reflect a high caliber of performance. Specific content and methods of evaluation will be determined in collaboration with the instructor. An approved proposal is a necessary prerequisite to registration. Prerequisites: Matriculation in Psy.D. in School Psychology. Cr var.
SPY 709 History and Systems of Psychology
This course covers the history of modern psychology. Beginning with the history of Western psychology, the course reviews the major historical, social, economic, and cultural factors that contributed to the rise of psychology as a distinct branch of science in Europe and the United States. The course includes readings and discussion of the similarities and differences between the science of human behavior and other scientific disciplines. Additionally, the course includes readings and discussion of the study of human behavior from other cultural traditions. Prerequisites: Matriculation in Psy.D. in School Psychology. Cr 3.

SPY 727 Advanced Academic Intervention Methods
This course provides training in knowledge and skills for the use of advanced educational intervention practices in school psychology. Students learn how to select, use, and interpret data from advanced academic achievement assessment and intervention methods appropriate for school psychology practice. Through readings, discussion, practice, and report-writing, students will develop the skills necessary to provide comprehensive intervention services for students with academic achievement difficulties. Prerequisites: Matriculation in Psy.D. in School Psychology, SPY 601, SPY 602, and SPY 605, or instructor permission. Cr 3.

SPY 729 Advanced Intervention Methods for Individuals with Behavioral and/or Developmental Disabilities
This course provides training in knowledge and skills for the use of advanced intervention practices in school psychology. Students learn how to select, use, and interpret data from advanced intervention measures appropriate for use with individuals who have developmental disabilities. Through readings, discussion, practice and report-writing students will develop the skills necessary to provide comprehensive intervention services for low-incidence and high-risk student populations. Prerequisites: Matriculation in Psy.D. in School Psychology, SPY 601, SPY 602, and SPY 605 or instructor permission. Cr 3.

SPY 730 Advanced Behavior Therapy
The primary focus of this course is to provide students with advanced training in the application of evidence-based behavior therapies in the assessment and treatment of depression, anxiety, and other related disorders in children, adolescents, and young adults. This advanced course includes role play, performance feedback, and self-evaluation of skills in implementing behavior therapies. This course includes instruction in methods for documenting the effectiveness of behavior therapies (data-based progress monitoring). Prerequisite: Matriculation in Psy.D. in School Psychology, SPY 601, SPY 605, and SPY 606, or instructor permission. Cr 3.

SPY 751 Advanced Research Seminar
This course examines research techniques appropriate for educational and clinical settings. The research techniques covered in the course emphasize a problem-solving assessment methodology with a particular focus on measuring progress toward reduction or elimination of problem behaviors. A selection of the research methods taught in the course will be utilized by students to conduct a doctoral dissertation related to best practices in school psychology. This course is usually taken in the semester before internship and is a prerequisite for SPY 759: Psy.D. Dissertation. Prerequisites: Matriculation in Psy.D. in School Psychology and instructor permission. Cr 3.

SPY 759 Psy.D. Dissertation
This course includes the activities necessary to design, implement, evaluate, and summarize a doctoral dissertation in the field of school psychology. Course participants will conduct a literature review and needs assessment to identify a research project. The project will be matched to an identified subject or sample to address specific research questions. Once appropriate informed consent for research is obtained, students will conduct the research and report the findings. Graded Pass/Fail. Prerequisites: Matriculation in Psy.D. in School Psychology, SPY 751, and instructor permission. Cr 3.

SPY 788 Pre-Doctoral Internship in School Psychology
The pre-doctoral internship is a 2000 hour field experience in school psychology under the supervision of a licensed psychologist in a public school and/or clinical setting. It is undertaken at the end of the program. Graded Pass/Fail. Prerequisites: Matriculation in the Psy.D. in School Psychology and instructor permission. Cr var. (total of 9 semester hours for the internship).
Certificate in Athletic Coaching

Description

This program is designed to prepare students for certain coaching responsibilities in schools and recreational programs. The curriculum includes an introduction to the organization and administration of athletics as well as practical work in assisting coaches in selected sports. Attention is also given to the prevention and care of the most common injuries occurring in athletic programs. Students may take courses as electives or as part of the certificate program.

Program Requirements

A certificate will be presented to students completing the minimum 18-hour program. In addition, the proper notation will be made on the student's official transcript indicating proficiency in the area of athletic coaching as determined by the certificate program. For more information about this program please call Meredith Bickford at (207) 780-5997 or e-mail mbickford@usm.maine.edu.

Course of Study in Athletic Coaching (18-credit program)

Required (12 credits)
- PHE 203 Athletic Training for Coaches
- PHE 302 Coaching Philosophy and Fundamentals
- PHE 314 Organization and Administration of Athletics
- PHE 391 Field Experience

Electives (6 credits)
- PHE 106 NCAA Life Choices
- PHE 198 Physiology of Health Fitness
- PHE 303 Coaching and Officiating Basketball
- PHE 309 Coaching and Officiating Track and Field
- PHE 311 Coaching and Officiating Soccer
- PHE 312 Coaching and Officiating Football
- PHE 315 Coaching and Officiating Field Hockey
- PHE 316 Coaching and Officiating Volleyball
- PHE 335 Coaching and Officiating Baseball and Softball

Minor in Athletic Coaching

Description

This minor is designed to prepare students for certain coaching responsibilities in schools and recreational programs. The curriculum includes an introduction to the organization and administration of athletics as well as practical work in assisting coaches in selected sports. Attention is also given to the prevention and care of the most common injuries occurring in athletic programs. The minor helps to prepare students to begin a career in coaching with a solid base of philosophy, sports specific knowledge, and practical experiences. Students have the opportunity to learn first-hand from seasoned coaches and then move on to apply their knowledge through field experiences and internships with local programs. Students may take courses as electives or as part of the certificate program. For more information about this minor, please contact the Athletic Department at (207) 780-5997 or e-mail Meredith Bickford at mbickford@usm.maine.edu.

Program Requirements
Upon completion of the 18 credit minor a certificate will be presented to students. In addition, a notation will be made on the student's transcript indicating proficiency in the area of athletic coaching as determined by the minor.

Required Courses (12 credits)

PHE 203 Athletic Training
PHE 302 Coaching Philosophy and Fundamentals
PHE 314 Organization and Administration of Athletics
PHE 391 Field Experience

Elective Courses (6 credits)

(3 credits or more from the electives below)

CON 216 Emergency Response OR
REC 218 Wilderness Emergency Response
PHE 303 Coaching Basketball
PHE 309 Coaching Track and Field
PHE 311 Coaching Soccer
PHE 312 Coaching Football
PHE 315 Coaching Field Hockey
PHE 315 Coaching Volleyball
PHE 335 Coaching Baseball and Softball

Additional Elective Courses

BUS 312 Sport Law
PHE 106 NCAA Life Choices
PHE 198 Physiology of Health Fitness
REC 224 Inclusive Leisure Services
SPM 230 Psychology of Physical Activity and Sport

Course List

Click here to view catalog course descriptions.
Teacher Education

Teacher Education Overview

Program Coordinator: Dr. Flynn Ross, 500 Bailey Hall, Gorham

Teacher Education Advisor: Patricia Mew, 218a Bailey Hall; Associate Professors: Canniff, Jones, Kuech, Ross, Shank, Whitney

The Teacher Education programs at the graduate level leading to initial teacher certification in Maine offers the Educational Studies Minor at the undergraduate level. The Teacher Education faculty is dedicated to ensuring that USM's teacher candidates have the knowledge, skills and dispositions to teach in the increasingly diverse and demanding schools of today. We are committed to providing our teacher candidates simultaneous classroom experiences and course work that help them connect the theories and research of education with everyday work with students. Through a post baccalaureate pathway the Extended Teacher Education Program (ETEP), students engage in an intense graduate level internship and post-internship course work to complete the Masters of Science in Education with a concentration in Teaching and Learning (MSEd- MTL). ETEP, a nationally recognized teacher certification program, includes options for an intensive one-year program and a 13-month part-time program, completion of certification requirements, and optional completion of a master's degree in teaching and learning.

Minor in Educational Studies

Description

The Educational Studies Minor provides students who are interested in education, experience and knowledge of the philosophical, psychological and practical facets of this field of study. The minor is a total of 18 credits, nine of which must be chosen from the following list. The Educational Studies Minor courses meet many of the Core Curriculum requirements, including the Thematic Cluster. Important: The Minor in Educational Studies does NOT lead to teacher certification.

Program Requirements

Required Courses

EDU 100* Exploring Teaching as a Profession Or
EYE 108 Culture Identity, and Education
HRD 200* Multi-Cultural Human Development (meets Socio-Cultural Analysis requirement)
SED 335* Students with Exceptionalities in General Education

Choose 3 of the following:

ADS 300* Ethics and Youth with Exceptionalities (EISRC course)
EDU 200 Education in the United States
EDU 210 Theoretical Foundations of Learning
EDU 300 Educational Media and Technology
EDU 310* What is the Purpose of Education in a Democracy? (meets ESIRC and International requirement)
EDU 305* Foundations of Cultural and Linguistic Diversity (meets Diversity requirement)
EDU 336 Children's Literature
SED 420* Multi-Tiered Systems of Educational Support

* These courses include a field experience component.
Course Descriptions

Click here to view catalog course descriptions.
Muskie School of Public Service

Muskie School Overview

Associate Dean: Andrew Coburn

Professors: Coburn, Colgan, Edney, Fraumeni, Kartezi, Lapping, Savage, Thompson; Associate Professors: Bampton, Bolda, Ettenger, Hamilton, Joly, Lambert, Laping, Lynn, Merrill, Pavri; Assistant Professors: Kim, Morris; Practice Faculty: Sahonchik, Tupper, Shaw

Academic Programs

The Edmund S. Muskie School of Public Service is a non-partisan education, research, and public service organization dedicated to educating leaders, informing policy and practice, and strengthening civic life. The school combines nationally recognized research programs with graduate degrees in Community Planning and Development (CPD), Public Health (MPH), and Public Policy and Management (PPM). It also offers a bachelor's degree and several minors through the school’s Geography-Anthropology (GYA) program, as well as a wide spectrum of certificates and certificates of graduate study. Muskie graduates work in many fields in both the public and private sectors.

The Muskie School is frequently sought after as a source of knowledge on issues of national, regional, state, and local importance. More than 150 faculty and staff engage in research and public service projects through externally funded grant and contract awards totaling $20 million. The school’s faculty and staff bring a practical, innovative approach to health, social, environmental, community, and economic development problems, and a commitment to spanning traditional boundaries among university, government, and nonprofit organizations. The school’s research and public service programs provide faculty and students with real-life experiences which expand and inform the educational experience. Many graduate students take advantage of the school's research programs through assistantships and internships.

Muskie School Research and Public Service

The school's research and public service programs are engaged in research, program evaluation, policy analysis, technical assistance, and training projects in Maine and across the country. The school is home to the Catherine E. Cutler Institute for Health and Social Policy, which houses four program areas: children, youth, and families; disability and aging; justice policy; and population health and health policy. The Cutler Institute conducts projects for federal, state, and local agencies as well as private foundations, and is committed to bringing the resources of the University to bear on problems of critical importance to Maine and the nation. Collaborative partnerships with agencies and organizations have served as vehicles for innovative policy and program development.

Muskie houses also several national research centers. The Maine Rural Health Research Center is one of seven federally funded centers focused on critical issues related to rural health in the United States. The National Child Welfare Resource Center for Organizational Improvement assists all 50 states with advances in public services for children and families. The school’s research portfolio also includes the Casco Bay Estuary Partnership, the New England Environmental Finance Center and other initiatives that address sustainability issues, including urban growth, food systems, energy, and climate change.

Specialized laboratories administered by Muskie's Geography-Anthropology program, provide high-tech, hands-on research and teaching facilities that allow for student-faculty research collaborations. These include the Archaeology, Environmental Archaeology, Zooarchaeology, Qualitative Research, Cartography and Map Collections, and the Geographic Information System (GIS) Laboratories.

Joint Degree Programs

The joint degrees program in law and public policy and in law and community planning and development offer the Juris Doctor degree (JD) through the University of Maine School of Law and the master’s degree through the Muskie School. The programs allow students to earn both the JD and masters’ degrees simultaneously by designating a certain number of crossover courses that satisfy the graduation requirements of each degree. Students may thus complete both degrees in four years instead of the five years that would ordinarily be required. Separate admission to each program is required.

The joint degrees program in business administration and public health offers a Master of Business Administration (MBA) through USM's School of Business and MPH through the Muskie School. This program allows students to earn the MBA and MPH simultaneously by designating a certain number of crossover courses that satisfy the graduation requirements of each degree. Full-time MBA/MPH students may complete both degrees in three years instead of the four years that would ordinarily be required. Separate admission to each program is required.

Master’s Degree Program Policies

In addition to the general policies described in the Academic Policies of the USM Graduate chapter, specific policies of these programs are as
follows:

**Time Limit**

All students must complete requirements for the degree within six years from the semester in which they matriculated in the program.

**Full-Time Graduate Students**

Full-time students typically take 9 or more credits per semester. They should take as many core courses as possible in the first year, remaining sensitive to the possible need to fit in an occasional track/concentration course and/or elective course scheduled only in alternate years. In the second year, full-time students should first make certain all core and track requirements are fulfilled; they are then free to exercise concentration and elective options for the remaining credits, finishing with the capstone course.

**Part-Time Graduate Students**

Students planning to graduate in May of the third year should plan to take 14 to 18 credits the first and second years (two courses in the fall, two in the spring, and one or two in the summer session), for a total of 33 credits the first two years, and all remaining credits the third year. It is suggested that the three-year, part-time student take all core courses in the first year and a combination of core, track, and elective courses in the second and third years. Again, sensitivity to alternate year course sequencing is advised.

**Certificates of Graduate Study**

Certificates of graduate study are designed for working professionals and/or those exploring future opportunities for graduate study. Enrollment in a Certificate Program does not guarantee admission to the PPM, MPH, or CPD program.

The following certificates of graduate study are offered by the Muskie School:

- Applied Research and Evaluation Methods
- Community Planning and Development
- Health Policy and Management
- Nonprofit Management
- Public Management
- Public Health
- Social Policy Analysis

**Non-matriculated Students**

Public service professionals and community residents may also enroll in Muskie School courses as non-matriculated students. Non-matriculated students are required to fulfill all prerequisites for the courses in which they wish to enroll. Those interested in enrolling in the School’s courses are urged to contact instructors as early as possible. Students may also contact the Muskie School’s Student Affairs office for information on space availability and registration information. Taking classes as a non-matriculated student does not guarantee admission to the PPM, MPH, or CPD program.

**Transfer Credit**

Students who have completed coursework in another graduate program at USM or elsewhere may petition the PPM, MPH, or CPD Academic Affairs Committee for transfer credit. Transfer credit may reduce the number of credits that must be taken to complete the degree, and/or may be used to waive a specific curriculum requirement when appropriate. Upon approval of the program Academic Affairs Committee, transfer credits may be used in one of three ways:

Courses taken at the Muskie School prior to matriculation: Students not enrolled in a certificate program may bring up to 12 credits of Muskie School courses taken prior to matriculation in the degree program. Credits taken in the semester in which application is made for the degree program count towards the 12-credit limit.

Courses taken as part of a Muskie graduate certificate program: Students may transfer the certificate credits taken to complete the certificate up to a maximum of 12 (students completing the 15-credit certificate in Public Health may petition to transfer all certificate credits into their Public Health degree). Students who exceed the university time limits for obtaining a degree and are readmitted to the Muskie School may transfer all credits taken at Muskie that satisfy catalog requirements at the time of readmission. Students who switch matriculation from one Muskie degree program to another Muskie degree program may transfer all credits taken at Muskie that satisfy catalog requirements at the time of program transfer.

Graduate courses taken at other institutions: These must be declared on students’ application for graduate study at Muskie, and may be used for transfer credit only if they meet the requirements of the graduate program and the University. Students may apply to transfer up to 12 credits of graduate credit from other universities taken prior to matriculation, except that students who transfer into full-time study in a Muskie graduate
program directly from full-time study in another university’s accredited graduate program in a comparable field may apply to transfer up to one half of the Muskie degree credit requirements. Each program must approve specific program requirement waivers.

Extramural Credit for Matriculated Students

Students who are matriculated in the PPM, MPH, or CPD master’s program and would like to take a course offered by a department at USM or another university that is not already cross-listed with a Muskie degree program must obtain permission from their Muskie program’s chair prior to registering for the non-Muskie course. The same limits with respect to transfer credit apply to extramural credit.

Requirement Waiver Request

A student may request a waiver from a program requirement by showing adequate mastery of the subject matter. Evidence may include the undergraduate transcript or a transcript of other graduate work, successful completion of an examination or other academic exercise prepared by the course instructor, submission of samples of work, or through other means acceptable to the program’s Academic Affairs Committee or chair, whichever is appropriate. The Academic Affairs Committee or program chair may solicit input from the Muskie course’s instructor as to the advisability of the substitution, and may request supplemental information from the student. Approval of a course waiver does not reduce the credit requirement for graduation; students may take additional electives to meet the required credits. Students contemplating a request for permission to substitute a course are strongly advised to meet with the chair of his or her program’s Academic Affairs Committee, or the chair of his or her program (whichever is appropriate) for more information about the process before making their request.

Capstone Requirements

The capstone project is an integrative learning requirement for each of the graduate programs in the Muskie School. Depending upon the academic program, the substantive focus and format may be either an individual or group project. Regardless of the academic program, it is the policy of the Muskie School that all students applying for graduation must have completed and successfully presented a capstone proposal no later than two weeks prior to graduation. Additional program requirements may apply. Students are urged to contact their academic program advisor or program capstone coordinator for additional information regarding program-specific requirements.

3-2 Programs in Community Planning and Development

The school offers opportunities for undergraduates to complete both a bachelor’s and master’s degree on an accelerated schedule by taking courses in their senior year that are counted in both (undergraduate and graduate) degrees. Undergraduate majors in Geography-Anthropology or Environmental Planning and Policy may apply in their junior year for provisional admission to the CPD program, and fully matriculate in the graduate program following completion of their undergraduate requirements.

Geography-Anthropology Overview

Chair of the Program: Firooza Pavri, 300G Bailey Hall, Gorham

Professors: Bampton, Edney, Savage; Associate Professors: Ettenger, Hamilton, Pavri; Professors Emeriti: Crader, Davis, French, Hodges, Tizon; Lecturer: Michaud-Stutzman; Adjunct Faculty: Bigelow, Harrison, Valentine

The Geography-Anthropology program offers the following: Bachelor of Arts in geography-anthropology; Bachelor of Arts in geography-anthropology, elementary education; Bachelor of Arts in geography-anthropology, secondary education; minor in anthropology; minor in archaeology; minor in geography; applied geography minor in planning; minor in tourism and community development; and a certificate in applied Geographic Information Systems (GIS).

Along with the Community Planning and Development program, the Geography-Anthropology program offers an accelerated admissions, undergraduate-graduate program resulting in a Bachelor of Arts in Geography-Anthropology and a Masters in Community Planning and Development.

Minors offered by the Geography-Anthropology program are intended for those students with a major other than geography-anthropology who wish to broaden their educational experience in a formally designated program of study. Each course of study emphasizes common interests in the relationship between human populations and their natural environment, decision-making strategies of human groups, and the health and nutritional status of human societies. Faculty, serving as both experts in the classroom and the community, engage in cutting-edge research and analysis that directly influences our broader understanding of past and current human interactions with the environment.

The Geography-Anthropology program resides within the Muskie School of Public Service. The Edmund S. Muskie School of Public Service is an education, research, and public service school dedicated to educating leaders, informing policy and practice, and strengthening civic life. The School combines the expertise of nationally recognized research programs with an undergraduate program in geography-anthropology, graduate
programs in community planning and development, public health, and public policy and management, and a doctoral program in public policy.

Additional Information

Specialized laboratories provide high-tech, hands-on learning environments. The labs serve not only as research facilities, but also as teaching facilities, allowing for student-faculty research collaborations. Our facilities include:

Archaeology Laboratory

The Archaeology Laboratory located in 317 Bailey Hall provides facilities for research in archaeology and related areas. Various research collections are available, primarily from Maine, Alaska, and the Caribbean. The Archaeology Laboratory also houses collections of materials excavated by USM and a small library including books, journals, slides, and maps. Opportunities are available for independent student research projects, and work-study positions are available in the laboratory each semester.

Environmental Archaeology Laboratory

The Environmental Archaeology Laboratory located in 318 Bailey Hall provides facilities and microscopes for research in archaeology and related areas. Current collections include a comparative faunal collection specializing in fish, birds, and shellfish of the Gulf of Maine and the Caribbean. The laboratory also houses comparative and excavated plant remains from the Northeast.

Zooarchaeology Laboratory

The Zooarchaeology Laboratory located in 316 Bailey Hall provides facilities for research and teaching in biological anthropology, zooarchaeology, human osteology, and human evolution. Current collections include casts of nonhuman primates and fossil hominids, and a comparative faunal collection specializing in mammals, birds, and fish reptiles of the Northeast. Opportunities are available for independent student research projects, and work-study positions are available in the laboratory each semester.

Qualitative Research Laboratory

The Qualitative Research Laboratory is housed in 315 Bailey Hall and is dedicated to qualitative analysis, training, and instruction, including the use of digital media. The room is used for classes and laboratories, and to conduct research and media production in the qualitative aspects of cultural anthropology and human geography. Opportunities are available for independent research projects, and work-study positions are available in the laboratory.

Cartography Laboratory and Map Collections

The Cartography Laboratory located in 323 Bailey Hall provides facilities for map making and air photo interpretation. A regional map collection is housed in 318 Bailey Hall. Holdings include Maine maps, topographic maps, and various world regional maps.

GIS Laboratories

The USM Geographic Information Systems (GIS) Laboratories, located in 302 and 304 Bailey Hall, provide dedicated facilities for computerized automated research of geographical data and for access to USM GIS resources and activities. The GIS Laboratories include a variety of geographic information systems, remote sensing, and global positioning systems software, high resolution and large format scanners, high precision survey gear, and large format color printing.

BA in Geography-Anthropology

Description

The Bachelor of Arts in geography-anthropology emphasizes the integration of the two disciplines and the common interests in the relationship between human populations and their natural environment, decision-making strategies of human groups, and the health and nutritional status of human societies.

Geography-Anthropology students explore human-environmental processes in western and non-western cultures and engage in field experiences in archaeology, anthropology, and geography. As a result of data collection in the field or analysis in our specialized learning laboratories, students also have the opportunity to engage in scholarship through publications and conference presentations, and often receive assistantships and fellowships funded by such organizations as the National Science Foundation, NASA, and the Maine Space Grant consortium.
The major is an interdisciplinary degree program. Students enrolled in the major select either a concentration in geography or anthropology and are expected to take courses from both disciplines. The program of study beyond the basic requirements should be planned carefully, in close consultation with the student's program advisor, and should be approved by the latter. Such an arrangement allows for flexibility according to the student's interests while also providing close guidance and a control of educational quality by the Geography-Anthropology program.

**Program Requirements**

All students with majors or specific discipline minors in the social sciences must achieve at least six credits with grades of B or better in the requirements of those majors or minors. No grades of D will be counted toward fulfillment of the major or minor requirements. Except for Independent Studies, no required course may be repeated more than one time.

All students are reminded that, in addition to meeting departmental requirements for the major, they must also meet the University's minimum readiness requirements and the Core curriculum requirements. Students are required to take MAT 120 for the Quantitative Reasoning requirement of the Core.

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 40-46.

All students must take:

- ANT 101 Anthropology: The Cultural View
- ANT 103 Introduction to Archaeology
- GEO 101 Human Geography
- GEO 102 Physical Geography
- GYA 210 Perspectives on Environment, Society and Culture since 1750

All students then elect to concentrate in either anthropology or geography.

Students who elect to concentrate in anthropology must also take:

Three of the following topical, regional or ethnography courses from a minimum of two different professors

- ANT 102 Biological Anthropology
- ANT 201 Human Origins
- ANT 202 Origins of Civilization
- ANT 213 Human Ecology
- ANT 220 Indigenous Studies of North America
- ANT 222 Peoples of the North
- ANT 232 The Anthropology of Sex and Gender
- ANT 233 Food and Culture
- ANT 241 Tourism and Community Development
- ANT 250 Archaeology of South America
- ANT 261 Introduction to Cultural Tourism
- ANT 302 Medical Anthropology
- ANT 310 History of Anthropological Thought
- ANT 450 Topics in Anthropology

One of the following techniques or applied courses:

- ANT 306 Analysis of Archaeological Materials
- ANT 308 Environmental Archaeology
- ANT 315 Ethnography: Methods, Ethics, and Practice
- ANT 355 Public Interpretation in Anthropology
- ANT 360 Public Archaeology
- GEO 208 Cartography I
- GEO 305 Remote Sensing
- GEO 308 GIS I

12 additional credit hours, 3 of which must be ANT courses at or above the 300 level, 3 of which must be GYA/ANT at or above 300 level (may include Internship in Applied GYA or Field Experience), and 3 of which must be GEO courses at or above the 200 level.

Students who elect to concentrate in geography must also take:

Three of the following topical or regional courses from a minimum of two different professors and two of which must be at or above the 200
level:

- GEO 103 Human-Environmental Geography
- GEO 104 World Regional Geography
- GEO 120 Geography of Maine
- GEO 203 Urban and Regional Development
- GEO 207 Map History: Making Sense of the World
- GEO 255 Making a Living: Workers in a Global Economy
- GEO 285 Global Environmental Problems and Sustainability
- GEO 302 Gender, Work, and Space
- GEO 303 Economic Geography
- GEO 320 Conservation of Natural Resources
- GEO 350 Geography of International Development
- GEO 402 Urban Geography
- GEO 450 Topics in Geography
- GEO 455 Gender, 'Race' and Class in the City
- GEO 481 Megacities and Global Planning Issues

One of the following techniques or applied courses:

- GEO 208 Cartography I
- GEO 209 Introduction to Land Use Planning
- GEO 210 Planning Maine Communities
- GEO 305 Remote Sensing
- GEO 308 GIS I
- GEO 408 GIS II
- ANT 315 Ethnography: Methods, Ethics, and Practice

12 additional credit hours, 3 of which must be GEO courses at or above the 300 level, 3 of which must be GYA/GEO at or above 300 level (may include Internship in Applied GYA or Field Experience), and 3 of which must be ANT courses at or above the 200 level.

Additionally, all geography-anthropology majors are required to demonstrate writing competence by completing either two research papers or one research paper and one research product (e.g., poster, media project) in the major with grades of C or better, from two different professors, at least one semester prior to graduation.

The maximum number of hours of internships, field experience, and/or independent studies that can be applied toward the major is 9 hours. All students must meet with their advisors before registering for courses each semester.

**BA in Geography-Anthropology, Elementary Education**

**Description**

The Geography-Anthropology program offers teacher certification tracks for prospective teachers at both the elementary and secondary education levels. These tracks are designed to provide prospective elementary and secondary teachers a strong academic foundation in geography and anthropology.

**Program Requirements**

All students must formally declare their entry into a teacher certification concentration by completing the declaration procedures found on the Office of Educator Preparation web site at [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation). Passing Praxis I scores, creation of a free Tk20 account and declaration application, and two recommendation forms are necessary to complete the declaration process.

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site:
Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed with in the context of the Unit’s data management system (i.e., Tk20).

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: http://www.maine.gov/doe/cert/fingerprinting/

Students must maintain a high level of academic achievement. Minimum academic requirements are as follows:

- A grade of C or better in all University Core and major coursework.
- A grade of B or better in all professional education coursework.
- An overall GPA of 3.00 or better.

Prior to admission to the professional internship year, students must pass the Praxis II exam and demonstrate satisfactory progress toward the State of Maine Core Teaching Standards.

**USM Core Curriculum (including pre-internship education courses):**

- EYE 108, Culture, Identity and Education, or EDU 100, Exploring Teaching as a Profession
- College Writing- ENG 100 (3 cr.)
- Cultural Interpretation (3 cr.)
- Quantitative- MAT 120 (4 cr.)
- Creative Expression (3 cr.) (THE 102 or 170 recommended)
- Socio-Cultural Analysis- HRD 200 Multicultural Human Growth & Development (3 cr.)
- Science Exploration- GEO 102 (4 cr.)
- Ethics- EDU 310 Purpose of Schooling in a Democracy (3 cr.)
- Cluster- EDU 305 Foundations of Cultural and Linguistic Diversity, SED 335 Students with Exceptionalities in General Education, and SED 420 Multi-Tiered Systems of Educational Support (9 cr.)
- Diversity and International met with EDU 305 and EDU 310 respectively.

**Geography-Anthropology Major Requirements:**

All students with majors or specific discipline minors in the social sciences must achieve at least six credits with grades of B or better in the requirements of those majors or minors. No grades of D will be counted toward fulfillment of the major or minor requirements. Except for Independent Studies, no required course may be repeated more than one time.

All students are reminded that, in addition to meeting departmental requirements for the major, they must also meet the University's minimum readiness requirements and the Core curriculum requirements.

The minimum number of credits (exclusive of the University's Core curriculum & Professional Education Internship requirements) required for the major: 44-50.

All students must take:

- ANT 101 Anthropology: The Cultural View
- ANT 103 Introduction to Archaeology
- GEO 101 Human Geography
- GEO 102 Physical Geography
- GYA 210 Perspectives on Environment, Society and Culture since 1750

All students then elect to concentrate in either anthropology or geography.

Students who elect to concentrate in **anthropology** must also take:

- Three designated topical, regional or ethnography courses from a minimum of two different professors
- One designated techniques or applied course
- 12 additional credits, 6 of which must be ANT courses at or above the 300 level, and 3 of which must be GEO courses at or above the 200 level.

Students who elect to concentrate in **geography** must also take:
• Three designated topical or regional courses from a minimum of two different professors; two of which must be at or above the 200 level
• One designated techniques or applied course
• 12 additional credits, 6 of which must be GEO courses at or above the 300 level, and 3 of which must be ANT courses at or above the 200 level.

Additionally, all geography-anthropology majors are required to demonstrate writing competence by completing either two research papers or one research paper and one research product (e.g., poster, media project) in the major with grades of C or better, from two different professors, at least one semester prior to graduation. The maximum number of hours of internships, field experience, and/or independent studies that can be applied toward the major is 9 hours. All students must meet with their advisors before registering for courses each semester.

Professional Education Internship Requirements:

• MME 405, Methods of Teaching Mathematics (3 cr.)
• EDU 465, Teaching Reading (3 cr.)
• EDU 466, Introduction to the Writing Process (3 cr.)
• EDU 452, Teaching Science K-8 (3 cr.)
• EDU 451, Teaching Social Studies K-8 (3 cr.)
• EDU 441, Seminar I (3 cr.)
• EDU 442, Seminar II (3 cr.)
• EDU 324 (6 credits), year long internship

Electives:

Students must complete elective credit to complete the 120 credit hour degree. Students pursuing K-8 certification must complete no fewer than 6 credits in each of the following content areas (outside their major): Math, English, Science, and Social Studies. Courses in the Core count toward the minimum of six credits. Recommended content includes:

• Math: MAT 131, MAT 231 or MAT 232
• English: ENG 100, ENG 145
• Social Studies: in addition to course work in ANT and GEO for the major, coursework including 6 credits from HTY 121, 122, or 123 and 3 credits of POS/ECO electives
• Science: GEO 102, 3 credits Science electives

For those students interested in teaching at the middle level, it is recommended that they complete coursework in a second content area (e.g., English, mathematics, science) to become highly qualified to teach that content area in addition to social studies. Finally, students should consider taking education courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

BA in Geography-Anthropology, Secondary Education

Description

The Geography-Anthropology program offers teacher certification tracks for prospective teachers at both the elementary and secondary education levels. These tracks are designed to provide prospective elementary and secondary teachers a strong academic foundation in geography and anthropology.

Program Requirements

All students must formally declare their entry into a teacher certification concentration by completing the declaration procedures found on the Office of Educator Preparation web site at http://usm.maine.edu/educatorpreparation. Passing Praxis I scores, creation of a free Tk20 account and declaration application, and two recommendation forms are necessary to complete the declaration process.

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site:
Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed with in the context of the Unit’s data management system (i.e., Tk20).

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: [http://www.maine.gov/doe/cert/fingerprinting/](http://www.maine.gov/doe/cert/fingerprinting/)

Students must maintain a high level of academic achievement. Minimum academic requirements are as follows:

- A grade of C or better in all University Core and major coursework.
- A grade of B or better in all professional education coursework.
- An overall GPA of 3.00 or better.

Prior to admission to the professional internship year, students must pass the Praxis II exam and demonstrate satisfactory progress toward the State of Maine Core Teaching Standards.

**USM Core Curriculum (including pre-internship education courses):**

- EYE 108, Culture, Identity and Education, or EDU 100, Exploring Teaching as a Profession
- College Writing- ENG 100 (3 cr.)
- Cultural Interpretation (3 cr.)
- Quantitative- MAT 120 (4 cr.)
- Creative Expression (3 cr.) (THE 102 or 170 recommended)
  - Socio-Cultural Analysis- HRD 200 Multicultural Human Growth & Development (3 cr.)
- Science Exploration- GEO 102 (4 cr.)
- Ethics- EDU 310 Purpose of Schooling in a Democracy (3 cr.)
- Cluster- EDU 305 Foundations of Cultural and Linguistic Diversity, SED 335 Students with Exceptionalities in General Education, and SED 420 Multi-Tiered Systems of Educational Support (9 cr.)
- Diversity and International met with EDU 305 and EDU 310 respectively

**Geography-Anthropology Major Requirements:**

All students with majors or specific discipline minors in the social sciences must achieve at least six credits with grades of B or better in the requirements of those majors or minors. No grades of D will be counted toward fulfillment of the major or minor requirements. Except for Independent Studies, no required course may be repeated more than one time.

All students are reminded that, in addition to meeting departmental requirements for the major, they must also meet the University's minimum readiness requirements and the Core curriculum requirements.

The minimum number of credits (exclusive of the University's Core curriculum & Professional Education Internship requirements) required for the major: 44-50.

All students must take:

- ANT 101 Anthropology: The Cultural View
- ANT 103 Introduction to Archaeology
- GEO 101 Human Geography
- GEO 102 Physical Geography
- GYA 210 Perspectives on Environment, Society and Culture since 1750

All students then elect to concentrate in *either* anthropology or geography.

Students who elect to concentrate in *anthropology* must also take:

- Three designated topical, regional or ethnography courses from a minimum of two different professors
- One designated techniques or applied course
- 12 additional credits, 6 of which must be ANT courses at or above the 300 level, and 3 of which must be GEO courses at or above the 200 level.

Students who elect to concentrate in *geography* must also take:

- Three designated topical or regional courses from a minimum of two different professors; two of which must be at or above the 200 level
• One designated techniques or applied course
• 12 additional credits, 6 of which must be GEO courses at or above the 300 level, and 3 of which must be ANT courses at or above the 200 level.

Additionally, all geography-anthropology majors are required to demonstrate writing competence by completing either two research papers or one research paper and one research product (e.g., poster, media project) in the major with grades of C or better, from two different professors, at least one semester prior to graduation. The maximum number of hours of internships, field experience, and/or independent studies that can be applied toward the major is 9 hours. All students must meet with their advisors before registering for courses each semester.

**Professional Education Internship Requirements:**

- EDU 404, Secondary Social Studies methods (3 cr.)
- EDU 441, Seminar I (3 cr.)
- EDU 442, Seminar II (3 cr.)
- EDU 324 (9 credits), year long internship

**Electives:**

In addition to in-depth knowledge of ANT and GEO gained through the major, students will complete coursework in HTY and other Social Studies disciplines to become highly qualified to teach. Required courses include: HTY 101, HTY 102, and HTY 121, 122, or 123, and 2 POS/ECO electives.

For those students interested in teaching at the middle level, it is recommended that they complete coursework in a second content area (e.g., English, mathematics, science) to become highly qualified to teach that content area in addition to social studies. Finally, students should consider taking education courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

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**Certificate in Applied GIS**

**Description**

The Certificate in Applied GIS is designed to provide students and members of the professional community with Geographic Information Systems skills. At all levels of the program, training focuses on the application of GIS skills in the workplace and in research environments. The certificate is open to undergraduates and graduates interested in developing GIS applications in their fields, those already holding degrees who are interested in developing GIS skills to apply to their own areas of expertise, or professionals interested in adding GIS to their lexicon of skills or retooling for a career change.

**Program Requirements**

The Certificate in Applied GIS consists of three required courses and two electives, totaling a minimum of 14 undergraduate or 12 graduate credit hours. All courses will be taught at USM. Some courses may be transferred from other campuses within the University of Maine system, as appropriate. Contact the director of USM GIS for details. One course may be transferred from colleges outside the University of Maine System, on a case by case basis and as approved by USM faculty teaching that course.

In cases where students have already completed the listed course and with prior approval, alternate courses may be substituted for both requirements and electives to make up the minimum count of 14 undergraduate or 12 graduate credits. There is a minimum residency requirement of 3 courses or 9 credit hours. Students must complete all courses with a C- or better. Geography-anthropology majors may use only one course in the certificate toward their major requirements. Majors in other programs should discuss similar restrictions with their advisors.

**Required courses:**

- GEO 308/GEO 508/GEO 608
- GEO 408/GEO 518/GEO 618

**Electives**

Take at least two of the following for a minimum of 14 undergraduate or 12 graduate credit hours: COS 160 (3 cr.) and COS 170 (1 cr.), CPD
MCPD in 3+2 Accelerated Undergraduate -Graduate Degree Pathway in Geography-Anthropology and Community Planning & Development

Description

The undergraduate Geography-Anthropology (GYA) and graduate Community Planning and Development (CPD) programs in the Muskie School of Public Service offer an accelerated undergraduate-graduate degree pathway for prospective students. The close disciplinary connections between these programs and their focus on the relationship between human populations and their natural and built environment, sustainability, community development, and planning allow for a unique undergraduate-graduate educational opportunity.

Geography-Anthropology majors (with at least 84 undergraduate credit hours in the Core and GYA major) may apply in their junior year for conditional admission to the Master’s in Community Planning & Development (MCPD) program. Students conditionally accepted may take courses in their senior year which will count towards completion of both the BA in Geography-Anthropology and MCPD degrees.

Program Requirements

Requirements:

- Complete all requirements for the BA in Geography-Anthropology as detailed in this catalog.
- All conditionally admitted students will take CPD 601/CPD 501 and CPD 602/CPD 502 during their senior year.
- 24 credits from among the cross-listed and approved GYA-CPD courses listed earlier must be taken in the senior year. Students then enter the CPD program with 24 credits of requirements remaining (allowing completion of the CPD degree in one additional year of full time study.)

Cross-listed courses may be curriculum requirements of the CPD and GYA programs as follows:

Curriculum Requirements: BA in GYA

Courses in Group A (see below) may be used to meet the GYA requirements for Topical, Regional or Ethnography Electives (provided they are taken from a minimum of two different professors) or other general electives within the major, or as meeting the requirement for a Techniques or Applied Course.

Course in Group B (see below) may be used to meet requirements for elective at the 300 level or above.

Curriculum Requirements: MCPD

The following courses in Group A count as electives in the MCPD Land Use and Environment Track

- GEO 320/GEO520 Conservation of Natural Resources
- ANT 308/ANT 508 Environmental Archaeology

The following courses in Group A count as electives in the MCPD Community and Regional Development Track

- GEO 303/GEO 503 Economic Geography
- GEO 350/GEO 550 Geography of International Development
- GEO 402/GEO 502 Urban Geography
- GEO 455/GEO 555 Gender, Race and Class in the City
- GEO 481/GEO 581 Megacities and Global Planning Issues

The following courses in Group A meet the requirements for a methods course in the MCPD

- GEO 408/GEO 518/GEO 618 GIS Applications 2
- ANT 315/ANT 515 Ethnographic Methods
The field experience/internship elective for GYA may be used to meet the field experience requirement for CPD provided the internship is taken during the Senior Year, meets the requirements for the CPD field experience and is approved by the CPD chair (or designee) prior to beginning the internship.

Conditionally admitted students will be assigned a CPD advisor who will, with the students GYA advisor, work with the student in their senior year.

Courses Available to Conditionally Admitted Students

Students in their junior year in the Geography-Anthropology BA degree program and having completed at least 84 undergraduate credits will be eligible to enroll in the following courses at the graduate level:

Group A: Geography-Anthropology Courses
The following GYA courses will be available for graduate credit to conditionally admitted students. (Graduate credit is granted upon satisfactory completion of additional work as assigned by the course instructor).

- GEO 303/GEO 503 Economic Geography
- GEO 320/GEO 520 Conservation of Natural Resources
- GEO 350/GEO 550 Geography of International Development
- GEO 402/GEO 502 Urban Geography
- GEO 455/GEO 555 Gender, Race and Class in the City
- GEO 305/GEO 505/GEO 605 Remote Sensing
- GEO 308/GEO 508/CPD 608 GIS Applications 1
- GEO 408/GEO 518/GEO 618 GIS Applications 2
- GEO 481/GEO 581 Megacities and Global Planning Issues
- ANT 315/ANT 515 Ethnographic Methods: Ethics and Practice
- ANT 308/ANT 508 Environmental Archaeology
- ANT 355/ANT 555 Public Interpretation in Anthropology

Group B: Community Planning & Development Courses
The following CPD courses may be taken without prerequisite:

- CPD 601/CPD 501 Planning Theory and History
- CPD 602/CPD 502 Sustainable Communities
- CPD 605/CPD 505 Elements of Plan Making
- CPD 615/CPD 515 Citizen Involvement & Dispute Resolution
- CPD 660/CPD 560 Intro to Community Planning

The following CPD courses may be taken with the indicated prerequisite:

- PPM 650 State and Regional Development
  (Prereq: GEO 203 Urban and Regional Development)
- CPD 652/CPD 552 Intro to Community Development
  (Prereq: GEO 455/GEO 555 Gender, Race, and Class in the City)

Admission Information

Admissions Procedure:

1. GYA students who have completed, or are in the semester of completion, at least 84 undergraduate credit hours (approximately the second semester of their junior year) may apply for conditional admission to the MCPD program.
2. The application shall consist of the standard USM graduate application, recommendations, and transcript. One of the recommendations must come from the student’s undergraduate advisor.
3. Upon conditional acceptance to the MCPD program, students may take courses that are approved for cross-listing between GYA and CPD as set forth below.
4. Upon satisfactory completion of the BA degree requirements, including receiving no grades less than B in the courses approved for cross-
listing, students will become fully matriculated in the MCPD program without further review. Students who receive less than a B on one or more cross-listed course may appeal to the CPD Admissions Committee to be fully matriculated.

**Minor in Anthropology**

**Description**

The Geography-Anthropology program offers a minor in anthropology.

**Program Requirements**

All students with majors or specific discipline minors in the social sciences must achieve at least six credits with grades of B or better in the requirements of those majors or minors. No grades of D will be counted toward fulfillment of the major or minor requirements. Except for Independent Studies, no required course may be repeated more than one time.

All students are reminded that, in addition to meeting departmental requirements for the major, they must also meet the University's minimum readiness requirements and the Core curriculum requirements.

The minor in anthropology shall consist of the following 18 credits:

**Required:**

- ANT 101 Anthropology: The Cultural View (3 credits)
- ANT 103 Introduction to Archaeology (3 credits)
- and any four courses (or 12 credit hours total) from two different subfields of anthropology (cultural, biological, archaeology)

**Minor in Applied Geography - Planning**

**Description**

The Geography-Anthropology program offers a minor in applied geography - planning.

**Program Requirements**

All students with majors or specific discipline minors in the social sciences must achieve at least six credits with grades of B or better in the requirements of those majors or minors. No grades of D will be counted toward fulfillment of the major or minor requirements. Except for Independent Studies, no required course may be repeated more than one time.

All students are reminded that, in addition to meeting departmental requirements for the major, they must also meet the University's minimum readiness requirements and the Core curriculum requirements.

The minor in applied geography-planning shall consist of a minimum of 18 credits:

- **Required courses:** GEO 101, GEO 209, GEO 320
- **Choice of one from:** GYA 350-351, GYA 400
- **Choice of one from:** GEO 305, GEO 308
- **Choice of one from:** GEO 303, GEO 402
Minor in Archaeology

Description

The Geography-Anthropology program offers a minor in archaeology.

Program Requirements

All students with majors or specific discipline minors in the social sciences must achieve at least six credits with grades of B or better in the requirements of those majors or minors. No grades of D will be counted toward fulfillment of the major or minor requirements. Except for Independent Studies, no required course may be repeated more than one time.

All students are reminded that, in addition to meeting departmental requirements for the major, they must also meet the University's minimum readiness requirements and the Core curriculum requirements.

The minor in archaeology consists of a minimum of 18 credits:

Required:

- ANT 103 Introduction to Archaeology (3 credits)
- ANT 306 Analysis of Archaeological Materials (3-6 credits)

Any three or four of the following (to meet minor credit minimum):

- ANT 202 Origins of Civilization
- ANT 250 Archaeology of South America
- ANT 307 Specialized Techniques in Archaeology
- ANT 308 Environmental Archaeology
- ANT 360 Public Archaeology
- GYA 300 Archaeology Field School

Minor in Geography

Description

The Geography-Anthropology program offers a minor in geography.

Program Requirements

All students with majors or specific discipline minors in the social sciences must achieve at least six credits with grades of B or better in the requirements of those majors or minors. No grades of D will be counted toward fulfillment of the major or minor requirements. Except for Independent Studies, no required course may be repeated more than one time.

All students are reminded that, in addition to meeting departmental requirements for the major, they must also meet the University's minimum readiness requirements and the Core curriculum requirements.

The minor in geography shall consist of the following 19 credits:

- GEO 101 Human Geography (3 credits)
- GEO 102 Physical Geography and Lab (4 credits)
- GEO 120 Geography of Maine (3 credits)
- GEO 208 Cartography I (3 credits)
or GEO 305 Remote Sensing (3 credits)

and 6 additional hours of geography courses.

**Minor in Tourism and Community Development**

**Description**

The Geography-Anthropology program offers a minor in tourism and community development.

This minor provides a practical and critical understanding of the role of tourism in local and regional economic development, and will prepare students for careers in planning, economic development, travel and hospitality, and related areas.

**Program Requirements**

All students with majors or specific discipline minors in the social sciences must achieve at least six credits with grades of B or better in the requirements of those majors or minors. No grades of D will be counted toward fulfillment of the major or minor requirements. Except for Independent Studies, no required course may be repeated more than one time.

All students are reminded that, in addition to meeting departmental requirements for the major, they must also meet the University's minimum readiness requirements and the Core curriculum requirements.

The minor in tourism and community development consists of a minimum of 18 credits:

**Required:**

- GEO 210 Planning Maine Communities: Current Issues and Directions
- ANT 241 Tourism & Community Development
- GYA 399 Tourism: Theory and Practice

**Electives:**

Three of the following (9 credits minimum):

- GEO 203 Urban & Regional Development
- GEO 209 Intro to Land Use Planning
- GEO 303 Economic Geography
- ANT 450 Topics in Anthropology (Tourism, Development & Sustainability)
- ANT 450 Topics in Anthropology (Indigenous Peoples & Tourism)
- GYA 215 Culture and Place
- GYA 350-351 Internship in Applied Geography-Anthropology
- GYA 400 Independent Study in Anthropology or Geography

**Geography-Anthropology Course List**

**GYA 210 Perspectives on Environment, Society, and Culture Since 1750**

Geography and Anthropology evolved together to understand and explain the complex relationships humans have with their environments. They have common conceptual foundations, common institutional frameworks, and parallel internal divisions. At the same time, they are marked by significant differences in their respective implementation of general concepts. By comparing and contrasting the histories of the two disciplines, we seek to come to a better understanding of what it means to be geographers and anthropologists. Prerequisite: One introductory course in Geography (GEO 101 or GEO 102) and one introductory course in Anthropology (ANT 101 or ANT 103) and sophomore standing. Cr 3.

**GYA 215 Culture and Place**
This course provides an introduction to the ways in which basic principles of ethnography, ethnohistory, and material culture studies can be used to understand the cultural landscape. Normally offered during either the Winter Session or the Summer Session, the course will usually be conducted in a setting outside Maine. The emphasis will be on collaborative research skills, understanding of other cultures, and appreciation of the interrelationship of anthropology and geography. Cr. 4-6.

**GYA 300 Archaeology Field School**
The summer field school is designed to combine training in research methods of archaeology and geography. Students will receive intensive training in methods of site survey excavation and materials analysis. Several weeks will be spent at selected areas of coastal Maine involved in survey and excavation of sites, mapping sites and landscape features, and investigating potential food resources in site areas. This will be followed by some laboratory analysis of recovered materials. This course may be repeated twice with the permission of the instructor. Cr 4-6.

**GEO/GYE 360 Field Mapping in the Island Environment: Data Collection to GIS**
The coast of Maine provides a unique laboratory for teaching environmental mapping, data compilation, and data management. In this course students are trained and equipped to use kayaks as the platform from which to conduct survey work for the preparation of small-scale high-resolution analytical maps of natural, historical, and archaeological phenomena. Field techniques used include topographic surveying, global positioning system (GPS) operation, and field mapping of geological and geographical features. Minimum impact methods are used throughout. Laboratory techniques used include air-photo interpretation, traditional cartography, and geographic information system (GIS) operation. The course culminates in the completion of a portfolio of maps and a GIS database covering the area surveyed. This course may be repeated once for credit. Offered Summer Session only. Prerequisite: permission of instructor. Cr 6.

**GYA 350-351 Internship in Applied Geography-Anthropology**
Internships offer the student practical experience in working with public agencies, private firms, and municipalities engaged in applied geographical-anthropological activities including, but not limited to, planning, transportation, delivery of human services, and natural resources. A written contract will be drawn up by advisor and student for each internship, specifying the number of credits sought and work required for these credits. As a general rule, internships will require at least eight hours of actual work per week. Interns will be expected to meet at least once every two weeks with instructor to discuss experiences and/or problems. In addition, a major paper will be required from each student intern discussing an aspect of the internship or the work performed during the internship. Prerequisite: junior or senior standing in geography-anthropology and permission of instructor. Offered pass/fail only. Cr 1-6.

**GYA 400 Independent Study in Anthropology or Geography**
The Department faculty offers independent study in a topic in anthropology or geography for upper-level students (junior and senior status). Students must have had at least one course from the faculty member supervising the independent study; the proposal is subject to departmental approval. Prerequisite: permission of instructor. Variable credits will be offered.

**Anthropology**

**ANT 101 Anthropology: The Cultural View**
This course is a basic introductory survey of cultural anthropology. It examines the differences between cultures as well as cultural universals, and the relationship between social organization, ideology, economics, and political structure in different types of societies. It reviews the various theoretical approaches in cultural anthropology's attempt to explain human behavior, presenting examples from foraging, farming, and contemporary industrial societies through readings and films. Cr 3.

**ANT 102 Biological Anthropology**
This course examines our place in nature; the relationship between human biology and culture; the relevance of primate behavior and human evolution to understanding contemporary human society; human biological adaptations, including a discussion of population and nutrition; and contemporary human variation with an evaluation of the concept of race. The course includes a required 2-hour lab each week that provides practical experience with materials and research methods used by biological anthropologists. Cr 4.

**ANT 103 Introduction to Archaeology**
This course describes the methods and theories used by modern archaeologists to uncover information about past human life ways. Attention is given to techniques of survey and excavation of archaeological materials; concepts of space and time in archaeology; and detailed analysis of artifacts and organic residues. Some attention will be given to specific topics such as the archaeology of New England and the Caribbean. Cr 3.

**ANT 201 Human Origins**
This course focuses on the fossil and cultural evidence for human evolution. Topics to be covered include evolutionary theory, primate behavior, hominin origins, the taxonomy and phylogenetic relationships of fossil hominids, Pleistocene cultural adaptations, and the origin of modern Homo sapiens. The relationship between biology, geography, and culture is explored using the skeletal and archaeological evidence for human evolution. Cr 3.

**ANT 202 Origins of Civilization**
This course traces the evolution of human culture from the origins of farming and domestication, to the development of complex societies. General processes of urbanization and social stratification will be investigated, and examples will be drawn from throughout the Old and New Worlds, including the classical civilizations of the Near East, Southeast Asia, Mexico, and Peru. Cr 3.
ANT 213 Human Ecology
This course examines interactions between human societies and their natural environments. Human adaptation is viewed as a problem-solving process, involving the development of strategies for maximizing energy efficiency and reproductive success, for warding off environmental stress, and for reducing conflicts. These management strategies are examined for a number of human societies, and are used to gain insight into modern decision-making processes. Prerequisite: ANT 101 or 102. Cr 3.

ANT 220 Indigenous Studies of North America
This course combines an ethnographic and archaeological perspective on the culture history and traditional cultures of native North Americans. Emphasis is placed on the relationship of aboriginal native cultures to their environments, and the evolution of complex societies in certain regions of North America. Also included is discussion of the fragmentation of indigenous societies that followed the European invasion of North America. Cr 3.

ANT 222 Peoples of the North
This course is designed as a comprehensive summary of the prehistory, traditional culture, and contemporary life ways of peoples living in the northern hemispheres of both the Old and New Worlds—from Maine to Alaska, and from Siberia to Lapland. Special attention will be given to the origins of these peoples; the problems of living in cold, northern environments; the effects of European contact; and the modern problems that they face ranging from the effects of urbanization to land claim disputes. Prerequisite: ANT 101 or 103 or permission of instructor. Cr 3.

ANT 232 The Anthropology of Sex and Gender
Sex and gender are, respectively, biological realities and cultural constructs. This course will examine the anthropology of sex and gender in an evolutionary-biological and cross-cultural perspective. The course is organized to explore the issues of sex and gender in three of the major subfields of anthropology: archaeology and biological and cultural anthropology. Topics will include bias in science, the biology and evolution of sex differences, sex-linked behaviors, nonhuman primates, human evolution and the division of labor, and sex roles in different kinds of human societies. Cr 3.

ANT 233 Food and Culture
This course focuses on food as an essential and central part of human experience. We will examine the anthropology of food and food habits, including an evolutionary-ecological perspective, the reconstruction of past human diets from archaeological evidence, and a cross-cultural examination of the diversity of human food preferences and avoidances. An important goal of the course will be to try to understand and appreciate cultural differences in food habits from both an ecological and a societal point of view. Cr 3.

ANT 241 Tourism and Community Development
Explores relationships between tourism, economic development, and communities. Topics include strategic planning, community participation, marketing and promotion, and conflict resolution. Case studies from Maine and beyond examine positive and negative aspects of linking community development to tourism and hospitality. Required for the Minor in Tourism and Community Development. Prerequisite: EYE. Cr 3.

ANT 250 Archaeology of South America
This course is designed as a comprehensive summary of prehistoric cultures and paleo-environmental conditions of South America. Emphasis is placed on the evolution of complex societies in the Andean and Pacific coast regions. Also included is a discussion of European contact and interaction with the Inka State. Cr 3.

ANT 255 Cultures of Africa
Africa is a vast continent rich in cultural diversity. This course will explore a variety of African people and cultures south of the Sahara. Students will read ethnographic case studies about small-scale communities that focus on interrelated issues such as music, religion, politics, economics, geography, ethnicity, and gender. The course will consider the effects of colonial periods on indigenous populations but will emphasize post-independence Africans. Students will learn to challenge negative Western representations of Africa by focusing on the power and perseverance of African people and their cultures. Cr 3.

ANT 261 Introduction to Cultural Tourism
This course explores cultural tourism, including how arts, crafts, local heritage, and history can be incorporated into tourism planning and development. Topics include the meaning, value, and potential tourism roles of historical sites, festivals and events, arts and artisans, archaeological and cultural heritage sites, and museums and educational institutions. Cr 3.

ANT 301 Global Issues in Travel and Tourism
As one of the world’s largest industries, and one that brings travelers and host communities into close contact, tourism is a major force of social, economic, cultural and environmental change and sometimes conflict. This course delves into these issues from a mainly anthropological perspective, showing how tourism affects both travelers and communities in complex and contentious way—from commodification of culture to ethical quandaries such as sex tourism, the lure of western ideals and images, and changes in local economies and social institutions. The course also considers how travel, when planned and carried out according to ethical principles and guidelines, can be a force of change for the better, introducing travelers to other cultures, improving living conditions of local residents, and even protecting local environments, resources and lifestyles. 3 cr.

ANT 302 Medical Anthropology
This course considers the interface between medicine and anthropology in terms of both human biology and society. The course develops concepts of health as effective adaptation to environmental stresses, including infectious disease, nutritional stress, and psychosomatic illness, among others. It traces the history of health and disease in human society from hunter-gatherers to modern urban, industrial communities, and examines the way in which human populations have attempted to deal with various agents of disease. The course examines the diversity of human theories of disease causation and explores the role of modern medicine in effective health care delivery to persons of different cultural and ethnic backgrounds. Prerequisite: ANT 101, 102 or permission of instructor. Cr 3.

ANT 306 Analysis of Archaeological Materials
This course provides an opportunity for in-depth study of methods used in the analysis of archaeological materials after they are recovered from excavations. Students will work in teams to apply analytical techniques to archaeological site collections including ceramics; stone, bone, and shell artifacts; and archaeological soils and faunal remains. Credit will vary with the range of techniques covered in a particular semester. Prerequisite: ANT 103. Cr 3-6.

ANT 307 Specialized Techniques in Archaeology
This course provides experience in the application of specific techniques from allied science disciplines to research problems in archaeology. Specific topics and course title may vary. May be repeated for credit under different titles. Prerequisite: GYA 300 or ANT 306 or permission of the instructor. Cr 1-2.

ANT 308/ANT 508 Environmental Archaeology
Students will be introduced to the analytical techniques that are commonly used in the archaeological study of past environments and environmental change. Topics to be covered include archaeological soils, preservation conditions, the reconstruction of past climates and landforms, and the analysis of plant and animal communities from archaeological evidence. In semesters when this course carries more than three credits, requirements will include a substantial research project. Prerequisite: junior status, and ANT 103 or GYA 300. Cr 3-6.

ANT 310 History of Anthropological Thought
This course is a historical survey of theory in anthropology from the early classical evolutionists to contemporary materialist and idealist approaches. It will examine the various theories in terms of their level of analysis, explanatory value, and relationship to the western society from which they emerged. This course is a requirement for those concentrating in anthropology. Prerequisites: ANT 101 and either ANT 102 or ANT 103. Cr 3.

ANT 315/ANT 515 Ethnography: Methods, Ethics, and Practice
This course offers students an overview of the methods of ethnographic observation and analysis, and of the ethical considerations of conducting such research. Students will be required to carry out ethnographic fieldwork, employing appropriate methods of data collection and analysis. Credit will vary depending on the scope of the fieldwork project, as determined by the instructor. Prerequisites: ANT 101 and one ethnography course or ANT 310. Cr 3-6.

ANT 355/ANT 555 Public Interpretation in Anthropology
Interpretation of anthropological information for the public using video, audio, photos, and other digital media. Students will work individually or in teams to create products for museums, schools, online, or in other public venues. Prerequisite: permission of instructor. Cr 3.

ANT 360/ANT 560 Public Archaeology
This course introduces students to the interpretation of archaeological information for the public benefit. Topics to be covered include museum exhibits, collection management, federal and state legislation, ethics, site conservation database management, and GIS. Students will work in teams to produce a finished product for presentation during Archaeology Awareness Week. The course includes prehistoric excavation and a trip to two museums. Credit varies with specific substantial topics and project breadth. Prerequisite: ANT 103. Cr 2-6.

ANT 450 Topics in Anthropology
This course is designed to undertake detailed, in-depth analysis of important topics and issues in such subfields of anthropology as sociocultural anthropology, biological anthropology and archaeology. Topics vary from semester to semester. Research papers are required. Prerequisite: junior standing or permission of instructor. Cr 3.

Geography

GEO 101 Human Geography
This course examines social, economic, and political processes that shape the contemporary global landscape, with particular emphasis on the relationships between developed and developing regions of the world. Cartography, population trends, agricultural systems, migration, urbanization, and industrialization are among the topics covered. Cr 3.

GEO 102 Physical Geography
This course examines the physical processes of the environment as they relate to human endeavors. Climate, soil, vegetation, land form, water, and mineral resources are among the topics covered. Laboratory exercises acquaint the student with the materials and methods of physical geography. Climate data, topographic maps and field observations are employed to solve practical problems of human interaction with the environment. Cr 4.
GEO 103 Human-Environmental Geography
Using geographic perspectives, this course focuses on the changing nature of the earth's environment and the human role in these changes. Both direct and indirect human impacts on the biosphere, the atmosphere, and the hydrosphere are considered, including tropical deforestation and the loss of biodiversity, the human role in global climate change, and the impact of human actions on world fisheries. Local and regional examples will be incorporated. Cr 3.

GEO 104 World Regional Geography
This course will familiarize students with the diversity of people and places in the world by examining the physical, political, and cultural geography of different regions of the world. Emphasis will be given to development of regions within a global framework. This course will add to the general education of students by developing their geographic skills and by enhancing their geographic awareness and knowledge of the world through various aspects of global diversity. Cr 3.

GEO 108 Introduction to ArcGIS
An introduction to the ArcGIS software, stressing basic operation of this popular GIS package. Topics covered include system navigation, data display, data download, and printing public domain and user-created geographical data sets. Cr 3.

GEO 120 Geography of Maine
This course will examine Maine as a geographic region. Physical and cultural attributes of the state will be analyzed. Political, economic and demographic factors will be emphasized in viewing the assets and problems of the Maine environment and in planning Maine's future. Cr 3.

GEO 203 Urban and Regional Development
Students will survey contemporary patterns of urban and regional development through comparative analysis. Students will examine links between urbanization, employment, and social welfare in different political and economic contexts as the course moves from the global scale to the local. Students will be introduced to a series of research skills including the use of computer databases and spreadsheet programs, many of which will be of use in other courses. Cr 3.

GEO 207 Map History: Making Sense of the World
An international and interdisciplinary history of maps and spatial knowledge, this course uses the rare collections of USM’s Osher Map Library and online resources to explore the many ways in which different cultures and societies have made and used maps to variously comprehend, imagine, organize, control, and change the world and its parts. Cr 3.

GEO 208 Cartography I
This is an introductory course in cartography focused on developing basic mapping and graphic communication skills essential to a wide variety of disciplines. The course will be flexible and adjusted to individual needs. Familiarization with basic charting technology and cartographic tools will be included. Cr 3.

GEO 209 Introduction to Land Use Planning
This course offers an overview of human/land relationships as they influence contemporary patterns of settlement and use of the land. It will discuss the logic of a planning process as a method of decision making; the formulation of goals and evaluation of alternative courses of action; standards and requirements for specific planning objectives (such as land use, energy, recreation, transportation); and the place of the planning function in government and the role of citizens and private groups. Introduction to basic planning tools and techniques including PERT, aerial photography, and methods of land inventory and classification will be presented. Cr 3.

GEO 210 Planning Maine Communities: Current Issues and Directions
This course will examine the issues facing Maine communities such as providing affordable housing, maintaining and improving the community's physical facilities such as streets, sewers, playgrounds, etc., disposing of solid and hazardous wastes, stimulating jobs and economic development, providing adequate transportation facilities, and preserving Maine's environment and lifestyle in the face of growth. It will also address how these issues can be addressed through the use of the planning process and sound planning techniques. Cr 3.

GEO 255 Making a Living: Workers in a Global Economy
Our daily experiences shape and are shaped by changing economic landscapes through our patterns of work, consumption, and leisure. The course addresses the prospects and challenges for making a living in a global economy. We will examine a variety of perspectives on work, both paid and unpaid. We will pay particular attention to the connection of workers between and across places. The course discusses both new and old geographical divisions of labor and the restructuring of work and workplaces at the international, regional, local and household scales. Prerequisites: EYE. Cr 3.

GEO 285 Global Environmental Issues and Sustainability
An overview of global environmental problems and employing a sustainability framework to provide long-term solutions. Global climate change, landscape transformation, rural and urban sustainability are considered. Emphasis is placed on understanding the interplay of natural-social systems in shaping environmental issues. Students use an integrated sustainability approach to tackle environmental problems. Cr. 3.

GEO 302 Gender, Work, and Space
Students will examine the ways in which the workforce is divided by gender, race, class, and ethnicity and how location and space shape and
sustain such divisions. Competing explanations for why women and minorities hold jobs that differ distinctly from jobs held by other workers will be examined. Students will learn how a geographic understanding of gender, race, ethnicity, and class can help explain more fully the current position of women in the economy. Cr 3.

GEO 303/GEO 503 Economic Geography
This course examines the intersection between economies and geography. Emphasis is placed on the social, cultural, and political contexts within which economies develop and are regulated and restructured. Students are introduced to the skills which allow them to interpret and understand the present economic landscapes and to evaluate the factors and trends that anticipate the future. Prerequisites: one of the following: ANT 101, GEO 101, GEO 203, ECO 101, ECO 102, or permission of instructor. Cr 3.

GEO 305/GEO 505/GEO 605 Remote Sensing
Theory and techniques of image processing and analysis for remotely sensed digital data acquired from airplane and satellite platforms. Topics include image enhancement and classifications, spectral analysis, and landscape change detection techniques. Practical applications of natural and built landscapes are considered using remotely sensed datasets and techniques. Cr 3.

GEO 308/GEO 508/GEO 608 GIS Applications I
Students are introduced to vector-based geographical information systems (GIS). Topics include overviews of geospatial technologies, spatial analysis, GIS data, system operation, the interpretation of results, and professional practices. The course comprises a weekly lecture and laboratory. Students are evaluated with tests, laboratory assignments, and on the basis of a substantial project. Cr 4.

GEO 320/GEO 520 Conservation of Natural Resources
This course examines the geographical approaches to natural resource use and management. It will offer the study of the geographic distribution and physical attributes of natural resources, their role in economic development, and the socio-political factors governing decision making about their use. Management strategies for forests, soils, wetlands, and energy resources are assessed. Recommended prerequisites: GEO 101, GEO 102, or GEO 103. Cr 3.

GEO 340/GEY 340 Digital Mapping
Students are exposed to the latest digital survey gear and integrated techniques with applications in geoscience, geography, and environmental science. Instrumentation includes both static and real-time kinematic GPS (global positioning system) and autolock servo-driven electronic total station. Detailed precision survey data are combined with geo-referenced maps and imagery in GIS software. Prerequisites: introductory course in GEY, GEO, or ESP, and additional 200-level course in any of the above areas. Cr 4.

GEO 350/GEO 550 Geography of International Development
A critical examination of theories and approaches to the study of development. Historical and contemporary perspectives will help examine the role of states, international institutions, and civil society in the development process. Examples from selected countries and regions across the world demonstrate issues facing developing countries. Recommended prerequisites: GEO 101, GEO 103, GEO 104, or ANT 101. Cr 3.

GEO 402/GEO 502 Urban Geography
This course examines the underlying social, economic, cultural, and political processes that have created and continue to shape the North American urban landscape. The course will combine readings, lectures, discussion, and fieldwork to explore various themes in urban geography. Topics may include industrialization, immigration, residential segregation, housing, economic development, sustainable growth, urban ecology, and planning policy. Prerequisite: GEO 101, GEO 203, or permission of instructor. Cr 3-6.

GEO 408/GEO 518/GEO 618 GIS Applications II
Students explore the use of geographical information systems (GIS) in research and professional environments. Building upon knowledge and skills developed in GEO 308, students design and execute a substantial project. Project design focuses on generating hypotheses, planning time lines and individual work assignments, and identifying technical and data resources. Projected execution is undertaken using a variety of raster, vector, and graphical user interface (GUI) software, as appropriate. Prerequisite: GEO 308 or permission of instructor. Cr 4.

GEO 438/GEO 538/GEO 638 Independent Study in GIS
Students will work closely with a faculty member to develop and complete a course of study in a specialized aspect of GIS or remote sensing. Variable credits will be offered. Prerequisite: GEO 308 or instructor permission, and program approval. Cr 1-3.

GEO 448/GEO 648 GIS Internship
Students work with a public agency, private firm, municipality, nonprofit organization, or research unit, using geospatial technology to complete a clearly defined project under the direct supervision of an on-site professional. A USM faculty advisor who is directly involved with USM GIS oversees the internship. At the course's conclusion, students submit a portfolio including a log, samples of the work completed, and an evaluation from the on-site supervisor. Prerequisite: GEO 308, or instructor permission, and program approval. Cr 1-3.

GEO 450 Topics in Geography
This course provides in-depth analysis of relevant topics from the perspective of an economic, political, cultural, regional or other focused approach to geographic study. The topics vary depending upon current issues of significance and the special background of the instructor. Research papers are required. Prerequisite: permission of Department. Cr 3.
GEO 455/GEO 555 Gender, 'Race' and Class in the City
This course will focus on the relationships among gender, "race," class and urban spaces in twentieth century U.S. cities. The course will explore how urban spaces reflect and perpetuate different relations of power, inequality, and identity. First, we explore how different frameworks for urban analysis help to explain the social and spatial organization of U.S. cities. We will develop a framework for urban analysis that integrates race, class, and gender, and draws upon the geographic concepts of place and scale. Second, we will apply our integrated framework to contemporary metropolitan processes and problems. Prerequisite: one of the following: GEO 302 or permission of instructor. Cr 3.

GEO 458/GEO 658 Research Applications in GIS
An advanced workshop in geographical information systems (GIS) in which students undertake an original research project. The objective of the course is to generate a product which meets professional standards for publication or presentation at a professional meeting, allowing students to build resumes and gain exposure to a professional audience. Prerequisite: GEO 408. Cr 3.

GEO 481/581 Megacities and Global Planning Issues
This course provides an overview of the interactive factors that shape the socio-economic and physical structures of megacities around the world. Students will examine the processes that influence urbanization and gain an understanding of the contemporary state of the world’s cities, with a particular focus on megacities. Students will be exposed to issues confronted by citizens, policy makers, and planners in those megacities. The course is organized geographically and will focus on selected megacities in Latin America, Africa, Asia, in addition to Europe, and the United States. Cr. 3.
School of Social Work

Social Work Overview

Director: Susan Fineran, Masterton Hall, Portland

B.S.W. Coordinator: Barbara Rich

M.S.W. Coordinator: Jeanette Andonian

Professors: Faherty, Fineran, Wagner; Associate Professors: Andonian, Johnson, Kohli, Lazar; Assistant Professors: Gerstenblatt, Smith; Lecturers: Belicose, Muri; Field Work Co-Coordinators: Fitch, Richfield

Student Affairs Coordinator: Kate Corbett; Administrative Specialist: Cathryn Egan-Arnold

The University of Southern Maine's School of Social Work is committed to educating culturally competent generalist social-work practitioners prepared for multi-level, strengths-based practice that values the well-being of diverse individuals, families, groups, organizations, and communities.

The School, which is part of the College of Management and Human Service, serves southern Maine by responding to the social work education, leadership, service, and evaluation and research needs of the region. The commitment to social and economic justice, and diversity and multiculturalism are integrated. The School strives for excellence in teaching and learning.

Graduates are prepared for entry-level professional practice in protective services, corrections, residential services to various populations, hospitals, nursing homes and assisted living facilities, neighborhood and community centers, child welfare, and drug and alcohol programs, etc. The social work curriculum of the School is accredited by the Council on Social Work Education at the baccalaureate and master's levels. Students who receive a degree from an accredited undergraduate program in social work may apply to selected graduate schools of social work for Advanced Standing. It is important to consult individual institutions for their acceptance criteria and procedures, which may vary. In most schools, a bachelor's degree in social work from a CSWE-accredited institution allows the student to waive the first year of the Master of Social Work (MSW).

Because social work is a values-based profession whose principal commitment is to vulnerable clients, a student's suitability for the profession will be assessed during the process of his or her education. The students of the School have organized a Social Work Student Organization. The organization seeks to facilitate communication between students and faculty, ensure student involvement in departmental activities, provide for professional growth, and respond to issues and problems in the community. Student representatives may attend faculty meetings and may serve as advisory members on the department's curriculum committees. Within the School, a chapter of the Phi Alpha Honor Society exists.

BA in Social Work

Description

The Bachelor of Arts in Social Work (commonly referred to as a BSW) prepares the student for professional practice of social work at the entry level. Students with a BSW can become licensed at the LSW level in the State of Maine.

Program Requirements

The major in social work consists of 45 credits in required social work courses. In addition, 37 credits of foundation courses must be completed in other departments. Some of these foundation courses may also be used to satisfy the Core curriculum requirements as appropriate. Students shall not be eligible to repeat a class more than once without the written permission of the director of the School of Social Work.

To major in social work, all students must maintain a 2.5 over all cumulative grade point average, and a grade of C (2.0) or better in all major and foundation classes. In order to prepare for the field work component in the School of Social Work, students must take SWO 393 Methods of Social Work Practice I in the spring semester preceding their field work year.
To qualify for enrollment in SWO 393, students must: 1) have at least 60 credits at the time of preregistration and have successfully completed math readiness, EYE, English composition, statistics, SOC 100, PSY 101, POS 101, ECO 101, HRD/SBS 200, SWO 201 and 250; and 2) continue with a 2.5 cumulative GPA overall. At the time of enrollment, transfer students may be approved by advisor and BSW coordinator but must, at minimum, have completed SWO 201 and SWO 250. Students must maintain the 2.5 GPA and a grade of C or better in all social work and required foundation courses to complete the major. Please see the Student Handbook and Field Work manual on our website (http://usm.maine.edu/swo) for additional information about requirements of field work. All required courses with their pre-requisites can be viewed there.

During the field work year which occurs in the student's last academic year, each student is placed in a community social service agency approved by the School of Social Work. Placements begin only in the fall semester and continue throughout the academic year. By the end of the spring semester, each student will have completed 480 hours of field work. A large number of social and community agencies in the Greater Portland area and in cities and towns of southern Maine have been most generous in their cooperation with the School and in making available field instruction resources including supervision for students of the School. All students should refer to School guidelines governing field work for more information and directions.

Required Social Work Courses
- SWO 201 Introduction to Social Work
- SWO 250 Introduction to Social Welfare
- SWO 333 Social Work Research I
- SWO 334 Social Work Research II
- SWO 350 Social Welfare Policy
- SWO 365 Examining Oppression and Valuing Diversity
- SWO 370 Human Behavior in the Social Environment
- SWO 393 Methods of Social Work Practice I
- SWO 403 Methods of Social Work Practice II
- SWO 404 Methods of Social Work Practice III
- SWO 411 Field Work I
- SWO 412 Field Work II
- 1 SWO Elective

Required Foundation Courses in Other Departments
- ENG 100 College Writing
- ECO 101 Introduction to Macro-economics
- POS 101 Introduction to American Government
- PSY 101 General Psychology I
- An introductory statistics course (MAT 120, PSY 105, or LCC 150)
- SOC 100 Introduction to Sociology
- HRD/SBS 200 Multicultural Human Development
- or PSY 220 Psychology of the Lifespan

* A student may take a second social work elective, in which case only two (2) social work, sociology, psychology, criminology, SBS, anthropology, geography, political science, economics, or women's studies courses are required.

Three other intermediate-level (200-399) sociology, psychology, criminology courses, SBS, anthropology, geography, political science, economics, or women's studies courses (and one of these may be a second SWO elective), selected in consultation with the students advisor, are required. These may not all be in the same discipline, with the exception of either external transfer students or Lewiston-Auburn College students. Students are required to achieve a grade of C or better in all required social work and required foundation courses that they have completed, and maintain a cumulative grade point average of 2.5 in order to enter SWO 393.

**Recommended Course Sequence**

**Recommended Course Sequence**

During the first years at the University, with the assistance of faculty advisors, students enroll in a combination of classes fulfilling their Core curriculum requirements, required foundation courses for social work (classes in other fields required by the major), and the major itself. Because many classes are prerequisites for other classes, students must carefully sequence their courses with help from their advisors. The model below indicates the desired program for social work majors; starred (*) classes indicate the class is a prerequisite for other social work requirements.

**Model Schedule**

**Year 1**

- EYE Entry Year Experience
English Composition
Mathematics readiness requirement
PSY 101 General Psychology I*
SOC 100 Introduction to Sociology*
General Electives

Year 2
ECO 101 Introduction to Economics*
HRD/SBS 200 Multicultural Human Development*
POS 101 Introduction to American Government*
SWO 201 Introduction to Social Work*
SWO 250 Introduction to Social Welfare*
Statistics (in math, psychology, sociology, or SBS at Lewiston-Auburn College)*
SWO 365 Examining Oppression and Valuing Diversity
General Electives

Year 3
SWO 333 Social Work Research I
SWO 334 Social Work Research II
SWO 350 Social Welfare Policy
SWO 370 Human Behavior and Social Environment
SWO 393 Methods of Social Work Practice I
Prerequisites: students must:

- have at least 60 credits at the time of preregistration and have completed math readiness, EYE, English composition, statistics, SOC 100, PSY 101, POS 101, ECO 101, HRD/SBS 200, SWO 201 and 250 at the time of enrollment, except in some cases transfer students
- have a 2.5 cumulative GPA overall

Social work elective, 300 level or higher

- Electives in sociology, psychology, criminology, or SBS, anthropology, geography, political science, economics or women's studies (or one additional upper level SWO elective).
- General electives

Year 4
SWO 403, 404 Methods of Social Work Practice II and III
SWO 411, 412 Field Work I and II (full year)
Social Work elective, 300-level or higher

Any remaining sociology, psychology, criminology, SBS, anthropology, geography, political science, economics or women's studies (or one additional upper level SWO elective) electives.

General electives

To assure consistency and avoid confusion, it is important that social work majors meet with their advisors on a regular basis. Advising in the School of Social Work is a mutual process of exploring career objectives, reviewing School requirements, designing the best possible combination of required courses and electives, determining proper course sequencing, and facilitating a collaborative relationship between the student and the School.

Course Descriptions

- Undergraduate
- Graduate

Undergraduate

SWO 201 Introduction to Social Work
This course is an introduction to the profession of social work. Students are introduced to the core values of social work and the code of ethics that emanates from those values. Oppression and social justice are central themes of this course. The practice of social work is considered from the perspective of a collaborative strengths-based model working with complex social service systems. The course familiarizes students with various roles, functions, and tasks that social workers perform in a variety of settings. It acquaints students with the primary skills and practices of professional social work. Taking this course will help students make a more informed decision about social work as a career. This course satisfies
the Socio-cultural Analysis Core requirement. Cr 3.

SWO 250 Introduction to Social Welfare
Provides an introduction to the institution of social welfare through a review of social welfare history; the values and philosophy in America of treating the poor, the ill, and others in need; contemporary approaches to social policy; and possible alternative models of social welfare. Cr 3.

SWO 322 Community Services In Belize
This service-learning course provides students with an opportunity to understand and appreciate the diverse Belizean culture while collaborating with local agencies to address identified social needs. Service sites include an orphanage, a home for elderly, and work with a women's group. Winter session only—2 Saturday classes prior to departure. Prerequisite: SWO 201 or permission of instructors. This course satisfies the International Core requirement. Cr 3.

SWO 333 Social Work Research I
A study of the methods of social work research for social policy and social work practice. The course emphasizes both quantitative and qualitative research processes with the goal of enabling the student to be competent as a "practitioner searcher." Prerequisites: SWO 201, SWO 250-; any introductory statistics course (MAT 120, PSY 105, SOC 307, or SBS 328). Cr 3.

SWO 334 Social Work Research II
In this continuation of SWO 333, students complete an empirical research project. Class members serve as a review committee for all research instruments used, learn the practical aspects of writing quantitative and qualitative research reports, and function as a research support group for one another. Prerequisite: SWO 333. Cr 3.

SWO 344 Costa Rica Immersion: Social Work Perspectives on Culture, Language, and Service-Learning
This 2-week course takes place in Costa Rica and will introduce students to the colonial heritage, indigenous cultures, and the contemporary sociopolitical, ecological, and economic issues facing this Central American country. Students will receive 4 hours per day of Spanish language instruction, a class in dance and cooking, visits to cultural and recreational sites, lectures on Costa Rican social problems and social work agencies, and service-learning in a local organization such as an orphanage or refugee camp. Two all-day Saturday classes will be held at USM prior to the course trip. Summer Session only. This course satisfies the International Core requirement. Cr 3.

SWO 350 Social Welfare Policy
A critical examination of social welfare institutions, the social problems and social needs to which they are addressed, and the policy decisions that determine the organization and direction of social welfare programs. Prerequisites: ECO 101, SWO 250, POS 101, or permission of instructor. Cr 3.

SWO 365 Examining Oppression and Valuing Diversity
This course is designed to provide a framework for understanding and respecting cultural diversity. The cultural aspects of race/ethnicity, gender, sexual orientation, socioeconomic status, and ableness will be discussed. A central theme in organizing the course is the examination of the role of oppression in shaping the lives of members of various cultural groups. Prerequisites: SWO 201 or permission of instructor. This course satisfies the Diversity requirement of the Core. Cr 3.

SWO 370 Human Behavior in the Social Environment
This course examines the ways in which normative and predictable human behavior throughout the life cycle is mediated by gender, race, age, sexual preference, class and culture. The implication of this knowledge for social work practice will be explored. Prerequisites: SWO 201, SWO 250; PSY 101, HRD 200. Cr 3.

SWO 374 Sexual Harassment in Education and Work
This course examines sexual harassment in the workplace and education from three perspectives: mental health, sexual violence, and social justice. Students apply concepts from the behavioral and social sciences, from clinical and community practice to contemporary education and corporate environments. Environmental and cultural forces that influence discriminatory behavior are explored. Prerequisite: junior standing or permission of instructor. Cr 3.

SWO 375 Gender and Aging
A theoretical and practical course that informs students about aging issues affecting women and men differentially. Students will analyze the manifestations of aging and apply concepts drawn from the behavioral and social sciences. Service learning experience may be available. Prerequisite: junior standing or permission of instructor. Cr 3.

SWO 378 Professional Practice with Older People
Enhances skills in human service practice with older people. Analyzes the sources and manifestations of both healthy and problematic aging. Applies concepts drawn from the behavioral and social sciences, and from clinical and community practice. Translates a developmental rather than a custodial view into everyday direct service. Prerequisite: junior standing or permission of instructor. Cr 3.

SWO 383 Social Work with Immigrants, Refugees, and Asylum Seekers
Considers migration patterns and flows across the globe, introduces critical concepts in immigration and U.S. immigration policies. Community-
based services will be explored with a focus on concepts such as cultural competence, diversity, empowerment, anti-oppressive social work, and critical multicultural approaches. Service-delivery efforts/approaches with the population will be considered. Prerequisite: Juniors standing or permission of instructor. Cr. 3.

**SWO 388 Alcohol and Other Drug Abuse Issues**
Examines the use and abuse of psychoactive substances: street drugs, prescription drugs, alcohol, caffeine, and nicotine. Consideration of the history, pharmacology, and physical and psychological effects of each substance. Exploration of prevention and treatment models, with special reference to those in use locally. Prerequisite: junior standing or permission of instructor. Cr 3.

**SWO 391 Mind/Body/Spirit Connections in Social Work Practice**
Examines mind/body/spirit connections in social work practice with regard to stress and its management (meditation, breath control, other relaxation techniques), stress-related illness and personalities, contemporary therapies (mainstream and culturally specific), and spirituality. Prerequisite: SWO 201, junior standing, or permission of instructor. Cr 3.

**SWO 393 Methods of Social Work Practice I**
This course is an introduction to the basic concepts and skills of interviewing and assessment within the framework of a strengths perspective. Emphasis will be placed on the integration of ethics and the process of reflection within a generalist practice of social work. Prerequisites: EYE, math readiness, English Composition, statistics, SOC 100, PSY 101, HRD 200, POS 101, ECO 101, SWO 201, SWO 250; at least 60 credits at the time of preregistration for SWO 393; grade of C or better in all required social work and foundation courses; and a 2.5 cumulative GPA overall at the time of enrollment. Offered spring semester only. This course has a service-learning component that requires students to have some time available for work in the community. Cr 3.

**SWO 397 Department Projects**
Individual or group projects, requiring independent study or field work in some aspect of social welfare, to be selected by students in consultation with a particular faculty member. Prerequisites: Department permission and application prior to registration. Cr var.

**SWO 403 Methods of Social Work Practice II**
Examines the dilemmas of professional human service workers in bureaucratic systems and the effects of professionalization and the bureaucracy on consumers. Develops a range of methods aimed at better meeting client need with particular reference to strategies of organizational change and community organization. Class discussions and assignments are based on field work experiences. Prerequisites: SWO 393 and a C or better in all required social work and foundation courses, and an overall 2.5 GPA. SWO 411 taken concurrently. Cr 3.

**SWO 404 Methods of Social Work Practice III**
This course is a continuation of Methods of Social Work Practice II. It explores the contextual nature of generalist social work practice within a strengths perspective. Emphasis will be placed on the processes of engagement, assessment, and intervention with individuals, families, and groups. Family systems, group, and crisis models of intervention will be presented. This course must be taken concurrently with SWO 412 (Field Work II). Prerequisites: SWO 393, SWO 403. Spring semester only. Cr 3.

**SWO 411 Field Work I**
For social work majors: a required internship of 16 hours per week in approved agency settings, designed to relate social work theory to practice under professional supervision. Fall semester only. Must be taken as the first in a two-course sequence. Prerequisites: SWO 201; SWO 393; a C or better in all required social work and foundation courses, and an overall 2.5 GPA. SWO 403 taken concurrently. Fall semester only. Cr 6.

**SWO 412 Field Work II**
A continuation of SWO 411. Spring term only. Must be taken as the second in a two-course sequence. Prerequisites: SWO 393, SWO 403, SWO 411, and SWO 404 (concurrent). Cr 6.

**SWO 456 Issues in Social Welfare and Social Work**
A seminar for social work majors that addresses significant issues confronting the social welfare system and the profession. Prerequisite: social work major or permission of instructor. Cr 3.

**Graduate (Back to top)**

**SWO 501 Multicultural Social Work**
This introductory course provides content on culturally diverse populations and serves as the basis for the infusion of cultural diversity issues throughout the graduate curriculum. The premise of this course asserts that the United States is a multicultural society in which social work cannot function effectively unless there is an understanding of how diversity strengthens and enriches us all. Open to non-matriculated graduate students. Cr 3.

**SWO 502 Critical Thinking about Human Behavior I**
This course examines the theories which address human behavior in mezzo and macro systems. The cultural context of behavior at all levels is an integral and underlying theme of the course. Systems theories, conflict theories, and social constructionist theories are presented. Cr 3.
SWO 503 Generalist Social Work Practice I
This course provides the student with an opportunity to acquire beginning generalist practice knowledge and skills in working with individuals, families, groups, and communities. Emphasis is placed on the development of basic practice, interpersonal, self-reflection, and communication skills. Corequisite or prerequisite: SWO 501, SWO 554. Cr 3.

SWO 504 Social Welfare Policy I
This introductory policy course provides an overview of the history of social welfare as well as an introduction to current social policy issues and dilemmas. Emphasis is placed on historical continuities in analyzing the American system of social welfare provision and lack of provision. Corequisite or prerequisite: SWO 501. Open to non-matriculated graduate students. Cr 3.

SWO 505 Social Work Research I
This course introduces a body of knowledge, skills, and attitudinal perspectives designed to produce a high level of competence in the use of social scientific methods of knowledge building. Structured, analytical processes of inquiry are introduced, as well as a rigorous adherence to social work values and ethics. Both qualitative and quantitative methods of inquiry are discussed. Prerequisite: SWO 501. Open to non-matriculated graduate students. Cr 3.

SWO 552 Critical Thinking about Human Behavior II
The course is designed to locate the interplay of biological, psychological, and sociological influences on human behavior within the broader context of culture. Cultural diversity and oppression are seen as central to understanding human behavior and evaluating human behavior theories. The course explores a range of psychological theories such as psychodynamic, narrative, cognitive, and behavioral to understand the person within the complexity of his/her life circumstances. Prerequisites: SWO 501, SWO 502. Cr 3.

SWO 553 Generalist Social Work Practice II
This course builds on the concepts presented in Practice I. This course further develops students' values, knowledge, and skills for planned change with a particular focus on work with populations of special concern to social work. The course content emphasizes practice within organizations and communities. Prerequisite: SWO 503 (Social Work Practice I) and SWO 554 (Field and Field Seminar I). Cr 3.

SWO 554 Field Work and Field Seminar I
A graduate internship in an approved community agency, designed to relate social work theory to practice under professional supervision. Fall semester. Corequisite: SWO 503. Cr 3.5.

SWO 555 Field Work and Field Seminar II

SWO 522 Community Services In Belize
This service-learning course provides students with an opportunity to understand and appreciate the diverse Belizean culture while collaborating with local agencies to address identified social needs. Service sites include an orphanage, a home for elderly, and work with a women's group. Winter session only--2 Saturday classes prior to departure.

SWO 544 Costa Rica Immersion: Social Work Perspectives on Culture, Language, and Service Learning
This 2-week course takes place in Costa Rica and will introduce students to the colonial heritage, indigenous cultures, and the contemporary sociopolitical, ecological, and economic issues facing this Central American country. Students will receive 4 hours per day of Spanish language instruction, a class in dance and cooking, visits to cultural and recreational sites, lectures on Costa Rican social problems and social work agencies, and service-learning in a local organization such as an orphanage or refugee camp. Two all-day Saturday classes will be held at USM prior to the course trip. Cr.3

SWO 575 Gender and Aging
A theoretical and practical course that informs students about aging issues affecting women and men differentially. Students will analyze the manifestations of aging and apply concepts drawn from the behavioral and social sciences. Cr 3.

SWO 585 Sexual Abuse of Children and Adolescents
This course introduces the specialized knowledge and skills needed for social work practice relative to child sexual abuse, with a strong focus on understanding the dynamics when sexual abuse occurs in trusted relationships within families, organizations, and institutions. The course provides students the opportunity to integrate current research and theories around etiology, impact, and treatment within issues of resiliency, family strength, social support systems, diversity, value dilemmas, and social justice. This course stresses the need to base a practice approach on the holistic strengths-risks-based assessment of the child and the family and highlights the collaborative roles various providers play at all levels of the response systems including investigation, validation, intervention, and prevention. Cr 3

SWO 583 Social Work with Immigrants, Refugees, and Asylum Seekers
Considers migration patterns and flows across the globe, introduces critical concepts in immigration and US immigration policies. Community based services will be explored with a focus on concepts such as cultural competence, diversity, empowerment, anti-oppressive social work and critical multicultural approaches. Service delivery efforts/ approaches with the population will be considered. Cr 3.
SWO 591 Mind/Body/Spirit Connections in Social Work Practice
Examines mind/body/spirit connections in social work practice with regard to stress and its management (meditation, breath-control, other relaxation techniques), stress-related illnesses and personalities; complementary therapies (mainstream and culturally specific); and spirituality. This course is an elective in both the undergraduate and graduate social work programs. Cr 3.

SWO 596/696 Topics in Diversity
A variety of elective courses under this title are offered to facilitate students' development of competency in working with different population groups such as those oppressed by race and ethnicity, language, nationality, social class, gender, sexual orientation, mental and physical ability, spiritual and religious affiliation, and other factors. Prerequisite: SWO 501 or equivalent as determined by the instructor. Additional prerequisite may be required for some elective courses. Cr 3.

SWO 597 Independent Study
This is an individualized course of study, during the foundation year, on some aspect of social work or social welfare to be selected as a result of consultation between a student and a faculty member. Cr 1-3.

SWO 598/698 Topics in Community Social Work Practice
A variety of elective courses under this title are offered to cover a wide spectrum of micro and macro practice issues. These courses facilitate students' exploration of new practice areas or enhancement of advanced practice skills. Prerequisite: SWO 503 or equivalent as determined by the instructor. Additional prerequisite may be required for some elective courses. Cr 3.

SWO 603 Social Work Practice III: Group Practice
This course focuses on social group work practice that builds upon students' foundation level social work practice skills. The course emphasizes theory about groups and group process and demonstrates the skills necessary for effective practice. In order to take SWO 603, you must be enrolled in either the Fieldwork Seminar SWO 654 or the Fieldwork Experience SWO 655. Prerequisites: SWO 553, SWO 555. Corequisites: SWO 654 or SWO 655. Cr 3.

SWO 604 Social Welfare Policy II
This course provides a theoretical and critical model of analyzing policy processes. It contains an overview of policy analysis with particular emphasis on social conflict theory and social constructionist theories of policy formation. Prerequisites: SWO 504, SWO 554, SWO 555, and matriculated MSW student. Cr 3.

SWO 605 Social Work Research II: Social Data Analysis
This course provides an interactive learning environment in which students learn to analyze quantitative and qualitative existing social data. The goal of this course is to increase the analytical competencies of students in the planning, and eventual execution, of a community-based research project. Prerequisite: SWO 505 and matriculated MSW student. Cr 3.

SWO 651 Social Work Practice IV: Individuals and Families
This course contextualizes the facilitation of change with individuals and families within organizations and communities. Approaches to social work practice are taught within an ecosystems, strengths-based framework that reflects a commitment to the values of social and economic justice, cultural diversity, and individual and collective self-determination. In order to take SWO 651, you must be enrolled in either Fieldwork Seminar 654 or Fieldwork Experience SWO 655. Prerequisite: SWO 555. Corequisite: SWO 654 or SWO 655. Cr 3.

SWO 652 Social Work Research III: The Research Project
This course involves the utilization of the research knowledge and skills learned in SWO 505 Social Work Research I and SWO 605 Social Work Research II, and their application to selected social problems or issues of relevance to the needs of special populations or to the social work profession. Prerequisite: SWO 605. Cr 3.

SWO 654 Field Work and Field Seminar III
A graduate internship during the concentration year at an approved community agency, designed to relate social work theory to practice under professional supervision. Fall semester. All students registered for SWO 654 must also register for either SWO 603 or SWO 651 to take concurrently. Cr 4.5.

SWO 655 Field Work Experience
A continuation of the concentration year field placement. Spring semester. All students registered for SWO 655 must also register for either SWO 603 or SWO 651 to take concurrently. Prerequisite: SWO 654. Cr 4.5

SWO 660 Advanced Biopsychosocial Assessment
This course is designed to facilitate the acquisition of practice skills specific to in-depth biopsychosocial assessment. Assessment is viewed as the process of understanding a person in order to formulate a practice approach rather than a fixed descriptive category. This course relies heavily upon theories presented in SWO 502 and SWO 552. This course is designed to facilitate the acquisition of practice skills for in-depth biopsychosocial assessment within the advanced social work practice curriculum. Knowledge development and skill building for assessment and diagnosis, and the use of the Diagnostic and Statistical Manual of Mental Disorders (DSM) are covered in this course. Consideration of persons within a cultural context is emphasized throughout. Cr 3.
SWO 695 Thesis Option
In lieu of SWO 652, students may apply to the Research Sequence Curriculum Committee for permission to take the Thesis Option. This option provides structure and assistance to students wishing to complete a formal thesis rather than a research project. Upon completion, the student will present a verbal summary of the thesis at a formal thesis defense meeting. This option may be especially attractive for those students contemplating advanced doctoral-level education in social work or in other social sciences. Cr 6.

SWO 697 Independent Study
This is an individualized course of study, during the concentration year, on some aspect of social work or social welfare to be selected as a result of consultation between a student and a faculty member. Cr 1-3.
The College of Science, Technology, and Health (CSTH) offers a wide variety of majors and programs leading to graduate and professional study, and directly to careers. The College also offers courses and programs of study to students in all colleges of the University for intellectual development and aesthetic enrichment. The College is organized into the following departments/schools: Applied Medical Sciences; Biological Sciences; Chemistry; Computer Science; Engineering (mechanical and electrical); Environmental Science; Exercise, Health, and Sport Sciences; Geosciences; Linguistics; Mathematics and Statistics; School of Nursing; Physics; Psychology; Recreation and Leisure Studies; Technology.

The College's degree programs prepare students for productive and rewarding lives and provide knowledge and skills for many careers. Students, faculty, and alumni apply theory and use scientific and mathematical principles and techniques to solve practical problems and contribute to society in many ways. The College's academic programs are designed and delivered so that all students who are prepared and motivated can successfully complete them. Graduates have (1) technical competence with both depth and breadth, (2) a wide range of knowledge enabling them to function effectively in the professional world, (3) transferable skills such as reasoning, problem solving, verbal and written communications, teamwork, and leadership, and (4) motivation to continue to learn and grow professionally. Graduates secure gainful employment and/or are well prepared for admission to graduate and professional programs.

Degrees and Certificates

Bachelor of Arts

- Chemistry
  - Secondary Education
- Geosciences
- Linguistics
  - ASL/English Interpreting
  - Speech and Language Science
- Mathematics
  - Pure Mathematics concentration
  - Applied Mathematics/Operations
    - Research concentration
  - Statistics concentration
  - Secondary Mathematics Education
- Physics
- Psychology

Bachelor of Science

- Applied Technical Leadership
- Athletic Training
- Biochemistry
- Biology
  - Biotechnology specialization
  - Ecology specialization
  - General Biology specialization
  - Human Biology specialization
  - Teacher Certification in Life Sciences
- Chemistry
- Computer Science
- Electrical Engineering
  - Computer Engineering
- Environmental Science
- Exercise Science
  - Exercise Physiology
  - Health Fitness
• Geosciences
• Information Technology
• Mechanical Engineering
• Nursing
  o Traditional Program
  o Accelerated Program
  o RN to BS Degree
• Recreation and Leisure Studies
  o Community Recreation
  o Therapeutic Recreation
• Technology Management
  o Construction Management
  o Electro Mechanical Systems
  o Industrial Management
  o Information & Communications Technology
  o Precision Manufacturing

Certificates of Undergraduate Study (CUS)

• Applied Energy
• Applied Statistics
• Construction Management
• Electro-Mechanical Systems
• Environmental Education
• Foundations of Holistic Health
• Gerontology
• Pre-medical studies (post-baccalaureate)
• Pre-veterinary studies (post-baccalaureate)
• Sustainable Tourism

Certificates of Graduate Study (CGS)

• Computer Science
• Nursing Education
• Statistics

Certificates of Advanced Study (CAS)

• Nursing

Minors

• Applied Energy
• Applied Mathematics
• Biochemistry
• Biology
• Biochemistry
• Chemistry
• Computer Science
• Construction Management
• Deaf Studies
• Electrical Engineering
• Electro-Mechanical Systems
• Environmental Policy
• Environmental Science
• Environmental Sustainability
• Geosciences
• Holistic Health
• Industrial Management
• Information and Communications Technology
• Linguistics
• Mathematics
• Mechanical Engineering
• Nature Tourism
Masters Degrees

- Applied Medical Sciences
  - Biotechnology
  - Epidemiology
  - Immunology and Infectious Disease
  - Toxicology and Cancer Biology

- Biology
- Computer Science
- Nursing
  - Clinical Nurse Leader
  - Dual Degree Master of Science in Nursing and Master of Business Administration
  - Education
  - Family Nurse Practitioner
  - Family Psychiatric/Mental Health Nurse Practitioner
  - Management
  - Option for Non-Nurses with a Baccalaureate Degree
  - Certified FNP, ANP and WHNP
  - RN to Master of Science

- Statistics
  - Applied Statistics
  - Biostatistics
  - Operations Research/Applied Mathematics

Doctorate

- Doctor of Nursing Practice (DNP) - Post Master to DNP

Accreditations

The School of Nursing baccalaureate and master's programs are approved by the Maine State Board of Nursing and accredited by the Commission on Collegiate Nursing Education (CCNE). The athletic training education program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The health fitness major within the exercise science program is accredited by the Commission on Accreditation in Allied Health Education Programs (CAAHEP). The linguistics' ASL/English Interpreting program is accredited by the Commission on Collegiate Interpreter Education (CCIE). The electrical engineering and computer science programs are accredited by the Accreditation Board for Engineering and Technology (ABET). The technology programs are accredited by the Association of Technology, Management, and Applied Engineering (ATMAE). In addition to these accreditations, the University of Southern Maine is accredited by the New England Association of Schools and Colleges.

Departmental or Program Requirements

The College requires that every baccalaureate degree student fulfill the requirements of the university's core curriculum and a major program as noted in the catalog section devoted to each department's / school's majors. These requirements may be greater than the college minimum requirements. Students interested in a double major should consult the appropriate departments / schools and obtain a declaration of major form from the Registrar's Office. The requirements for graduate programs are listed in the catalog section of the individual department/school.

Student Services

The College is dedicated to supporting students in defining, developing, and achieving personal, academic, and career goals. Services and programs that are provided to meet the needs of CSTH students include: academic advising, career counseling, mentoring, and referrals. Assistance in locating and securing cooperative education and internships is provided as well as information on various scholarships available to CSTH students. For more information, contact the Dean's office at 780-5585 or csth@usm.maine.edu.

Commitment to Civility

The concepts of community and social justice are central to the mission and philosophy of the University of Southern Maine College of Science, Technology, and Health. Faculty, students, and staff are committed to promoting a healthy and just environment that supports transformative learning, academic integrity, open communication, and personal and professional growth among the diverse members of our academic community. We believe that these commitments are grounded in intellectual openness, in personal and professional accountability, and in the...
democratic values of inclusion and mutual respect that are guided by rational discourse and by a relational ethic of care. Our community includes peoples of diverse ethnic, racial, religious, cultural, political, and economic backgrounds as well as people who are disabled and people of different gender, sexual orientation, and age. Our goal is to increase the awareness of students, staff, and faculty to the importance of civility, its implications, and the behaviors that are acceptable and not acceptable in our learning community. Civility is the art of treating others, as well as ourselves, with respect, dignity, and care. Civility is apparent when we are sensitive to the impact that our communications, practices, and behaviors have on others, and when we acknowledge each person's self-worth and unique contributions to the community as a whole.

Cooperative Education and Internships

The College encourages students to participate in cooperative education and internship experiences. Both options integrate classroom learning with meaningful and rewarding work experience in a field related to a student's academic or career goals. Internships are sponsored by individual departments and require an academic advisor; variable credits are awarded. Co-op assignments are paid positions that are typically full time for a semester or six months. For more information, contact the coordinator of cooperative education at (207) 780-5450 or gcavanaugh@usm.maine.edu.

External Programs

External Programs provides credit, noncredit, and certificate programs to students who are unable to attend classes or programs on campus. Customized programs, including workshops, seminars, and short courses are available on specialized topics as requested by educational, corporate, or industrial organizations to meet their specific objectives. For further information, call (207) 780-5440.

Manufacturing Applications Center (MAC)

The Manufacturing Applications Center (MAC) works with Maine's industries to improve quality and efficiency in production operations. Interactive strategies and assistance are provided on a fee-for-services basis to help companies become more competitive via advanced technologies and world-class manufacturing strategies. Assistance is provided in: technical training, quality assurance, product testing and analysis, reverse engineering, rapid prototyping, production control, project management, CAD/CAM/CIM technologies, lean manufacturing, metrology, plant layout, process analysis and control, push/pull strategies, supply chain management, JIT flow, 5's, and engineering design. For further information, call (207) 780-5440 or mac@usm.maine.edu.

General Information

Admission to an undergraduate program in the College of Science, Technology, and Health is initiated through the Office of Undergraduate Admission. The College of Science, Technology, and Health offers merit-based awards to top science, technology, engineering, and math students through the USM Pioneers Program. Pioneers will be selected on the basis of their academic achievement, particularly in the areas of math and science. Interested candidates should contact the Office of Undergraduate Admission for more information or visit http://usm.maine.edu/Pioneers. Admission to a graduate program in the College of Science, Technology, and Health is initiated though the Office of Graduate Admission. Candidates for admission must meet admission requirements indicated in the Admission section of this catalog and the individual departments and schools of the College. General academic policies will be found in the Academic Policies section of this catalog. Specific policies and requirements are indicated in the sections dealing with the individual departments and schools of the College. All students are reminded that, in addition to meeting Program Requirements for a major, they must also meet all University and Core curriculum requirements. Students wishing to change their major apply directly to the department of the new major.

Applied Medical Sciences

Applied Medical Sciences Overview

Chair: Ah-Kau Ng, Ph.D.

Professors: Ng, Thompson, Wise; Associate Professors: Duboise, Pelsue; Assistant Research Professors: Holmes, Huston, Lichter, Paulu, Xie; Adjunct Professors: Friesel, Liaw, Lindner, Rice, Vary; Adjunct Associate Professors: Allan, Chandler, Craig, Davidoff, Fletcher, Follansbee

Minor in Toxicology and Environmental Health
Description

The undergraduate minor in Toxicology and Environmental Health provides students with a comprehensive overview of the scientific disciplines that are most relevant to understanding the effects of environmental hazards on human health. The effects of pollutants on various organ systems in humans and in marine mammals are emphasized.

Program Requirements

Students can minor in Toxicology and Environmental Health by completing 18 credits of curriculum involved in the minor with a grade of C (2.0) or higher. Interested students should contact the AMS office for additional information.

All students will be required to take the following core courses (10 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 490 Principles of Toxicology</td>
<td>4</td>
</tr>
<tr>
<td>AMS 491 Environmental Toxicology or AMS 493 Molecular Methods in Toxicology</td>
<td>4</td>
</tr>
<tr>
<td>AMS 496 Introductory Seminar in Biomedical Sciences</td>
<td>2</td>
</tr>
</tbody>
</table>

In addition students must choose from the following courses for their final 8 credits:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 435 Introduction to Epidemiologic Research</td>
<td>3</td>
</tr>
<tr>
<td>AMS 491 Environmental Toxicology (if not used above)</td>
<td>4</td>
</tr>
<tr>
<td>AMS 492 Introduction to Research Techniques in Toxicology and Environmental Health</td>
<td>4</td>
</tr>
<tr>
<td>AMS 493 Molecular Methods in Toxicology (if not used above)</td>
<td>4</td>
</tr>
<tr>
<td>AMS 494 Marine Mammal Biology and Toxicology</td>
<td>4</td>
</tr>
<tr>
<td>AMS 497 Introduction to Research Techniques in Toxicology and Environmental Health</td>
<td>Cr var</td>
</tr>
</tbody>
</table>

Course Descriptions

• Undergraduate
• Graduate

Undergraduate

AMS 435 Introduction to Epidemiologic Research
This course is intended to give students a basic foundation in principles for the conduct and interpretation of population-based studies of the distribution, etiology, and control of disease. Topics will include randomized experiments, non-randomized cohort studies, case-control studies, cross-sectional and ecological studies, causal inference, sources of bias, and measures of effect. Recent publications from the epidemiologic and general medical literature will be used to illustrate the application of the concepts to specific epidemiologic issues. Cr 3.
AMS 490 Principles of Toxicology
This course introduces students to the principles and practice of toxicology. The major focus of the course is on basic principles, mechanisms, and common methods underpinning the science of toxicology. Selected target organ systems (e.g. respiratory, nervous, and immune systems) are studied with respect to understanding how representative chemicals damage and impair their ability to function. Students will develop a fundamental understanding of how chemicals may exert toxic effects and gain insight into the importance of organ specific effects. Prerequisite: admission to the minor, cell biology, or molecular biology, or biochemistry, or permission of the instructor. Cr 4.

AMS 491 Environmental Toxicology
This course continues to introduce students to the principles and practice of toxicology. The course focuses on basic principles, mechanisms and common methods underpinning environmental toxicology. Selected environmental toxicants are studied with respect to their source of exposure and mechanisms of effect. Selected disease processes (e.g. mutagenesis, carcinogenesis and teratogenesis) are studied with respect to understanding their basic pathways and common mechanisms affected by environmental toxicants. Selected fields are presented to give students insight into the applications of environmental toxicology and its relationships with other fields. Prerequisite: BIO 105 or permission of the instructor. Cr 4.

AMS 493 Molecular Methods in Toxicology
This course introduces students to fundamental and state of the art molecular methods in toxicology. Representative methods are studied for exposure assessment, effects on gene expression, DNA damage and mutagenesis. Selected toxicants are studied through the primary literature to illustrate the application of these methods. Students will develop a fundamental understanding of the theory underlying these methods and gain insight into their strengths and limitations. Prerequisites: AMS 490 or permission of the instructor. Cr 3

AMS 494 Marine Mammal Biology and Toxicology
This course examines the biology of cetaceans, pinnipeds, and other marine mammals and the impact of toxic exposures to them. General adaptations to a marine existence; reproduction; diving physiology; communication and echolocation; feeding and migratory behavior; the role of genetics in conservation and the threats of the major classes of toxic chemicals to marine mammals are considered. An intensive review of the principles and practice of genetic toxicology. Students will develop a fundamental understanding of the major taxonomic groups of extant marine mammal groups, the physiological adaptations of marine mammals to a marine environment, the anatomic and acoustic basis of echolocation in cetaceans, the major toxicological and anthropogenic threats to marine mammals. Prerequisites: for undergrad class: BIO 105 or equivalent or permission of the instructor; for grad class: undergraduate biology, or permission of the instructor. Cr 4.

AMS 495 Introductory Seminar in Biomedical Sciences
The student participates in a weekly seminar on biomedical sciences. The seminar focuses on current topics in biomedical research. Prerequisite: Permission of instructor. Seminar is offered in both fall and spring semesters. Cr 1.

AMS 497 Introduction to Research Techniques in Toxicology and Environmental Health
The student learns a laboratory approach and techniques to study toxicology and environmental health. The term is spent under the direction of a faculty member engaged in a research project. This is a hands-on course with close supervision by technically trained personnel. For those sections in laboratories working with biohazards, laboratory safety and use of biosafety hoods are emphasized. Prerequisite: permission of instructor. Cr variable up to 4.

BIO 321 Neurobiology
This course presents an overview of nervous system function, structure, and development. Content focuses on the cellular and molecular properties that underlie normal function. Prerequisite: grade of C or higher in BIO 109 or BIO 111, or permission of instructor. Cr 3.

CHY 461 Biochemistry
Application of chemical methods and principles to understanding biological processes. Topics include structure and action of nucleotides, proteins, lipids, and carbohydrates; enzyme kinetics and mechanisms; membranes and transport; and metabolism and energy conversion. This one-semester course provides a survey of the major areas of biochemistry except for nucleic acids. Prerequisite: a grade of C- or better in CHY 253. Cr 3.

ESP 375 Environmental Risk Assessment and Management
The focus of this course is to provide students with an understanding of human health risk assessment as an organized, multidisciplinary approach to evaluating scientific data by studying basic toxicology and fate and transport of contaminants using generally accepted principles and terminology used in the field. Students will examine the limitations of current risk assessment methods and be introduced to the basics of ecological risk assessment. Finally, students will study the scientific, political, social, ethical, and economic dimensions of managing risks. Prerequisite: ESP 101/102K or permission of instructor. Cr. 3.

PSY 365 Physiological Psychology
Basic neuroanatomy, neurophysiology, and endocrinology, and the relationships between nervous system functioning and behavior. Physiological analysis of sensory function, motivation, and learning. Prerequisites: PSY 101J, 102, and BIO 111. Cr 3.
PSY 366 Drugs, Mind, and Behavior
The physiological and behavioral effects of drugs are examined in light of current research. Also considered are theories relating to the use/abuse of drugs, tolerance, addiction, and drug interactions. Prerequisites: PSY 101J and one semester of biology. Cr 3.

Graduate (Back to top)

AMS 530 Molecular Biology
This course covers basic principles of molecular biology. Lecture topics include biomolecules and cellular organization, structure and function of DNA, DNA replication, gene expression, RNA transcription and processing, protein synthesis and ribosome structure, cell cycle and signaling, gene rearrangement, retrovirology, developmental and cancer genetics, and recombinant DNA technology. Prerequisites: undergraduate biology, biochemistry, or permission of the instructor. Cr 3.

AMS 531 Molecular Biology Laboratory
This laboratory course introduces the student to basic molecular biology research methods using a project-based approach that emphasizes development of knowledge, laboratory skills, and accurate record keeping. The course includes fundamentals of molecular cloning, nucleic acid isolation and analysis, polymerase chain reaction, DNA sequencing, hybridization-based methods, site-directed mutagenesis, eukaryotic and bacterial expression of selected gene products, and basic bioinformatics. Prerequisites: undergraduate biology, biochemistry, or permission of the instructor. Cr 3.

AMS 535 Introduction to Epidemiologic Research
This course is intended to give students a basic foundation in principles for the conduct and interpretation of population-based studies of the distribution, etiology, and control of disease. Topics will include randomized experiments, non-randomized cohort studies, case-control studies, cross-sectional and ecological studies, causal inference, source of bias, and measures of effect. Recent publications from the epidemiologic and general medical literature will be used to illustrate the application of the concepts to specific epidemiologic issues. Cr 3.

AMS 540 Interdisciplinary Biomedical Science and Biotechnology
This course surveys new development in biomedical science and introduces students to the principles of biotechnology. It emphasizes the recent trend of integration of multiple disciplines of science and technology to advance the fields of biomedical science and biotechnology. This concept of scientific cross-pollination will be demonstrated by lecture series to be delivered individually or through teamwork by experts in a range of scientific fields that cover immunology, infectious disease, cancer research, environmental health and epidemiology, genomics and proteomics, development and production of diagnostics and therapeutics, animal models of human diseases, and bioethics. Lecturers include USM faculty, adjunct faculty, and other invited speakers from local research institutions and biotech industries. Prerequisites: undergraduate biology, biochemistry, or permission of the instructor. Cr 3.

AMS 541 Independent Study in Biotechnology Strategies
This course is designed to help students develop an understanding of the manufacturing, quality control, and management aspects of the biotechnology industry. This will be accomplished by developing and completing a project in association with a local biotechnology company. The project will be developed in conjunction with and approved by the student's advisor and/or advisory committee. Prerequisite: permission of the instructor. Cr 3.

AMS 545 Applied Biostatistical Analysis
This course is intended to give students a working understanding of the major types of biostatistical analysis used in laboratory sciences, clinical research, and public health. Topics will include estimation, descriptive statistics, hypothesis testing, crosstabulations and stratified analysis, life tables, multiple regression, and logistic regression. The course is designed primarily for students with little formal training in biostatistics, but may also prove valuable to other students who desire a course providing an integrated approach to diverse biostatistical techniques within an applied framework. Students will learn to manipulate datasets, analyze them, and interpret the results using the SAS software package. Cr 3.

AMS 551 Immunology Laboratory
This course consists of a series of comprehensive laboratories in which students learn basic immunoassays (e.g. enzyme-linked immunoabsorbent assay, immunofluorescence assay, immunoelectrophoresis, immunoprecipitation, and immunoblot assay) as well as techniques for the isolation, identification, and functional analysis of immune cells and their products such as antibodies and cytokines. The roles of T cells, B cells, NK cells, macrophages, and neutrophils in the immune response are examined through assays such as cell proliferation assay, cytotoxicity assay, and flow cytometry. The techniques of monoclonal antibody production will also be introduced. Course emphasis will be on experimental design, and the clinical and research applications of the procedures used. Prerequisite: permission of the instructor. Cr 3.

AMS 552 Immunology
This graduate immunology course stresses both the cellular and the molecular components of the immune system. It covers basic topics including cells and tissues of the immune system, inflammation, generation of diverse immune responses, molecules with immune functions, immune tolerances, autoimmunity, immune-mediated diseases, infection and immunity, transplantation immunology, tumor immunology, immune deficiencies, and other immune disorders. This course will also discuss practical aspects of antibody production, immunoassays, and other immunological techniques. Prerequisite: undergraduate biology, biochemistry, or permission of the instructor. Cr 3.

AMS 555 Environmental Health
This course provides students with an extensive introduction to scientific approaches to the investigation and modification of the effects of environmental factors on human health. Contributions of the fields of toxicology and epidemiology and the implications of research findings for policy and regulation are examined. Topic areas include toxic metals, pesticides and other organic chemicals, ionizing and non-ionizing radiation, vector-borne diseases, pollution of air and water, occupational exposures, injuries, and the health effects of global warming. The roles of local, state, and federal governments in environmental health are critically evaluated, as are initiatives by non-governmental organizations. No prerequisites. Cr. 3.

AMS 560 Virology
This is a graduate-level survey of virology with a biomedical emphasis that is also suitable for advanced undergraduate biology and biochemistry students. Virus structure, molecular biology, evolution, epidemiology, pathogenesis, and medical importance of major virus groups are discussed. Molecular genetic manipulation of viral genomes for gene therapy and vaccine development is also a major focus of the course. Experimental approaches that have provided significant insights into the biology of viruses and their host interactions are emphasized. Prerequisites: undergraduate biology, biochemistry, and permission of the instructor. Cr 3.

AMS 565 Molecular Microbiology
This graduate-level molecular microbiology course emphasizes the fundamental importance of the microbial world in human health and disease and current understanding of selected topics in the biology and molecular genetics of bacterial and eukaryotic microbes and their viruses. The molecular foundations of microbial pathogenesis and host-pathogen interactions and co-evolution are explored in the context of important human and animal diseases. Prerequisites: undergraduate biology, biochemistry, and permission of the instructor. Cr 3.

AMS 578 Epidemiology of Infectious Disease
This course will provide an introduction to the epidemiologic basis for the prevention and control of communicable diseases through the study of specific infections including HIV/AIDS, tuberculosis, viral hepatitis, rabies, influenza, and Lyme disease. The course will also include exercises on the investigation of acute disease outbreaks and discussions of immunization, institutional infection control, foodborne illnesses, and emerging infectious diseases. Cr 3.

AMS 579 Epidemiology of Chronic Disease
This course examines empirical human evidence concerning the genetic, environmental, and behavioral determinants of some of the most common and debilitating chronic diseases, including several of the following: coronary heart disease, stroke, diabetes, selected forms of cancer, chronic obstructive pulmonary disease, asthma, neurological diseases, musculoskeletal conditions, and psychiatric disorders. Relevance of the following tools are considered: descriptive epidemiology, experimentation on humans, observational cohort studies, case-control studies, and formal meta-analysis. Strategies for the prevention of each of the diseases considered are critically evaluated in the context of epidemiologic evidence for causation. Prerequisite: AMS 545. Cr 3.

AMS 590 Principles of Toxicology
This course introduces students to the principles and practice of toxicology. The major focus of the course is on basic principles, mechanisms, and common methods underpinning the science of toxicology. Selected target organ systems (e.g. respiratory, nervous, and immune systems) are studied with respect to understanding how representative chemicals damage and impair their ability to function. Students will develop a fundamental understanding of how chemicals may exert toxic effects and gain insight into the importance of organ specific effects. Prerequisite: molecular biology, biochemistry, or permission of the instructor. Cr 4.

AMS 591 Environmental Toxicology
This course continues to introduce students to the principles and practice of toxicology. The course focuses on basic principles, mechanisms and common methods underpinning environmental toxicology. Selected environmental toxicants are studied with respect to their source of exposure and mechanisms of effect. Selected disease processes (e.g. mutagenesis, carcinogenesis and teratogenesis) are studied with respect to understanding their basic pathways and common mechanisms affected by environmental toxicants. Selected fields are presented to give students insight into the applications of environmental toxicology and its relationships with other fields. Prerequisite: BIO 105 or permission of the instructor. Cr 4.

AMS 593 Molecular Methods in Toxicology
This course introduces students to fundamental and state-of-the-art molecular methods in toxicology. Representative methods are studied for exposure assessment, effects on gene expression, DNA damage and mutagenesis. Selected toxicants are studied through the primary literature to illustrate the application of these methods. Students will develop a fundamental understanding of the theory underlying these methods and gain insight into their strengths and limitations. Prerequisites: AMS 590 or permission of the instructor. Cr 3.

AMS 594 Marine Mammal Biology and Toxicology
This course examines the biology of cetaceans, pinnipeds, and other marine mammals and the impact of toxic exposures to them. General adaptations to a marine existence; reproduction; diving physiology; communication and echolocation; feeding and migratory behavior; the role of genetics in conservation and the threats of the major classes of toxic chemicals to marine mammals are considered. is an intensive review of the principles and practice of genetic toxicology. Students will develop a fundamental understanding of the major taxonomic groups of extant marine mammal groups, the physiological adaptations of marine mammals to a marine environment, the anatomic and acoustic basis of echolocation in cetaceans, the major toxicological and anthropogenic threats to marine mammals. Prerequisites: for undergrad class: BIO 105 or equivalent or permission of the instructor; for grad class: undergraduate biology, or permission of the instructor Cr. 4.
AMS 595 Seminar: Journal Club
The Journal Club is intended to keep the participants current in biomedical science, to instruct them in the techniques of evaluating scientific literature critically, and to clearly present scientific information. The seminar, directed by faculty members responsible for the corresponding core course material and including outside lectures from among the affiliates as well as other academic institutions, will provide the student with an opportunity to discuss practical applications of the core lecture material. Cr 2.

AMS 596 Advanced Seminars in Biomedical Sciences
The student participates in a weekly seminar on biomedical sciences. The seminar focuses on current topics in biomedical research. Prerequisite AMS 590 or permission of instructor. Seminar is offered in both fall and spring semesters. Cr 1.

AMS 633 Interdisciplinary Collaboration in Research and Education
This course is primarily for bioscience graduate students and teachers participating in USM science education outreach through programs such as the Maine ScienceCorps. The course provides collaborative interdisciplinary professional development opportunities for participating graduate students, secondary school teachers, and science faculty. Active participation is required in scientific seminar presentations, in discussions of readings, and in collaborative development of research based laboratory activities for scientific education at all levels. Prerequisite: permission of the instructor. Cr 1-3.

AMS 635 Applications of Epidemiology in Public Health Agencies
This course focuses on the role of epidemiologic principles and methods in the practice of public health. Topics include surveillance of the health status of populations, vital records, disease registries, special-purpose population-based surveys, responses to public concern about perceived clusters of disease, evaluation of the efficacy of public health interventions, the roles of state and federal government in collecting and interpreting epidemiologic data, and the uses of epidemiology in the formulation of policy in public health. Students will work on individual or group projects that involve hands-on participation in the application of epidemiologic methods within a public health organization. Prerequisite: AMS 545 or permission of the instructor. Cr 3.

AMS 636 Environmental Epidemiology
This course focuses on the effects of the physical environment on human health. Among the risk factors examined are a variety of pollutants found in outdoor air, indoor air, surface water, ground water, and food. Special attention is given to heavy metals, ionizing radiation, pesticides, flame retardants, carbon dioxide, and others of current public concern. Effects on human development, on the nervous system, and on respiratory disease and cancer receive particular attention. Topics include: environmental monitoring, quantification of exposure at the individual level, hazards in occupational settings, time-space clustering of disease, use of ecologic studies to estimate risks at the individual level, interactive effects of exposure to multiple environmental risk factors, perceptions of risk, integration of laboratory science with population-based studies, and the role of epidemiologic evidence in setting environmental standards. Prerequisites: AMS 545 or permission of the instructor. Cr 3.

AMS 638 Practicum in Epidemiologic Research
This course is designed to provide students with direct experience in the formulation of epidemiologic hypotheses and the analysis and interpretation of data. Each student will frame a research question that can be addressed using a dataset available on campus or elsewhere in Maine. With guidance from faculty, each student will conduct data analyses and will write a report in the format of a journal article. Prerequisites: AMS 535 and AMS 545 or permission of the instructor. Cr 3.

AMS 673 Epidemiology and Prevention of Cancer
This course provides a comprehensive review and synthesis of epidemiologic studies of the causes of several of the most common forms of cancer in humans. The role of genetics, diet, smoking, hormones, occupation, and other factors will be considered. The public health implications of interventions to alter behavior and to remove environmental risk factors will also be discussed, as will epidemiologic issues in the reduction of mortality through screening for cancer. Prerequisite: AMS 535 or permission of instructor. Cr 3.

AMS 674 Neurotoxicology
Prerequisites: AMS 572, molecular biology, biochemistry, or permission of the instructor. Cr 3.

AMS 675 Developmental Toxicology
Prerequisites: AMS 572, molecular biology, biochemistry, or permission of the instructor. Cr 3.

AMS 677 Regression Models in the Health Sciences
This course will familiarize students with the use of regression models for the analysis of epidemiologic and other biomedical data. Topics will include multiple linear regression, logistic regression, log-linear models, proportional hazard models, Poisson regression, generalized linear models, goodness of fit, and analysis of residuals and other diagnostics. Students will work on individual projects and will learn to use SAS software for conducting analyses. Cr 3.

AMS 680 Molecular Basis of Disease
This course focuses on the biochemical and genetic nature of human disease. It will cover the strategies of gene mapping and identification, molecular pathology, functional genomics, and gene therapy of heritable diseases. Prerequisite: AMS 530 or permission of the instructor. Cr 3.

AMS 691 Advanced Seminar in Biomedical Sciences
The student participates in a weekly seminar on biomedical sciences. The seminar focuses on current topics in biomedical research. Prerequisite: AMS 590 or permission of instructor. Seminar is offered in both fall and spring semesters. Cr 1.

AMS 692 Advanced Readings in Biomedical Sciences
The student participates in directed readings on a topic in biomedical sciences under the guidance of a faculty member. Readings on specific topics in carcinogenesis, epidemiology, immunology, molecular genetics, neuroscience, parasitology, toxicology, and virology are offered. Prerequisite: permission of instructor. Cr 2.

AMS 693 Advanced Research Techniques in Biomedical Sciences
The student learns laboratory techniques used as tools in biomedical research. The term is spent under the direction of a faculty member. Methods in epidemiology, immunology, molecular genetics, parasitology, toxicology, and virology are offered. This is a hands-on course with close supervision by technically trained personnel. For those sections in laboratories working with biohazards, laboratory safety and use of biosafety hoods are emphasized. Prerequisite: permission of instructor. Cr variable.

AMS 694 Genetic Toxicology
This course is an intensive review of the principles and practice of genetic toxicology. The major focus of the course is on basic principles, mechanisms, and common methods used to study chemical and radiation-induced damage to DNA and its repair. Selected types of damage and repair systems are studied with respect to understanding mechanisms of how representative chemicals or radiation damage and how the cell responds to impair their ability to function. Students will develop a fundamental understanding of how chemicals damage DNA and how human cells repair DNA and gain insight into the state-of-the-art of this field. Prerequisites: AMS 591, molecular biology, biochemistry, or permission of the instructor. Cr 3.

AMS 695 Chemical Carcinogenesis
This course is an intensive review of the principles of chemical carcinogenesis. The major focus of the course is on basic principles, mechanisms, and common methods involved in the neoplastic transformation of cells. Selected models of carcinogenesis are studied with respect to understanding mechanisms of how representative chemicals transform cells. Students will develop a fundamental understanding of the major theories in chemical carcinogenesis and gain insight into the state-of-the-art of this field. Prerequisites: AMS 591, molecular biology, biochemistry, or permission of the instructor. Cr 3.

AMS 696 Metal Toxicology
This course is an intensive review of the principles of metal toxicology. The major focus of the course is on basic principles, mechanisms, and common methods involved in how metals induce toxicity in major organ systems. Selected systems are studied with respect to understanding mechanisms of how metals induce cellular and systemic toxicity. Students will develop a fundamental understanding of the major theories in metal toxicology and gain insight into the state-of-the-art aspects of this field. At each session, a doctoral student will present a lecture on the topic including a review of required readings and directed activities. Offered in the fall of even-numbered years. Prerequisites: AMS 590, AMS 591, either AMS 694 or AMS 695, and permission of the instructor. Cr 3.

AMS 697 Externship
Under the stewardship of the student's graduate advisory committee, an externship will be arranged for a student to gain research training at a laboratory outside the University (e.g. industry, research institute, and government affiliates). Similar arrangement can be designed with some modifications for students who are already employed at the laboratory where an externship will be conducted. A written project on the work experience, similar to a dissertation, to be presented and approved by the advisory committee, is required. Prerequisite: permission of the instructor. Cr variable.

AMS 698 Thesis
Under the stewardship of the student's thesis advisor and committee, a hypothesis-driven research project will be developed for a student to gain research training in biomedical science. A written project proposal will be presented to and approved by the thesis advisory committee and upon completion of the research a dissertation will be written and presented to the advisory committee for final approval. Prerequisites: permission of the instructor. Cr variable.

GRS 602 Thesis Completion
See the complete course description in the “Continuous Enrollment and Residency” section of the Academic Policies chapter. Cr 1.
Department of Biological Sciences

Biological Sciences Overview

Chair of the Department: Lisa Moore, 406 Science Building, Portland

Professors: Gainey, Maher, Mazurkiewicz, Moore, Walker, Weber; Associate Professors: Champlin, Currie, Theodose; Adjunct Professors: Duboise, Evers, Harris, Levine, Ng, Oxburgh, Paruk, Stenhouse, Wilson, Wise; Health Professions Advisor: Dr. Jeffrey Walker, 305B Science Building, Portland

The Department of Biological Sciences offers a four-year program leading to a B.S. in biology that includes four options: general biology, human biology, biotechnology, and ecology. All programs of study provide students with a liberal arts education emphasizing the sciences. Each of these options have a core set of biology course requirements in addition to other biology courses that may be elected to suit individual interests and needs. Additional required courses in chemistry, mathematics, and physics reflect the interdisciplinary status of the biological sciences. Students also get strong hands-on experience by taking at least 4-6 lab classes, and many students get enhanced practical experience through research positions (volunteer, work study, grant funded, and fellowships) in science research labs at USM and elsewhere.

In addition to the B.S. degree options, the Department offers a minor in biology, a two-year nondegree program in pre-pharmacy, and postbaccalaureate certificates in pre-medical studies and pre-veterinary studies. Graduates of these programs have found careers in biological and medical research laboratories, biotechnology companies, and field biology, or have furthered their education by entering graduate, medical, dental, optometry, veterinary, and law schools, as well as schools for allied health professions. The Department of Biological Sciences also offer a master's degree in biology, with both thesis research and literature research options (see the USM Graduate Catalog).

In conjunction with the School of Education and Human Development, the Department of Biological Sciences is participating in a new Secondary Education Teacher Certification program in Life Sciences (see http://www.usm.maine.edu/educatorpreparation).

Additional information about the Biological Sciences Department and all degree programs can be found at http://usm.maine.edu/bio.

Additional Information

Pre-Health Professions Students

Almost every American school of medicine, veterinary medicine, and dentistry requires for admission a baccalaureate degree (major optional), two years of biology, two years of chemistry, one year of physics, a course in calculus, satisfactory performance on a national professional aptitude test, and a recommendation from a committee at the baccalaureate institution. At this campus, the Health Professions Pre-professional Evaluation Committee comprises faculty from the Departments of Biology, Chemistry, and Physics and is responsible for evaluating, comparing, and recommending students. For further information contact the Biological Sciences Department Health Profession Advisor, Dr. Jeffrey Walker, 305B Science Building, Portland

Lewiston-Auburn College Courses

The following Lewiston-Auburn College courses fulfill the corresponding prerequisite requirements in the Department of Biological Sciences: SCI 105 = BIO 105, SCI 106 = BIO 106, SCI 107 = BIO 107, SCI 170 = BIO 111, SCI 171 = BIO 112, SCI 172 = BIO 211, and SCI 173 = BIO 212.

Laboratory Fees

A laboratory fee is assessed in biology laboratory courses.

BS in Biology: Biotechnology concentration

Description

The biotechnology specialization emphasizes cell and molecular biology, and students who follow this track receive a solid foundation in both biology and chemistry. Graduates are well prepared to pursue employment in biotechnology or to enter graduate programs in biotechnology, cell
Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the emphasis in biotechnology: 74. Students may substitute Problems in Biology (BIO 441) for no more than one of the required AMS courses shown below. Per University policy, students enrolled in AMS courses pay graduate tuition rates. A grade of C- or higher is required for all courses listed below.

All of the following are required:

Biology (30-31 credit hours)
- BIO 105, 106 Biological Principles I: Cellular Biology and Laboratory
- BIO 107 Biological Principles II: Evolution, Biodiversity, and Ecology
- BIO 201 Genetics
- BIO 281, 282 Microbiology and Laboratory
- BIO 408 Experimental Genetics
- BIO 409, 410 Cell and Molecular Biology and Laboratory
  or AMS 530, 531 Molecular Biology and Laboratory
- BIO 431 Principles of Immunology
  AMS 551 Immunology Laboratory

Chemistry (26 credit hours)
- CHY 113, 114, 115, 116 Principles of Chemistry I and II and Laboratory
- CHY 251, 252, 253, 254 Organic Chemistry I and II and Laboratory
- CHY 461, 462, 463 Biochemistry I and II and Laboratory

Physics (10 credit hours)
- PHY 111, 114, 112, 116 Elements of Physics I and II and Laboratory
  or PHY 121, 114, 123, 116 General Physics I and II and Laboratory

Mathematics (8 credit hours)
- MAT 152 Calculus A
- MAT 220 Statistics for the Biological Sciences

Recommended Course Sequence

Recommended Course Sequence

Because the biology curriculum includes many support courses (chemistry, physics, math) that need to be taken in addition to biology courses, the Department offers a suggested plan of study, shown below. There is no guarantee that every course listed will be offered when the student wants the course. Students should consult their academic advisors regularly as well as the Tentative Schedule of Biology courses listed on the Department of Biological Sciences website to establish a graduate planner appropriate to your individual needs.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall semester</td>
<td></td>
</tr>
<tr>
<td>BIO 105 Biological Principles I: Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 106 Laboratory Biology</td>
<td>1.5</td>
</tr>
<tr>
<td>CHY 113 Principles of Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHY 114 Laboratory Techniques I</td>
<td>1</td>
</tr>
<tr>
<td>ENG 100 College Writing</td>
<td>3</td>
</tr>
<tr>
<td>EYE 1XX Entry Year Experience</td>
<td>3</td>
</tr>
<tr>
<td>Spring semester</td>
<td></td>
</tr>
<tr>
<td>BIO 107 Biological Principles II: Evolution, Biodiversity, and</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Ecology
- CHY 115 Principles of Chemistry II | 3 |
- CHY 116 Laboratory Techniques II | 1 |
- MAT 152 Calculus A | 4 |
- Core curriculum course | 3 |

Year 2

Fall semester
- BIO 201 Genetics | 3 |
<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall semester</th>
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<tbody>
<tr>
<td></td>
<td>CHY 461 Biochemistry I</td>
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<tr>
<td></td>
<td>CHY 462 Biochemistry Laboratory</td>
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<tr>
<td></td>
<td>PHY XXX Elements of Physics I or General Physics I</td>
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<tr>
<td></td>
<td>PHY 114 Introductory Physics Laboratory I</td>
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<td>Core curriculum course</td>
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<td>Core curriculum course</td>
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<table>
<thead>
<tr>
<th>Spring semester</th>
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<tbody>
<tr>
<td>BIO 409 Cell and Molecular Biology</td>
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<tr>
<td>BIO 410 Cell and Molecular Biology Laboratory</td>
</tr>
<tr>
<td>CHY 463 Biochemistry II</td>
</tr>
<tr>
<td>PHY XXX Elements of Physics II or General Physics II</td>
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<tr>
<td>PHY 116 Introductory Physics Laboratory II</td>
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<tr>
<td>Core curriculum course</td>
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<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall semester</th>
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<tbody>
<tr>
<td></td>
<td>BIO 431 Principles of Immunology</td>
</tr>
<tr>
<td></td>
<td>AMS 530 Molecular Biology (if BIO 409 not taken)</td>
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<tr>
<td></td>
<td>AMS 531 Molecular Biology Laboratory (if BIO 410 not taken)</td>
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<td>Core curriculum course</td>
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<tr>
<th>Spring semester</th>
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<tbody>
<tr>
<td>AMS 551 Immunology Laboratory</td>
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<tr>
<td>Core curriculum course</td>
</tr>
<tr>
<td>Core curriculum course</td>
</tr>
<tr>
<td>General elective(s)</td>
</tr>
</tbody>
</table>

Note: Total credits must add up to 120, with a minimum of 74 credits required for the biotechnology specialization. Suggested schedule is based on 8 semesters (4 years) with approximately 15 credits per semester. Needing to meet the English or Math proficiency requirements in your first year will alter and possibly lengthen your coursework beyond 4 years. Summer courses can reduce course load during the year.

**BS in Biology: Ecology concentration**

**Description**

The ecology concentration is designed for students interested in focusing on organismal level of biological organization and above (communities and ecosystems). Course choices include microbiology, botany, ornithology and vertebrate zoology, as well as various ecology selections. The concentration also includes training in Geographic Information Systems (GIS), a tool used by ecologists in fields such as conservation, consulting, and research. Graduates from this program are well qualified for careers in ecology, environmental sciences, and conservation.
Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 78. *All students must take at least three field labs. A grade of C- or higher is required for all courses listed below.

All of the following are required:
- BIO 105, 106 Biological Principles I: Cellular Biology and Laboratory
- BIO 107 Biological Principles II: Evolution, Biodiversity, and Ecology
- BIO 109 Biological Principles III: Functional Biology
- BIO 201 Genetics
- BIO 217 Evolution
- BIO 331 Ecological Principles

Organismal Biology courses: Choose at least 10 credits from the following:
- BIO 205 Comparative Vertebrate Anatomy
- BIO 231 Botany*
- BIO 281, 282 Microbiology and Laboratory
- BIO 291 Ornithology*
- BIO 335 Entomology*
- BIO 351 Invertebrate Zoology
- BIO 353 Vertebrate Zoology*
- BIO 361, 362 Parasitology and Laboratory
- BIO 381 Plant Physiology
- BIO 405, 406 Animal Behavior and Laboratory*

Ecology courses: Choose at least 10 credits from the following
- BIO 332 Field Ecology*
- BIO 337 Marine Ecology*
- BIO 383 Plant Ecology*
- BIO 403, 404 Comparative Animal Physiology and Laboratory
- BIO 415, 416 Microbial Ecology and Laboratory*

Additional required courses:

Geography-Anthropology (3 credit hours)
- GEO 108 Introduction to ArcGIS

Chemistry (16 credit hours)
- CHY 113, 114, 115, 116 Principles of Chemistry I and II and Laboratory
- CHY 251, 252, 253 Organic Chemistry I and II and Organic Chemistry Laboratory I

Physics (10 credit hours)
- PHY 111, 114, 112, 116 Elements of Physics I and II and Laboratory
  or PHY 121, 114, 123, 116 General Physics I and II and Laboratory

Mathematics (8 credit hours)
- MAT 152 Calculus A
- MAT 220 Statistics for the Biological Sciences

Recommended Course Sequence

Recommended Course Sequence

Because the biology curriculum includes many support courses (chemistry, physics, math) that need to be taken in addition to biology courses, the Department offers a suggested plan of study, shown below. There is no guarantee that every course listed will be offered when the student wants the course. Students should consult their academic advisors regularly as well as the Tentative Schedule of Biology courses listed on the Department of Biological Sciences website to establish a graduate planner appropriate to your individual needs.

Ecology Degree Plan

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Fall semester</td>
<td></td>
</tr>
<tr>
<td>BIO 105 Biological Principles I: Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 106 Laboratory Biology</td>
<td>1.5</td>
</tr>
</tbody>
</table>
CHY 113 Principles of Chemistry I 4  
CHY 114 Laboratory Techniques I 1  
ENG 100 College Writing 3  
EYE 1XX Entry Year Experience 3

Spring semester  
BIO 107 Biological Principles II: Evolution, Biodiversity and 4.5

Ecology  
CHY 115 Principles of Chemistry II 3  
CHY 116 Laboratory Techniques II 1  
MAT 152 Calculus A 4  
Core curriculum course 3

Year 2
Fall semester  
BIO 109 Biological Principles III: Functional Biology 3  
BIO 201 Genetics 3  
CHY 251 Organic Chemistry I 3  
CHY 252 Organic Chemistry Laboratory I 2  
MAT 220 Statistics for the Biological Sciences 4

Spring semester  
BIO 217 Evolution 3  
CHY 253 Organic Chemistry II 3  
GEO 108 Introduction to ArcGIS 3  
Core curriculum course 3  
Core curriculum course 3

Year 3
Fall semester  
PHY XXX Elements of Physics I or General Physics I 4  
PHY 114 Introductory Physics Laboratory I 1  
BIO 331 Ecological Principles 3  
BIO XXX Ecology or organismal biology course requirement variable  
Core curriculum course 3

Spring semester  
BIO XXX biology or organismal course requirement variable  
PHY XXX Elements of Physics II or General Physics II 4  
PHY 116 Introductory Physics Laboratory II 1  
Core curriculum course 3  
Core curriculum course 3

Year 4
Fall semester  
BIO XXX biology or organismal course requirement variable  
Core curriculum course 3  
Core curriculum course 3

Spring semester  
BIO XXX ecology or organismal course requirement variable  
Core curriculum course 3  
BIO Capstone course 3

Note: Total credits must add up to 120, with a minimum of 78 credits required for the ecology specialization. Suggested schedule is based on 8 semesters (4 years) with approximately 15 credits per semester. Needing to meet the English or Math proficiency requirements in your first year will alter and possibly lengthen your coursework beyond 4 years. Summer courses can reduce course load during the academic year.
BS in Biology: General Biology concentration

Description

The biology specialization offers the broadest exposure to the various sub-disciplines of biology through an examination of life from the molecular to the community level. Besides taking foundation courses that survey the full range of biology, plus genetics and evolution, students also take courses in three major areas of biology: organismal biology, ecology, and cellular and functional biology. Students interested in veterinary medicine should pursue this track. Students graduating in this track will have the broadest opportunities to further their educations either in graduate or professional schools or to pursue any of a number of careers in the biological sciences, such as lab technicians and state biologists.

Program Requirements

The minimum number of credits (in addition to the University's Core curriculum) required for the major: 70. A grade of C- or higher is required for all courses listed below.

All of the following are required:
- BIO 105, 106 Biological Principles I: Cellular Biology and Laboratory
- BIO 107 Biological Principles II: Evolution, Biodiversity, and Ecology
- BIO 109 Biological Principles III: Functional Biology
- BIO 201 Genetics
- BIO 217 Evolution

One lecture/laboratory combination from each of the following three areas: AREA 1: Organismal Biology
- BIO 205 Comparative Vertebrate Anatomy
- BIO 231 Botany
- BIO 291 Ornithology
- BIO 335 Entomology
- BIO 351 Invertebrate Zoology
- BIO 353 Vertebrate Zoology
- BIO 361, 362 Parasitology and Laboratory
- BIO 405, 406 Animal Behavior and Laboratory

AREA 2: Ecology
- BIO 331, 332 Ecological Principles and Field Ecology
- BIO 337 Marine Ecology
- BIO 383 Plant Ecology
- BIO 403, 404 Comparative Animal Physiology and Laboratory
- BIO 415, 416 Microbial Ecology and Laboratory

AREA 3: Cellular and Functional Biology
- BIO 281, 282 Microbiology and Laboratory
- BIO 305, 306 Developmental Biology and Laboratory
- BIO 321, 322 Neurobiology and Laboratory
- BIO 381 Plant Physiology
- BIO 401, 402 Animal Physiology and Laboratory
- BIO 409, 410 Cell and Molecular Biology and Laboratory

In addition to BIO 105, 106, 107, 109, 201, 217, and one lecture/laboratory course from each of the three stipulated areas, biology majors are required to take either two additional biology lecture courses or one biology lecture/laboratory course, with prefix numbers of 200 or above.

The biology major must also satisfactorily complete all of the following:

Chemistry (16 credit hours)
- CHY 113, 114, 115, 116 Principles of Chemistry I and II and Laboratory
- CHY 251, 252, 253 Organic Chemistry I and II and Organic Chemistry Laboratory I

Physics (10 credit hours)
- PHY 111, 114, 112, 116 Elements of Physics I and II and Laboratory
  or PHY 121, 114, 123, 116 General Physics I and II and Laboratory
Mathematics (8 credit hours)
MAT 152 Calculus A
MAT 220 Statistics for the Biological Sciences

In addition, students must fulfill the University Core curriculum requirements, including a Capstone course in the major.

**Recommended Course Sequence**

Because the biology curriculum includes many support courses (chemistry, physics, math) that need to be taken in addition to biology courses, the Department offers a suggested plan of study, shown below. There is no guarantee that every course listed will be offered when the student wants the course. Students should consult their academic advisors regularly as well as the Tentative Schedule of Biology courses listed on the Department of Biological Sciences website to establish a graduate planner appropriate to your individual needs.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td><strong>Fall semester</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 105 Biological Principles I: Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 106 Laboratory Biology</td>
<td>1.5</td>
</tr>
<tr>
<td>CHY 113 Principles of Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHY 114 Laboratory Techniques I</td>
<td>1</td>
</tr>
<tr>
<td>ENG 100 College Writing</td>
<td>3</td>
</tr>
<tr>
<td>EYE 1XX Entry Year Experience</td>
<td>3</td>
</tr>
<tr>
<td><strong>Spring semester</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 107 Biological Principles II: Evolution, Biodiversity and</td>
<td>4.5</td>
</tr>
<tr>
<td>Ecology</td>
<td></td>
</tr>
<tr>
<td>CHY 115 Principles of Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHY 116 Laboratory Techniques II</td>
<td>1</td>
</tr>
<tr>
<td>MAT 152 Calculus A</td>
<td>4</td>
</tr>
<tr>
<td>Core curriculum course</td>
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</table>

<table>
<thead>
<tr>
<th>Year 2</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall semester</strong></td>
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</tr>
<tr>
<td>BIO 109 Biological Principles III: Functional Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 201 Genetics</td>
<td>3</td>
</tr>
<tr>
<td>CHY 251 Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHY 252 Organic Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>MAT 220 Statistics for the Biological Sciences</td>
<td>4</td>
</tr>
<tr>
<td><strong>Spring semester</strong></td>
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<tr>
<td>BIO 217 Evolution</td>
<td>3</td>
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<tr>
<td>BIO XXX Area requirement</td>
<td>3-5</td>
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<tr>
<td>CHY 253 Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>Core curriculum course</td>
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<tr>
<td>Core curriculum course</td>
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<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall semester</strong></td>
<td></td>
</tr>
<tr>
<td>BIO XXX Area requirement</td>
<td>3-5</td>
</tr>
<tr>
<td>PHY XXX Elements of Physics I or General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHY 114 Introductory Physics Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>Core curriculum course</td>
<td>3</td>
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<tr>
<td>Core curriculum course</td>
<td>3</td>
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<tr>
<td><strong>Spring semester</strong></td>
<td></td>
</tr>
<tr>
<td>BIO XXX Area requirement</td>
<td>3-5</td>
</tr>
<tr>
<td>Physics XXX Elements of Physics II or General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHY 116 Introductory Physics Laboratory II</td>
<td>1</td>
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<tr>
<td>Core curriculum course</td>
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<tr>
<td>Core curriculum course</td>
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</tbody>
</table>

| Year 4                  |         |

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Fall semester
  BIO XXX elective(s) variable
  Core curriculum course 3
  Core curriculum course 3

Spring semester
  BIO XXX elective(s) variable
  BIO Capstone course 3

Note: Total credits must add up to 120, with a minimum of 70 credits required for the general biology major. Suggested schedule is based on 8 semesters (4 years) with approximately 15 credits per semester. Needing to meet the English or Math proficiency requirements in your first year will alter and possibly lengthen your coursework beyond 4 years. Summer courses can reduce course load during the year.

**BS in Biology: Human Biology concentration**

**Description**

The human biology track emphasizes biology related to human health and disease, including human anatomy & physiology, pathophysiology, and animal physiology, and provides a robust foundation for careers in health-related sciences, both human and veterinary. Many of these graduates enter medical schools in Maine and New England.

**Program Requirements**

The minimum number of credits (exclusive of the University's Core curriculum) required for the emphasis in human biology: 82. A grade of C- or higher is required for all courses listed below.

All of the following are required:

BIO 105, 106 Biological Principles I: Cellular Biology and Laboratory
BIO 107 Biological Principles II: Evolution, Biodiversity, and Ecology
BIO 111, 112 Human Anatomy and Physiology I and Laboratory
BIO 113, 114 Human Anatomy and Physiology II and Laboratory
BIO 345 Pathophysiology
BIO 401, 402 Animal Physiology and Laboratory

Choose 15 credits from the following:

BIO 201 Genetics
BIO 205 Comparative Vertebrate Anatomy
BIO 281, 282 Microbiology and Laboratory
BIO 305, 306 Developmental Biology and Laboratory
BIO 321, 322 Neurobiology and Laboratory
BIO 361, 362 Parasitology and Laboratory
BIO 407 Environmental Modulation of Developmental Mechanisms
BIO 409, 410 Cell and Molecular Biology and Laboratory
BIO 431 Principles of Immunology

The following courses are also required:

Chemistry (23-24 credit hours)

CHY 113, 114, 115, 116 Principles of Chemistry I and II and Laboratory
CHY 251, 252, 253, 254 Organic Chemistry I and II and Laboratory
CHY 461, 462 Biochemistry I and Laboratory
or CHY 461, 463 Biochemistry I and II

Physics (10 credit hours)

PHY 111, 114, 112, 116 Elements of Physics I and II and Laboratory
or PHY 121, 114, 123, 116 General Physics I and II and Laboratory
Mathematics (8 credit hours)
MAT 152 Calculus A
MAT 220 Statistics for the Biological Sciences

**Recommended Course Sequence**

Because the biology curriculum includes many support courses (chemistry, physics, math) that need to be taken in addition to biology courses, the Department offers a suggested plan of study, shown below. There is no guarantee that every course listed will be offered when the student wants the course. Students should consult their academic advisors regularly as well as the Tentative Schedule of Biology courses listed on the Department of Biological Sciences website to establish a graduate planner appropriate to your individual needs.

**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Description</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Fall semester</td>
<td>BIO 105 Biological Principles I: Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIO 106 Laboratory Biology</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>CHY 113 Principles of Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHY 114 Laboratory Techniques I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ENG 100 College Writing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EYE Entry Year Experience</td>
<td>3</td>
</tr>
<tr>
<td>Spring semester</td>
<td>BIO 107 Biological Principles II: Evolution, Biodiversity</td>
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<tr>
<td></td>
<td>(Science Exploration)</td>
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<tr>
<td></td>
<td>CHY 115 Principles of Chemistry II</td>
<td>3</td>
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<tr>
<td></td>
<td>CHY 116 Laboratory Techniques II</td>
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<tr>
<td></td>
<td>MAT 152 Calculus A</td>
<td>4</td>
</tr>
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<td></td>
<td>Core curriculum course Creative Expression, Socio-cultural Analysis or Cultural Interpretation</td>
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**Year 2**

<table>
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<tr>
<th>Semester</th>
<th>Course Description</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Fall semester</td>
<td>BIO 111 Human Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIO 112 Practical Human Anatomy and Physiology I</td>
<td>1.5</td>
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<tr>
<td></td>
<td>CHY 251 Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHY 252 Organic Chemistry Laboratory I</td>
<td>2</td>
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<tr>
<td></td>
<td>MAT 220 Statistics for the Biological Sciences</td>
<td>4</td>
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<tr>
<td></td>
<td>Core curriculum course Creative Expression, Socio-cultural Analysis or Cultural Interpretation</td>
<td></td>
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<tr>
<td>Spring semester</td>
<td>BIO 113 Human Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIO 114 Practical Human Anatomy and Physiology II</td>
<td>1.5</td>
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<tr>
<td></td>
<td>CHY 253 Organic Chemistry II</td>
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<td>CHY 254 Organic Chemistry Laboratory II</td>
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**Year 3**

<table>
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<tr>
<th>Semester</th>
<th>Course Description</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Fall semester</td>
<td>BIO 345 Pathophysiology</td>
<td>3</td>
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<tr>
<td></td>
<td>CHY 461 Biochemistry I</td>
<td>3</td>
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<td></td>
<td>CHY 462 Biochemistry Laboratory</td>
<td>2</td>
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<tr>
<td></td>
<td>Physics: Elements of Physics I or General Physics I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHY 114 Introductory Physics Laboratory I</td>
<td>1</td>
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<tr>
<td></td>
<td>Ethical Inquiry, Social Responsibility and Citizenship</td>
<td>3</td>
</tr>
<tr>
<td>Spring semester</td>
<td>CHY 463 Biochemistry II (if CHY 462 not taken in Fall)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Physics: Elements of Physics II or General Physics II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHY 116 Introductory Physics Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Thematic cluster course</td>
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</tr>
<tr>
<td></td>
<td>Thematic cluster course</td>
<td>3</td>
</tr>
</tbody>
</table>
Year 4

Fall semester
- BIO elective(s) 3 – 6
- Thematic cluster course 3
- Diversity course 3
- International course 3

Spring semester
- BIO 401, 402 Animal Physiology and Laboratory 5
- BIO elective 3 – 5
- BIO Capstone course 3
- General elective(s) variable

Note: Total credits must add up to 120, with a minimum of 82 credits required for the human biology concentration. Suggested schedule is based on 8 semesters (4 years) with approximately 15 credits per semester. Needing to meet the English or Math proficiency requirements in your first year will alter and possibly lengthen your coursework beyond 4 years. Summer courses can reduce course load during the year.

BS in Biology: Teacher Certification in Life Sciences concentration

Description

The Department of Biological Sciences offers a BS in Biology: Secondary Education in Biological Sciences concentration for prospective teachers at the undergraduate level. This track is offered in partnership with the School of Education & Human Development and is designed to provide prospective teachers a strong academic foundation in Biological Sciences.

All students interested in pursuing this concentration must formally declare their entry by completing the declaration procedures found on the Office of Educator Preparation web site at http://usm.maine.edu/educatorpreparation. Passing Praxis I scores, subscription to Tk20, and two recommendation forms are necessary to complete the declaration process.

Students must maintain a high level of academic achievement. Minimum academic requirements are as follows:

- A grade of C or better in all University Core and major coursework.
- A grade of B or better in all professional education coursework.
- An overall GPA of 3.00 or better.

Prior to admission to the professional internship year, students must pass the Praxis II exam and demonstrate satisfactory progress toward the State of Maine Core Teaching Standards.

Program Requirements

Because this BS in Biology with a concentration in Secondary Education in Biological Sciences is joint between the Department of Biological Sciences in the College of Science, Technology and Health and the USM Teacher Education program within the School of Education & Human Development, there are requirements from both colleges that must be met as well as the university Core Curriculum requirements. Many of these requirements overlap so that the overall credit requirement for this concentration is 115 minimum, depending on any minimum proficiency requirements that must be met in your first year, and the specific 200 level or above Biology courses taken. If possible, students should consider taking education elective courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

USM Core Curriculum (including pre-internship education courses):

- EYE 108, Culture, Identity and Education, or EDU 100, Exploring Teaching as a Profession
- College Writing - ENG 100 (3 cr.)
- Cultural Interpretation (3 cr.)
- Quantitative - MAT 152 (4 cr.)
- Creative Expression (3 cr.) (THE 102 or 170 recommended)
• Socio-Cultural Analysis - HRD 200 Multicultural Human Growth & Development (3 cr.)
• Science Exploration (4 cr.)
• Ethics - EDU 310 Purpose of Schooling in a Democracy (3 cr.)
• Thematic Cluster - EDU 305 Foundations of Cultural and Linguistic Diversity, SED 335 Students with Exceptionalities in General Education, and SED 420 Multi-Tiered Systems of Educational Support (9 cr.)

Professional Education Internship Requirements:

• Teaching methods in area of major: EDU 401 Secondary Science Methods (3 cr.)
• EDU 441, Seminar I (3 cr.)
• EDU 442, Seminar II (3 cr.)
• Year-long education internship (9 cr.)

Tk20 Subscription:

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: http://usm.maine.edu/educatorpreparation

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed within the context of the Unit’s data management system (i.e., Tk20).

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: http://www.maine.gov/doe/cert/fingerprinting/.

Recommended Course Sequence

<table>
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<th>BS in Biology: Secondary Education in Biological Sciences concentration</th>
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USM Undergraduate Academic Catalog 2014-15 436
Certificate in Post-Baccalaureate Pre-Medical

Description

This certificate program is designed for students who already have graduated from college with a baccalaureate degree and who seek to fulfill the science course requirements for admission to schools of medicine or dentistry, or to physician assistant programs.

Program Requirements

In addition to a baccalaureate degree, all of the following courses or equivalent courses transferred from another institution are required. A grade of C- or higher is required for all courses listed below.

Biology (19 credit hours)

- BIO 105, 106 Biological Principles I: Cellular Biology and Laboratory
- BIO 107 Biological Principles II: Evolution, Biodiversity, and Ecology
  or
- BIO 111, 112 Human Anatomy and Physiology I and Laboratory
- BIO 113, 114 Human Anatomy and Physiology II and Laboratory
  And two BIO courses with labs chosen from BIO 201/408, BIO 205, or those numbered 300 or higher

Chemistry (18 credit hours)

- CHY 113, 114, 115, 116 Principles of Chemistry I and II and Laboratory
- CHY 251, 252, 253, 254 Organic Chemistry I and II and Organic Chemistry Laboratory I and II

Physics (10 credit hours)

- PHY 111, 114, 112, 116 Elements of Physics I and II and Laboratory

Mathematics (4 credit hours)

- MAT 152 Calculus A

Certificate in Post-Baccalaureate Pre-Veterinary Certificate

Description

This certificate program is designed for students who already have graduated from college with a baccalaureate degree and who seek to fulfill the
Program Requirements

In addition to a baccalaureate degree, all of the following courses or equivalent courses transferred from another institution are required. A grade of C- or higher is required for all courses listed below.

Biology (19 credit hours)

- BIO 105, 106 Biological Principles I: Cellular Biology and Laboratory
- BIO 107 Biological Principles II: Evolution, Biodiversity, and Ecology
- BIO 281, 282 Microbiology and Laboratory
- And one BIO course with lab chosen from BIO 201/408, BIO 205, or those numbered 300 or higher

Chemistry (18 credit hours)

- CHY 113, 114, 115, 116 Principles of Chemistry I and II and Laboratory
- CHY 251, 252, 253, 254 Organic Chemistry I and II and Organic Chemistry Laboratory I and II

Physics (10 credit hours)

- PHY 111, 114, 112, 116 Elements of Physics I and II and Laboratory

Mathematics (4 credit hours)

- MAT 152 Calculus A

Minor in Biology

Description

Students in other fields of study receive a minor in Biology when they demonstrate that they have taken a rigorous and comprehensive set of courses within the discipline.

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 18. A grade of C- or higher is required for all courses in the minor.

The minor consists of 18 credit hours of biology coursework. There are two different paths to the minor. Students can begin with the general biology sequence of BIO 105, BIO 106, BIO 107, and BIO 109, then take 6 additional credit hours of upper-level electives (200 or above) to equal a total of 18 credit hours.

The other path is to begin with the human biology sequence of BIO 111, BIO 112, BIO 113, and BIO 114, then take 9 additional credit hours of upper-level electives (200 or above) to equal a total of 18 credit hours.

Note for both of these pathways to a minor in biology, at least 6 credit hours of these upper-level courses must be taken within the Department of Biological Sciences (have a BIO prefix).

Transfer Program in Pre-pharmacy Program: two-year, non-degree

Description

A two-year, non-degree program of study is offered to prepare students to apply to a four-year doctoral program in pharmacy (a 2+4 program). Most schools and colleges of pharmacy require 60-75 credits in their two-year pre-pharmacy phase, depending on the number of general education credits required. Individual programs vary in the general education courses they require, such as economics, social science, humanities,
and fine arts, so students should consult those programs accordingly. The pre-pharmacy concentration is a time-intensive program that students will need to commit to upon entering the University. Students are encouraged to take summer courses to reduce the number of credits taken each semester. If students choose not to take summer courses, they should consider extending the program to three years. If they do well in this program of study, they will be competitive with students from other universities applying for entry into professional pharmacy programs. The pre-pharmacy program is not a degree program but if students decide not to transfer after two years, they will be well along the path toward earning a B.S. in biology. For further information contact the Department of Biological Sciences' Health Professions Advisor, Dr. Jeff Walker, 305B Science Building, Portland.

Program Requirements

The minimum number of credits required for the pre-pharmacy program, including general education requirements: 79. A grade of C- or higher is required for all courses listed below. Although there is not a degree in pre-pharmacy, the pre-pharmacy program is taken within the biology degree program.

All of the following are required:

- BIO 105, 106 Biological Principles I: Cellular Biology and Laboratory
- BIO 107 Biological Principles II: Evolution, Biodiversity, and Ecology
- BIO 111, 112 Human Anatomy and Physiology I and Laboratory
- BIO 113, 114 Human Anatomy and Physiology II and Laboratory

Chemistry (18 credit hours)

- CHY 113, 114, 115, 116 Principles of Chemistry I and II and Laboratory
- CHY 251, 252, 253, 254 Organic Chemistry I and II and Organic Chemistry Laboratory I and II

Physics (10 credit hours)

- PHY 111, 114, 112, 116 Elements of Physics I and II and Laboratory

Mathematics (8 credit hours)

- MAT 152 Calculus A
- MAT 220 Statistics for the Biological Sciences

Other required courses:

- ENG 100 College Writing
- ENG 120 Introduction to Literature
- PSY 101 General Psychology I
- SOC 100 Introduction to Sociology
- THE 170 Public Speaking

In addition, students must fulfill an additional 6-9 credits of general education electives, and some programs require three credits of economics.

Recommended Course Sequence

Recommended Course Sequence

Because the biology curriculum includes many support courses (chemistry, physics, math) that need to be taken in addition to biology courses, the Department offers a suggested plan of study, shown below. There is no guarantee that every course listed will be offered when the student wants the course. Students should consult their academic advisors and the Tentative Schedule of Biology Course Offerings on a regular basis.

Pre-pharmacy Program Plan

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Fall semester</td>
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<tr>
<td>BIO 105 Biological Principles I: Cellular Biology</td>
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<td>BIO 106 Laboratory Biology</td>
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<tr>
<td>CHY 113 Principles of Chemistry I</td>
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</tr>
<tr>
<td>CHY 114 Laboratory Techniques I</td>
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<tr>
<td>ENG 100 College Writing</td>
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<td>EYE 1XX Entry Year Experience</td>
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<td>Spring semester</td>
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<tr>
<td>BIO 107 Biological Principles II: Evolution, Biodiversity</td>
<td>4.5</td>
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<tr>
<td>Ecology</td>
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<tr>
<td>CHY 115 Principles of Chemistry II</td>
<td>3</td>
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<tr>
<td>CHY 116 Laboratory Techniques II</td>
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</tbody>
</table>
Course Descriptions

- **Undergraduate**
- **Graduate**

**Undergraduate**

**BIO 101 Biological Foundations**
An introduction to the areas of current biological interest: molecular and cellular biology, genetics and development, and evolution and population biology. Intended primarily for students selecting a laboratory science to satisfy the Core curriculum or for those students not intending to take other courses in the biological sciences. This course cannot be used as a prerequisite for other biology courses. Cr 3.

**BIO 102 Biological Experiences**
Laboratory studies to complement and illustrate the concepts presented in BIO 101. Prerequisite: Prior or concurrent registration in BIO 101. Cr 1.

**BIO 103 Introduction to Marine Biology**
Selected groups of marine plants and animals are used to develop an understanding of biological processes and principles that are basic to all forms of life in the sea. Integrated in the course are aspects of taxonomy, evolution, ecology, behavior, and physiology. Intended primarily for students selecting a laboratory science to satisfy the Core curriculum or for those students not intending to take other courses in the biological sciences. Cr 3.

**BIO 104 Marine Biology Laboratory**
An examination of prototype organisms will be used to illustrate their varied roles in the ocean. Prior or concurrent registration in BIO 103. Cr 1.

**BIO 105 Biological Principles I: Cellular Biology**
This is an introduction to the scientific principles of molecular biology, cell biology, and genetics. Prerequisite: students must have fulfilled the University minimum proficiency requirements in writing and mathematics. Cr 3.

**BIO 106 Laboratory Biology**
Laboratory experiences illustrating concepts and principles introduced in BIO 105. Concurrent enrollment in BIO 105 is highly recommended. Prerequisite: grade of C- or higher or concurrent enrollment in BIO 105. Students must have fulfilled the University minimum proficiency requirements in writing and mathematics. Cr 1.5.

**BIO 107 Biological Principles II: Evolution, Biodiversity, and Ecology**
This is an integrated lecture-laboratory course introducing students to the scientific principles of evolution, biodiversity, and ecology. The lecture and laboratory each meet three hours weekly. Prerequisites: grades of C- or higher in BIO 105 and BIO 106. Cr 4.5.

**BIO 109 Biological Principles III: Functional Biology**
This is an introduction to the scientific principles of structure and function in plants and animals. Prerequisite: grade of C- or higher in BIO 107. Cr 3.

**BIO 111 Human Anatomy and Physiology I**
The course is the first semester of a two-semester sequence concerning the structure and function of the human body. The course focuses on the study of cell chemistry, cell physiology, tissues, integumentary system, skeletal system, muscle system, and nervous system. Prerequisite: satisfactory completion of minimum proficiency requirements. Cr 3.

**BIO 112 Practical Human Anatomy and Physiology I**
Laboratory experiences illustrating concepts and principles introduced in BIO 111. The course will cover the following topics: metrics, language of anatomy, cell physiology, tissues, integumentary system, skeletal system, muscular system, and nervous system. Prerequisite: BIO 111 or concurrent. Cr 1.5.

**BIO 201 Genetics**
A study of the organization, transmission and expression of genes and genomes. Prerequisite: grade of C- or higher in BIO 105 or BIO 111, or permission of instructor. Cr 3.

**BIO 205 Comparative Vertebrate Anatomy**
The comparative study of vertebrate organ systems from an adaptational and evolutionary point of view. Lecture three hours/week; one four-hour laboratory/week. Prerequisites: grade of C- or higher in BIO 109 or BIO 211. Cr 5.

**BIO 211 Human Anatomy and Physiology II**
This course is a continuation of BIO 111. The structure and function of the endocrine, cardiovascular, respiratory, digestive, and urinary systems will be discussed. Prerequisite: grade of C- or higher in BIO 111. Cr 3.

**BIO 212 Practical Human Anatomy and Physiology II**
Laboratory studies of the structure and function of the endocrine, cardiovascular, respiratory, reproductive, digestive, and urinary systems. Prerequisite: grade of C- or higher in BIO 112; BIO 211 or concurrently. Cr 1.5.

**BIO 217 Evolution**
A study of the fossil record, adaptive changes in genes and traits by natural selection, and the evolution of diversity and complexity. Prerequisites: grades of C- or higher in BIO 107 and BIO 201, or permission of instructor. Cr 3.

**BIO 231 Botany**
A study of structure, function, development, reproduction, and environmental adaptations of representative non-vascular and vascular plants. Lecture three hours/week; one three-hour laboratory/week. Prerequisite: grade of C- or higher in BIO 107 or permission of instructor. Cr 4.5.

**BIO 251 History of Biology**
A chronological survey of developments in biological investigations from earliest records to the present day. Prerequisite: grade of C- or higher in BIO 105 or 111, or permission of instructor. Cr 3.

**BIO 281 Microbiology**
This course is a comprehensive introduction to cellular, biochemical, and genetic aspects of prokaryotes. Viruses and some eukaryotic microorganisms are also considered. Prerequisites: grade of C- or higher in CHY 107 or CHY 113 and grade of C- or higher in BIO 105 or BIO 111. Cr 3.

**BIO 282 Microbiological Laboratory**
The laboratory explores basic techniques of isolation and cultivation of microorganisms, primarily bacteria and fungi. In addition, biochemical, molecular, and genetic analyses of microorganisms are introduced. Prerequisite: grade of C- or higher or concurrent enrollment in BIO 281 or BIO 311; or permission of instructor. Cr 2.

**BIO 291 Ornithology**  
This course studies the basic biology of birds: their life histories, migration, ecology, and economic importance, with emphasis on species found in Eastern North America. Numerous field trips to a variety of habitats will be taken for purposes of field identification. Students are responsible for their own appropriate outdoor clothing and footwear and for binoculars. Prerequisite: a grade of C- or higher in BIO 107, or permission of instructor. Cr 4.5.

**BIO 305 Developmental Biology**  
An analysis of the cellular and molecular interactions leading to normal development. Prerequisite: grade of C- or higher in BIO 107. Cr 3.

**BIO 306 Developmental Biology Laboratory**  
This laboratory course is designed to illustrate principles of animal development introduced in BIO 305 using genetic, histochemical, and molecular analyses. Prerequisite: prior or concurrent registration in BIO 305. Cr 2.

**BIO 321 Neurobiology**  
This course presents an overview of nervous system function, structure, and development. Content focuses on the cellular and molecular properties that underlie normal function. Prerequisite: grade of C- or higher in BIO 109 or BIO 111, or permission of instructor. Cr 3.

**BIO 322 Neurobiology Laboratory**  
This laboratory course is designed to enable students to gain experience with a range of experimental techniques used in neurobiology research. These include cell culture, electrophysiology, histochemistry, microscopy, and behavioral analyses. Prerequisite: prior or concurrent registration in BIO 321. Cr 2.

**BIO 331 Ecological Principles**  
A scientific study of interactions determining the distribution and abundance of organisms. Prerequisite: grade of C- or higher in BIO 107. Cr 3.

**BIO 332 Field Ecology**  
Field studies demonstrating basic concepts of ecology. Prerequisite: BIO 331 or concurrently. Cr 2.

**BIO 335 Entomology**  
Integrated lecture-laboratory course on the biology of insects and their impact on humanity. Prerequisite: grade of C- or higher in BIO 107. Cr 3.

**BIO 337 Marine Ecology**  
A comparative ecological study of coastal and oceanic environments. Lecture, three hours/week; weekly four-hour field trip. Prerequisite: Grade of C- or higher in BIO 107. Cr 5.

**BIO 345 Pathophysiology**  
A study of the physiological, genetic, biochemical and environmental basis of noninfectious diseases. Prerequisite: grade of C- or higher in BIO 109 or BIO 211, or permission of instructor. Cr 3.

**BIO 351 Invertebrate Zoology**  
The morphology, physiology and evolution of invertebrate animals. Three hours of lecture and two, two-hour laboratories per week. Prerequisite: a grade of C- or higher in BIO 107. Cr 5.

**BIO 353 Vertebrate Zoology**  
This course is a survey of the vertebrate animals, focusing on classification, morphology, physiology, ecology, behavior, and evolutionary history of each group. Lecture three hours a week; one four-hour laboratory a week. Prerequisites: grade of C- or higher in BIO 109. Cr 5.

**BIO 361 Parasitology**  
The life histories and host-parasite relationships of animal parasites, with emphasis on those of humans. Prerequisite: grade of C- or higher in BIO 107. Cr 2.

**BIO 362 Parasitological Laboratory**  
The morphology and life cycles of parasitic protozoa, helminths, and arthropods. Prerequisite: BIO 361 or concurrently. Cr 2.

**BIO 381 Plant Physiology**  
This course is a study of the physiological activities of plants, and their growth and development as influenced by internal and external factors. Lecture three hours/week; one three-hour laboratory/week. Prerequisites: CHY 115 and grade of C- or higher in either BIO 109 or BIO 231; or
BIO 383 Plant Ecology
This course examines plant ecology at the population, community, and ecosystem levels. Plant adaptations to the environment are also discussed, with emphasis on how these traits influence community and ecosystem processes. Weekly field trips are required. Prerequisite: grade of C- or higher in BIO 107. Cr 5.

BIO 401 Animal Physiology
A study of physiological processes and their regulation in animals. Prerequisites: CHY 115, either PHY 111 or PHY 121, and grade of C- or higher in either BIO 107 or BIO 211; or permission of instructor. Cr 3.

BIO 402 Animal Physiology Laboratory
Laboratory examination of physiological mechanisms in animals. Prerequisite: BIO 401 or concurrently; MAT 220. Cr 2.

BIO 403 Comparative Animal Physiology
Physiological and biochemical basis of environmental adaptation in animals. Prerequisites: CHY 115, junior standing, and grade of C- or higher in BIO 107. Cr 3.

BIO 404 Comparative Animal Physiology Laboratory
Laboratory experiments on the physiological basis of environmental adaptation. Emphasis is on marine animals. Prerequisite: BIO 403 or concurrently; MAT 220. Cr 2.

BIO 405 Animal Behavior
This course is a study of the principles of behavioral organization in vertebrate and invertebrate animals, with emphasis on behavior under natural conditions. Prerequisite: grade of C- or higher in BIO 107 or BIO 211, or permission of instructor. Cr 3.

BIO 406 Animal Behavior Laboratory
This course is a laboratory and field examination of behavioral principles in animals. Prerequisite: BIO 405 or concurrently. Cr 2.

BIO 407 Environmental Modulation of Developmental Mechanisms
This is a molecular genetic analysis of development focusing on an integrative approach toward understanding the evolution of developmental mechanisms. Prerequisite: grades of C- or higher in BIO 201 and BIO 305, or permission of instructor. Cr 3.

BIO 408 Experimental Genetics
This course includes lectures and laboratory exercises in human and fruit fly genetics. This is not a companion course to BIO 201. Prerequisite: BIO 201 or concurrently, or permission of instructor. Cr 2.

BIO 409 Cell and Molecular Biology
A study of the eukaryotic cell at the level of organelles and molecules. The biochemical aspects of cell growth and reproduction are emphasized. Prerequisites: CHY 115 and either grade of C- or higher in BIO 201 or concurrent enrollment in BIO 201. Cr 3.

BIO 410 Cell and Molecular Biology Laboratory
A course in which the techniques of cell fractionation and biochemical analyses are applied to the eukaryotic cell. Prerequisite: BIO 409 or concurrently. Cr 2.

BIO 415 Microbial Ecology
The course begins with an examination of microbial evolution and biodiversity. It then explores the interactions of microorganisms in populations and within communities, and their interactions with other organisms and the environment, including an examination of physiological adaptations and biogeochemical cycles. Prerequisite: grade of C- or higher in BIO 281 or BIO 311 or equivalent, or permission of instructor. Cr 3.

BIO 416 Microbial Ecology Lab
This is the companion lab course to BIO 415, designed as a hands-on project lab to introduce students to a variety of methods used in microbial ecology. There will be a field, lab, computing and written component to the projects that will be completed during the semester. Microscopic, cell culture, molecular and bioinformatics methods will be employed. Prerequisites: grade of C- or higher in BIO 415 (or equivalent) or concurrent enrollment, or permission of instructor. Cr 2.

BIO 417 Issues in Evolution
This course surveys major issues that motivate current research in evolutionary biology, providing an historical analysis of areas of controversy and alternative points of view within the field. The course is based on selected readings in the theoretical and experimental literature of the field, from primary and classical sources. Prerequisites: grades of C- or higher in BIO 201 and BIO 217; or permission of instructor. Cr 3.

BIO 421 Biology Seminar
Weekly oral reports and discussions by students and staff on biological topics of current interest. Prerequisite: 16 hours of biology or permission
of instructor. May be repeated. Cr 1 or 2.

**BIO 431 Principles of Immunology**
An introduction to the fundamentals of immunology, especially as they relate to human diseases. Topics include history of immunology, basic elements of immune systems, principles of natural and acquired immunity, cellular and molecular basis of B cell and T cell development and diversity, and clinical aspects of immunology. Prerequisites: CHY 105 or CHY 115, junior standing, and grade of C- or higher in either BIO 107 or BIO 211; or permission of instructor. Cr 3.

**BIO 441 Problems in Biology (Independent Studies)**
Independent library or laboratory studies on a special topic as mutually arranged by instructor and student. Prerequisite: by arrangement. Credit arranged.

**BIO 442 Honors Thesis in Biology**
This class is a continuation of the independent studies on a special topic started in BIO 441. This final semester includes a mid-semester thesis draft, a substantive revised thesis based on feedback, and a concluding public, oral defense. Fulfills University Core Curriculum Capstone requirement. Prerequisite: BIO 441, EISRC, and approval by Biology Dept Chair. Credit 3.

Graduate ([Back to top](#))

**BIO 501 Animal Physiology**
A study of physiological processes and their regulation in animals. Cr 3.

**BIO 502 Animal Physiology Laboratory**
Laboratory examination of physiological mechanisms in animals. Cr 2.

**BIO 505 Animal Behavior**
This course is a study of the principles of behavioral organization in vertebrate and invertebrate animals, with emphasis on behavior under natural conditions. Cr 3.

**BIO 506 Animal Behavior Laboratory**
This course is a laboratory and field examination of behavioral principles in animals. Cr 2.

**BIO 507 Molecular Mechanisms of Animal Development**
A molecular genetic analysis of animal development focusing on an integrative approach toward understanding the evolution of developmental mechanisms. Cr 3.

**BIO 508 Experimental Genetics**
This course includes both lectures and laboratory exercises in human and fruit fly genetics. Cr 2.

**BIO 509 Cell and Molecular Biology**
A study of the eukaryotic cell at the level of organelles and molecules. The biochemical aspects of cell growth and reproduction are emphasized. Cr 3.

**BIO 510 Cell and Molecular Biology Laboratory**
A course in which the techniques of cell fractionation and biochemical analyses are applied to the eukaryotic cell. Cr 2.

**BIO 511 Estuarine Ecology**
Integrated lecture/field laboratory course focused on interactions determining the distribution and abundance of life in estuaries. Cr 3.

**BIO 515 Microbial Ecology**
The course begins with an examination of microbial evolution and biodiversity, and explores the interactions of microorganisms in populations and communities, with other organisms, and with the environment, including an examination of physiological adaptations and biogeochemical cycles. Cr 3.

**BIO 516 Microbial Ecology Laboratory**
This companion lab course to BIO 515 Microbial Ecology is designed as a hands-on project lab to introduce students to a variety of methods used in microbial ecology. There are field, lab, computer and written components to the projects that will be carried out over the semester. Microscopic, cell culture, molecular, and bioinformatics methods will be employed. Cr 2.

**BIO 517 Issues in Evolution**
This course surveys major issues that motivate current research in evolutionary biology, providing a historical analysis of active areas of controversy and alternative points of view. The course is based on selected readings in the theoretical and experimental literature of the field, from primary and classical sources. Cr 3.
BIO 545 Advanced Pathophysiology
This course is a study of the physiological, genetic, biochemical, and environmental basis of diseases. Systems to be covered include reproductive, gastrointestinal, respiratory, cardiovascular, nervous, and skeletomuscular. Cr 3.

BIO 601 Research Methods in Biology
This course introduces students to faculty members' research. Students will study the philosophy of science, experimental design, data analysis and interpretation, and writing and assessment of scientific papers. Cr 3.

BIO 602 Ethical Issues in Biology
This course examines a variety of ethical issues arising in biology today, including those related to general scientific research, biotechnology, medicine, and the environment. Cr 2.

BIO 611 Endocrinology
This course examines hormone action in animals and plants at the molecular, cellular, organ, and organismal levels. Topics will include the endocrine control of development, behavior, and physiological processes. Cr 3.

BIO 615 Plant Metabolism
This is an advanced course on the regulation and integration of metabolism as viewed from a whole plant perspective. The course deals with primary metabolic pathways such as respiration, photosynthesis, nitrogen metabolism, and carbohydrate and lipid biosynthesis. Compartmentation of metabolic pathways and communication between cells, tissues, and organs via transport systems are discussed. Cr 3.

BIO 621 Graduate Seminar
This course reviews the literature pertinent to topics of biology. It may be repeated for credit as topics vary. Graduate students must complete at least two different seminars. Cr 1-3.

BIO 650 Internship
In this course, students apply their learning to a practical context under supervision of a faculty member. Cr 1-3.

BIO 660 Graduate Independent Study
Independent work on a special topic as arranged by the student, advisor, and committee. Cr 1-6.

BIO 698 Thesis Research
This course involves thesis research and preparation. It may be repeated for credit, but no more than six credits will apply to the degree. Enrollment is required each term in which the thesis is in progress. Cr 1-6.

BIO 699 Literature Review
This course involves preparation of a review paper based on current biological literature. Prerequisite: permission of the graduate advisor. Cr 1-6.

GRS 602 Thesis Completion
See the complete course description in the "Continuous Enrollment and Residency" section of the Academic Policies chapter. Cr 1.
Department of Chemistry

Chemistry Overview

Chair of the Department: Caryn Prudenté, B351 Science Building, Portland

Professors: Prudenté, Tracy; Associate Professors: Benedict, Ford; Assistant Professor: Woodruff; Professors Emeriti: Gordon, Newton, Rhodes, Ricci, Sottery, Whitten

The field of chemistry is concerned with the structure of matter, its transformations, and the energy changes related to these transformations. Departmental aims are to contribute to the student's understanding of chemistry's place within the sciences and in today's industrial and business world, and to provide students concentrating in this field with a thorough and practical education that will be useful in teaching or in industrial, technical, or graduate work.

To achieve these aims the Department of Chemistry offers a four-year program with three tracks leading to baccalaureate degrees (B.A. in chemistry, B.S. in chemistry, and B.S. in biochemistry). Because the chemistry courses in each track are the same for the first two years, it is possible to switch tracks through the junior year. Students considering a chemistry major are strongly urged to consult with a member of the Department of Chemistry faculty to discuss the total program. They should pay particular attention to the pre- and co-requisites necessary for different courses.

Admission Requirements

Students who apply for admission to the chemistry program should have completed college preparatory courses in chemistry, physics, and mathematics. At least two years of algebra and a semester each of geometry and trigonometry are recommended as part of the student's high school program. (Freshmen in the chemistry program who lack this preparation in mathematics are required to take MAT 140, Precalculus Mathematics.)

Additional Information

Laboratory Fees

A laboratory fee is assessed in chemistry laboratory courses.

BA in Chemistry

Description

Because the chemistry courses in each track are the same for the first two years, it is possible to switch tracks through the junior year. Students considering a chemistry major are strongly urged to consult with a member of the Department of Chemistry faculty to discuss the total program.

Program Requirements

To graduate as a chemistry major or minor in any of the programs, a student must earn a grade of C or better in all chemistry courses and a minimum grade point average of 2.0 in all other courses required for the major.

The minimum number of credits in chemistry and related areas (exclusive of the University's Core curriculum) required for the major in this track: 64-65.

The courses include: CHY 113 and 114; 115 and 116; 233; 251 and 252; 253 and 254; 371; 373 and 374; 470; two of the following five offerings: 345; 351; 377 and 378; 421; 461. In addition PHY 121 and 114; PHY 123 and 116; MAT 152, 153; PHY 261 or a math/computer science course approved by the Chemistry Department are required. At least 12 credit hours beyond the 100-level must be taken within the Chemistry Department at USM.
BA in Chemistry with Concentration in Secondary Education

Description

This concentration is for students who want to become certified to teach 7-12 chemistry in Maine. Interested students should see the secondary education chemistry coordinator upon acceptance at USM, matriculation, upon choosing a chemistry major, or as early in their time at USM as possible. The curriculum for this concentration is designed to provide prospective 7-12 teachers a strong academic foundation in chemistry along with a continuous focus on both the theory and practice of teaching through a sequence of pre-internship education courses and field experiences. It has four components: USM Core curriculum, a chemistry major, professional education courses, and electives totaling ~120 credit hours for the degree.

Program Requirements

USM Core Curriculum (including pre-internship education courses):

- EYE 108 Culture, Identity, and Education (recommended), (3 cr.)
- EDU 100 Exploring Teaching (recommended), (3 cr.)
- College Writing- ENG 100 (3 cr.)
- Cultural Interpretation (3 cr.)
- Quantitative- MAT 152 Calculus A (4 cr.)
- Creative Expression (3 cr.)
- Socio-Cultural Analysis- HRD 200 Multicultural Human Growth & Development (3 cr.)
- Science Exploration- CHY 113/114 (4 cr.)
- Ethics- EDU 310 Purpose of Schooling in a Democracy (3 cr.)
- Cluster- EDU 305 Foundations of Cultural and Linguistic Diversity, SED 335 Students with Exceptionalities in General Education, and SED 420 Multi-Tiered Systems of Educational Support (9 cr.)

Major Requirements:

Chemistry major (see major degree requirements) for a BA in chemistry.

Professional Education Internship Year Requirements:

- EDU 401/501 Teaching Science in Grades 7-12 (3 cr.)
- STEM Seminar in Teaching and Learning I (3 cr.)
- STEM Seminar in Teaching and Learning II (3 cr.)
- Internship in Secondary Education (9 cr.)

Electives:

Students must complete elective credit to complete the 120 credit hour degree. For those students interested in teaching at the middle level (grades 7 or 8), it is recommended that they complete coursework in a second content area (e.g., English, social studies, life or physical science) to become highly qualified to teach an additional content area. Those students interested in teaching high school may want to use their elective credits to bolster their content knowledge by taking additional courses in their major discipline and related fields. Finally, students should consider taking education courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

Other Requirements:

All students must formally declare their entry into a teacher certification program or pathway by completing the declaration procedures found on the Office of Educator Preparation web site at http://usm.maine.edu/educatorpreparation. Passing Praxis I scores, subscription to Tk20, and two recommendation forms are necessary to complete the declaration process.

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web
Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed within the context of the Unit’s data management system (i.e., Tk20).

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: http://www.maine.gov/doe/cert/fingerprinting/

Students must maintain a high level of academic achievement. Minimum academic requirements are as follows:

- A grade of C or better in all University Core and major coursework.
- A grade of B or better in all professional education coursework.
- An overall GPA of 3.00 or better.

Prior to admission to the professional internship year, students must pass the Praxis II exam and demonstrate satisfactory progress toward the State of Maine Core Teaching Standards.

**BS in Biochemistry**

**Description**

See Program Requirements

**Program Requirements**

To graduate as a chemistry major or minor in any of the programs, a student must earn a grade of C or better in all chemistry courses and a minimum grade point average of 2.0 in all other courses required for the major.

The minimum number of credits in chemistry and related areas (exclusive of the University's Core curriculum) required for the major in this track: 70-78.

The courses include: CHY 113 and 114; 115 and 116; 233; 251 and 252; 253 and 254; 373; 461 and 462; 463 and 464; either CHY 421 or 377 and 378. In addition either BIO 281 and 282 or BIO 107, 305 and 306 or BIO 107, 109, 409 and 410 or BIO 107, 109, 321 and 322. Also, BIO 105 and 106; PHY 121 and 114; PHY 123 and 116; MAT 152 and 153 are required. At least 12 credit hours beyond the 100-level must be taken within the Chemistry Department at USM.

**BS in Chemistry**

**Description**

See Program Requirements

**Program Requirements**

To graduate as a chemistry major or minor in any of the programs, a student must earn a grade of C or better in all chemistry courses and a minimum grade point average of 2.0 in all other courses required for the major.

The minimum number of credits in chemistry and related areas (exclusive of the University's Core curriculum) required for the major in this track: 69.
The courses include: CHY 113 and 114; 115 and 116; 233; 251 and 252; 253 and 254; 371; 373 and 374; 377 and 378; 421; 470 one of the following three offerings: 345, 351, 461. In addition PHY 121 and 114; PHY 123 and 116; MAT 152, 153; PHY 261 or a math/computer science course approved by the Chemistry Department are required. At least 12 credit hours beyond the 100-level must be taken within the Chemistry Department at USM.

**Minor in Biochemistry**

**Description**

See Program Requirements

**Program Requirements**

To graduate as a chemistry major or minor in any of the programs, a student must earn a grade of C or better in all chemistry courses and a minimum grade point average of 2.0 in all other courses required for the major.

The minimum number of credits required (exclusive of Core courses) for the minor: 24. The minor consists of CHY 113, 114, 115, 116, 251, 252, 253, 254, 461, and either 462 or 463. The biochemistry minor is not open to chemistry majors. At least 6 credit hours beyond the 100-level must be taken within the Chemistry Department at USM.

**Minor in Chemistry**

**Description**

See Program Requirements

**Program Requirements**

To graduate as a chemistry major or minor in any of the programs, a student must earn a grade of C or better in all chemistry courses and a minimum grade point average of 2.0 in all other courses required for the major.

The minimum number of credits (exclusive of the Core curriculum) required for the minor: 19. At least 6 credit hours beyond the 100-level must be taken within the Chemistry Department at USM.

The minor consists of CHY 113 and 114, 115 and 116 and either of the following two groups of courses: 233, 251, and 252, or 371, 373, 374 and 421.

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>CHY 113/114 Principles of Chemistry I with Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>CHY 115/116 Principles of Chemistry II with Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHY 233 Analytical Chemistry with Laboratory</td>
<td>5</td>
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<tr>
<td>CHY 251/252 Organic Chemistry I with Laboratory</td>
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</table>

or

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CHY 113/114 Principles of Chemistry I with Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>CHY 115/116 Principles of Chemistry II with Laboratory</td>
<td>4</td>
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<tr>
<td>CHY 371 Quantum Chemistry</td>
<td>3</td>
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<tr>
<td>CHY 373/374 Chemical Thermodynamics and Laboratory</td>
<td>5</td>
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<tr>
<td>CHY 421 Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>Total hours</td>
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</tbody>
</table>
Course Descriptions

CHY 100 Foundations for College Chemistry
The course will review basic chemical principles commonly presented in high school chemistry and emphasize solving mathematical problems usually done in freshman college-level chemistry. Prerequisite: satisfaction of math proficiency requirements. A high school chemistry course is recommended. Not open to students who have already passed a chemistry course numbered 101 or higher. Cr 2.

CHY 101 Introduction to Chemistry
General topics in chemistry including introductory units on matter and its properties; measurement; elements and compounds; atomic structure; solutions, dispersions, and water; osmotic pressure; chemical bonds; chemical nomenclature; stoichiometry; radio-chemistry; gases; acids, bases and buffers; and energy relationships in chemical processes. Three hours lecture per week (usually concurrent with CHY 102). Prerequisite: high school algebra. Not appropriate for science majors, pre-med, pre-vet or pre-dentistry students. Cr 3.

CHY 102 Introduction to Laboratory Measurement
Experiments will be designed to teach students how to perform accurate and reliable measurements using the major parameters of mass and volume. Topics to be covered include: physical and chemical changes; separation of a mixture; analysis of an ionic solution; properties of water; gases; acids, bases and buffers; titration. One recitation and two laboratory hours per week. Corequisite: CHY 101. Not appropriate for chemistry or biology majors. Cr 1.

CHY 103 Introduction to Organic and Biochemistry
Stress will be placed upon topics of special importance for students of the health sciences: nomenclature of organic compounds; electron distribution in organic molecules; structural features of organic molecules; substitution, elimination, and addition reactions; oxidation reduction reactions; carbohydrates; lipids; proteins and amino acids; enzymes; nucleic acids; metabolism; summary of some aspects of nutrition; pharmaceuticals; medical applications of radiochemistry. Three lecture hours per week (usually concurrent with CHY 104). Prerequisite: a grade of C or better in CHY 101. Not appropriate for chemistry majors, biology majors, or pre-professionals (pre-dental, pre-medical, pre-veterinary). Cr 3.

CHY 104 Introductory Organic and Biochemistry Laboratory
Students will perform experiments to illustrate aspects of organic chemistry of importance to living systems, as well as elementary principles of biochemistry. Topics include separation and identification of organic compounds; qualitative reactions of lipids, proteins, and nucleic acids; introduction to enzyme chemistry. One recitation and two laboratory hours per week. Offered spring semester. Corequisite: CHY 103. Not appropriate for chemistry or biology majors. Cr 1.

CHY 107 Chemistry for Health Sciences
A one-semester introduction to general, organic, and biological chemistry for the health sciences. Topics include acids and bases, pH, chemical kinetics and equilibria, the chemistry of organic compounds; carbohydrates, proteins, lipids, nucleic acids. This course is not suitable for chemistry majors, biology majors, or pre-professionals (pre-dental, pre-medical, pre-veterinary). Cr 3.

CHY 108 Chemistry Laboratory for Health Sciences
Experiments in this laboratory are designed to illustrate principles from CHY 107. Aims of the course are to develop skill in using common laboratory equipment, measuring and analyzing data, and in reporting results of lab work. One three-hour meeting per week. Pre- or corequisite: CHY 107. Cr 1.

CHY 110 Chemistry, Life, and the Environment
An introduction to chemistry and its importance to society. This course is centered on the nature of atoms and molecules, and how the structures of molecules give rise to the beneficial and harmful effects of chemicals. Classroom examples include medicines, consumer products, pollutants, and the molecules of life. Laboratory and home experiments include examining the chemical content of foods. Prerequisite: completion of all Core Basic Competence requirements. Cr 4.

CHY 113 Principles of Chemistry I
A presentation of fundamental principles of chemical science. These principles will be presented in quantitative terms and illustrated by examples of their applications in laboratories and in ordinary non-laboratory experience. This course and CHY 114 (normally taken concurrently) provide the basis for further study of chemistry. The course consists of two lecture sessions and a one hour recitation each week. Pre- or corequisite: successful completion of MAT 108 or equivalent. Cr 3.

CHY 114 Laboratory Techniques I
Laboratory experiments to illustrate the principles that are presented in CHY 113 lectures. One recitation and two laboratory hours per week. Pre- or corequisite: CHY 113. Cr 1.

CHY 115 Principles of Chemistry II
A continuation of CHY 113K. This course is designed to provide the foundation for all further studies in chemistry and is a prerequisite for all upper-level chemistry courses. Prerequisite: a grade of C or better in CHY 113. Cr 3.
CHY 116 Laboratory Techniques II
Laboratory experiments to illustrate the principles presented in CHY 115 lectures. One recitation and two laboratory hours per week. Prerequisite: a grade of C or better in CHY 114. Pre- or corequisite: CHY 115. Cr 1.

CHY 233 Analytical Chemistry w/Lab
A survey of principles and applications of modern analytical chemistry and related calculations. Topics include volumetric and gravimetric analysis, electroanalysis, spectrophotometry, separations, statistics, and error analysis. Quantitative experimental determination by means of classical and instrumental methods. Techniques used include titration, gravimetric analysis, spectrophotometry, electroanalysis, and chromatography. Precision, accuracy, and statistical error analysis of results are emphasized. Prerequisite: a grade of C or better in CHY 115 and CHY 116. Cr 5.

CHY 251 Organic Chemistry I
An intensive treatment of organic chemistry. Topics include: nomenclature; structure and stereochemistry; reaction types: substitution, addition, elimination and oxidation-reduction; reaction mechanisms and factors influencing them; spectroscopic techniques of structure determination (mass, nuclear magnetic resonance, ultraviolet-visible and infrared). Prerequisite: a grade of C or better in CHY 115. Cr 3.

CHY 252 Organic Chemistry Laboratory I
Students conduct independent research by executing a multi-step synthesis of a series of compounds. An additional goal is the characterization of the physical and chemical properties of the target molecules as well as the intermediates. Students will develop proficiency in synthetic methods, chromatography, and spectroscopy by working with model compounds. Prerequisite: a grade of C or better in CHY 116. Pre- or corequisite: CHY 251. Cr 2.

CHY 253 Organic Chemistry II
A continuation of CHY 251, but with a more extensive (and intensive) investigation of the principal categories of organic reactions. Extensive problem solving in such areas as structure determination, spectroscopy, and stereochemistry. The structures and fundamental chemical reactions of lipids, carbohydrates, proteins and nucleic acids will be presented. Prerequisite: a grade of C or better in CHY 251. Cr 3.

CHY 254 Organic Chemistry Laboratory II
Students will apply the skills they developed by working with model compounds in CHY 252 to the synthesis of the desired target molecules. Prerequisite: A grade of C or better in CHY 252. Pre- or corequisite: CHY 253. Cr 2.

CHY 345 Polymer Chemistry
We live in a plastic society. During the past 90 years plastics (synthetic polymers) have become an integral part of our daily lives. This course will survey the past, present, and future of the chemistry of these essential materials. We will discuss the preparation of polymers under radical chain, step-reaction, ionic, and coordination conditions. Then we will consider methods of characterization of polymers, both experimental and theoretical. Finally we will examine commercial polymers and polymer technology. Prerequisites: a grade of C or better in CHY 253 and 373. Cr 3.

CHY 351 Advanced Organic Chemistry
This course will explore fundamentals of organic reaction mechanisms. A partial list of the topics to be covered includes steric, electronic, and stereo electronic effects; conformational analysis; thermodynamic and kinetic principles; applications of molecular orbital theory; reactive intermediates; and modern techniques used to study reaction mechanisms. Course content may vary from year to year, depending on student interests. Prerequisite: a grade of C or better in CHY 253. Cr 3.

CHY 371 Quantum Chemistry
Principles of theoretical chemistry: quantum mechanics and spectroscopy. Candidates for the B.S. degree elect this course in the fall semester of the junior year. Prerequisites: a grade of C or better in CHY 115, MAT 152, and PHY 123. Cr 3.

CHY 373 Chemical Thermodynamics
Principles of theoretical chemistry: classical thermodynamics, molecular energetics, equilibrium, reaction kinetics, statistical thermodynamics, and electrochemistry. Prerequisites: a grade of C or better in CHY 115, MAT 152, and PHY 123. Cr 3.

CHY 374 Chemical Thermodynamics Laboratory
Experiments illustrating material presented in CHY 373. One recitation and three laboratory hours per week. Prerequisite: a grade of C or better in CHY 116. Pre- or corequisite: CHY 373. Cr 2.

CHY 377 Spectroscopy
The course focuses on the structural elucidation of molecules through the use of mass spectrometry, infrared spectrometry, and nuclear magnetic spectrometry. A thorough consideration of the operation of the instrumentation used to obtain the spectra will also be addressed. Additional topics may include ultraviolet-visible and fluorescence spectroscopies and x-ray diffraction techniques. Prerequisite: a grade of C or better in CHY 233 and CHY 253. Pre- or corequisite: CHY 371 or permission of instructor. Cr 3.

CHY 378 Instrumental Analysis Laboratory
Experiments will be performed in electrochemistry, mass spectrometry, gas and liquid chromatography, and UV-Vis, NMR, AA, and fluorescence spectroscopy. Prerequisites: grades of C or better in CHY 233 and CHY 254. One hour of pre-lab recitation and three laboratory hours per week. Cr 2.

**CHY 410-419 Special Topics**
Reading and discussion of advanced subjects or instruction in special topics/research. Permission of instructor required. 6 credits maximum. Cr 1-3.

**CHY 421 Inorganic Chemistry**
Descriptive chemistry of the inorganic compounds, structure, bonding and ligand field theory. Prerequisite: a grade of C or better in CHY 115. Pre- or corequisite: CHY 371 or permission of instructor. Cr 3.

**CHY 422 Advanced Chemistry Laboratory**
Preparation and characterization of compounds utilizing advanced modern techniques and instrumentation. One recitation and three laboratory hours per week. Pre- or corequisite: CHY 421. Not offered every year. Cr 2.

**CHY 461 Biochemistry**
Application of chemical methods and principles to understanding biological processes. Topics include structure and action of nucleotides, proteins, lipids, and carbohydrates; enzyme kinetics and mechanisms; membranes and transport; and metabolism and energy conversion. This one-semester course provides a survey of the major areas of biochemistry, except for nucleic acids. Prerequisite: a grade of C or better in CHY 253 or by instructor permission. Cr 3.

**CHY 462 Biochemistry Laboratory**
Basic experimental methods in modern biochemistry. Experiments include detecting, purifying, crystallizing, and characterizing proteins; analyzing protein structure, and measuring enzyme kinetics. Techniques include ultraviolet and visible spectrophotometry; ion-exchange, gel, and high-pressure liquid chromatography; electrophoresis, and analysis of protein structure by computer graphics. One hour lecture and three hours laboratory per week. Prerequisite: a grade of C or better in CHY 254. Pre- or corequisite: CHY 461. Cr 2.

**CHY 463 Biochemistry II**
Continuation of CHY 461. Topics include selected biosynthetic pathways, including photosynthesis; signal transduction applied to hormones, nerve transmission, and the five senses; and methods for structural analysis of macromolecules, including X-ray diffraction, nuclear magnetic resonance, and homology modeling. Participants present a seminar on a topic of current biochemical research. Prerequisite: a grade of C or better in CHY 461. Cr 3.

**CHY 464 Biochemistry Laboratory II**
Continuation of CHY 462. Experiments include detecting and characterizing lipids, sequencing proteins and nucleic acids, analyzing protein conformation, measuring protein synthesis, and characterizing antigen-antibody interactions. Techniques include paper and thin-layer chromatography, gel electrophoresis, and computer graphics. One hour lecture and three hours laboratory per week. Prerequisite: a grade of C or better in CHY 462. Pre- or corequisite: CHY 463. Cr 2.

**CHY 470 Chemistry in Perspective**
Capstone course in chemistry requiring both oral and written presentation of a current topic in chemistry with a laboratory component. This course includes an interdisciplinary component, as well as, ethical, economic, and political considerations of the research topic. Required of all senior majors in the Chemistry BS and BA programs. Two hours of lecture and four hours of laboratory. Prerequisite: a grade of C or better in CHY 233, 253/254, and 373/374. Pre- or corequisite: CHY 371 and CHY 377/378. Cr 4.

**CHY 490 Senior Research Project**
Open to senior majors. Prerequisites include a 2.0 GPA in chemistry, completion of the Analytical and Organic Chemistry series, and permission of the department. 15 credits maximum. Cr 3-15.
Computer Science

Computer Science Overview

Chair of the Department: David Briggs

Professors: Alagic; Associate Professors: Boothe, Briggs, Congdon, MacLeod;

Adjunct Faculty: Bantz, El-Taha, Felch, Heath, Houser, Largay, Rad

The Department of Computer Science offers a four-year program leading to a B.S. in computer science. Computer science courses concern the theory and practice of solving problems by computer. More specifically, computer scientists build and analyze tools that allow complex problems to be solved. A component of computer science is the study and use of various programming languages, but computer science consists of much more than programming. The mathematical theory of computer science aids in determining the efficiency and correctness of algorithms and programs. In addition, a computer scientist must understand how computers are built and operate. The systematic application of general methods and computing technology to actual problems is also part of computer science.

The undergraduate degree in computer science prepares students both for careers in the computing profession and for graduate study. Course requirements ensure that students receive instruction in both practical and theoretical aspects of computer science. The B.S. degree in computer science is accredited by the Computing Accreditation Commission (CAC) of ABET, the national board that accredits computer, engineering, and technology programs (see http://www.abet.org).

Program Objectives

At the time of graduation, USM computer science students will be prepared for careers and/or graduate school. In three to five years, graduates of the USM computer science program will

- have successful professional careers
- be valued, ethical members of their profession and society
- be actively involved in continuing their professional education

Double Majors

Students who opt to pursue a double major with computer science as one of the major fields of study must satisfy all computer science degree requirements. The general requirements for a double major are listed under the heading Double Major in this catalog.

BS in Computer Science

Description

The Bachelor of Science in Computer Science prepares the student for either continued study at the graduate level or entry into the labor market. Our students have been successful at both, with some earning doctoral degrees and some reaching high levels in the private sector, including the director of software development at a major corporation. The curriculum includes a required core of courses that provides a broad base of fundamental knowledge, but allows for individuals to follow their own specific interests at the advanced level. All courses focus on general principles that will remain valid into the future but use tools and vehicles reflecting contemporary practice.

Computer Science is perhaps the most pervasive technology of our time, reaching into every aspect of modern life, from work to recreation. It spans many disciplines, from mathematics and electrical engineering to linguistics, cognitive psychology and graphic design. It is a challenge to provide a definition of the essence of such a sprawling discipline, but one that we like is that Computer Science is the study of what can be automated.

Many people imagine that one must learn advanced mathematics to become a computer scientist or software developer. To be sure, some applications, such as computational modeling of physical processes, require techniques from advanced mathematics. Other applications, however, do not require mathematics beyond the basics taught in a strong high school program. Far more important is the ability to think logically and precisely and the ability to devise a plan to solve a problem. We have had students successfully convert to Computer Science from a variety of
non-technical disciplines, including history, classics, and English literature.

**Program Requirements**

All students are reminded that, in addition to meeting departmental requirements for a major, they must also meet the University Core Curriculum requirements. Students are advised that COS 430 Software Engineering satisfies the Core Curriculum Capstone requirement.

The total number of credits for graduation is 120.

Courses used to fulfill major requirements in sections A through F below must be passed with a grade of C– or better. The accumulative grade point average of all courses applied to the major must be at least 2.0. At most three credits of COS 497 can be used to meet a degree requirement.

The specific course requirements are as follows:

A. Computer Science:
   - COS 160 Structured Problem Solving: Java
   - COS 161 Algorithms in Programming
   - COS 170 Structured Programming Laboratory
   - COS 250 Computer Organization
   - COS 255 Computer Organization Laboratory
   - COS 285 Data Structures
   - COS 350 Systems Programming
   - COS 360 Programming Languages
   - COS 485 Design of Computing Algorithms
   - COS 398 Professional Ethics and Social Impact of Computing

B. Software Design:
   - COS 420 Object Oriented Design
   - or COS 430 Software Engineering

C. Computer Systems:
   - COS 450 Operating Systems
   - or COS 457 Database Systems

D. Completion of three additional COS courses numbered 300 and above, excluding COS 498.

Graduate courses in the Computer Science Department can be used to fulfill the requirements in section D.

E. Mathematics and Science requirements
   1. Completion of:
      - MAT 145 Discrete Mathematics I
      - COS 280 Discrete Mathematics II
   2. Enough additional courses from the following list to total, with the two required courses of the last item, at least 15 credit hours:
      - MAT 152 Calculus A
      - MAT 153 Calculus B
      - MAT 252 Calculus C
      - MAT 281 Introduction to Probability
      - MAT 282 Statistical Inference
      - MAT 292 Theory of Numbers
      - MAT 295 Linear Algebra
      - MAT 350 Differential Equations
      - MAT 352 Real Analysis
      - MAT 355 Complex Analysis
      - MAT 364 Numerical Analysis
      - MAT 366 Deterministic Models in Operations Research
      - MAT 370 Non-Euclidean Geometry
      - MAT 380 Probability and Statistics
      - MAT 383 System Modeling and Simulation
      - MAT 395 Abstract Algebra
      - MAT 460 Mathematical Modeling
      - MAT 461 Stochastic Models in Operations Research
      - MAT 490 Topology
      - MAT 492 Graph Theory and Combinatorics
3. Completion of a two-semester sequence of any from the three
   CHY 113 with CHY 114 and CHY 115 with CHY 116
   or
   PHY 121 with PHY 114 and PHY 123 with PHY 116
   or
   BIO 105 with BIO 106 and BIO 107

4. Enough additional courses from E(2) or the sciences to make at least 30 credit hours combined of mathematics and science. A science course taken to fulfill this requirement must be one that satisfies a degree requirement within its discipline and if it has an accompanying lab course the lab must be taken.

F. Communication skills requirement:
   THE 170 Public Speaking
   ITP 210 Technical Writing

**Recommended Course Sequence**

**Recommended Course Sequence**

**Suggested Schedule**

The following schedule of mathematics and computer science courses is typical for the freshman and sophomore years.

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<thead>
<tr>
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<th>Fall</th>
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<tbody>
<tr>
<td>First year</td>
<td>COS 160</td>
<td>COS 161</td>
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<td></td>
<td>COS 170</td>
<td>MAT 145</td>
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<td>Second year</td>
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<td>COS 250</td>
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<tr>
<td></td>
<td>COS 285</td>
<td>COS 255</td>
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**Minor in Computer Science**

**Description**

The Minor in Computer Science is intended for individuals who want to combine a basic knowledge of programming practice and computer hardware with more extensive knowledge in another domain. Students who minor in Computer Science will be able to write programs to perform useful tasks in their areas of specialty. They will be prepared to recognize opportunities to automate tasks from their domains, and to liaison between technical and non-technical staff. They are not required to learn as much theoretical material and do not get the breadth and depth that majors receive.

**Program Requirements**

A minor in computer science may be obtained by successfully completing the following courses with an accumulative grade point average of 2.0 in these courses: COS 160 and COS 170; COS 161; COS 250 and COS 255; COS 285, and two additional COS courses numbered 250 or greater, excluding COS 498.

**Course Descriptions**

- Undergraduate
- Graduate
Undergraduate

Course Fees

In some computer science courses fees are assessed to cover the cost of materials, supplies, and tutorial support staff.

COS 131 Web Programming
In this course students develop actual Web pages and acquire basic skills in Web programming languages such as JavaScript, VBScript, and Active Server Pages. Other topics include: object model, event model, dynamic HTML, Web-enabled databases, and XML. Prerequisite: a programming course or instructor permission. Cr 3.

COS 141 Visual Basic I
Visual Basic is used to introduce students to the fundamental skills of problem solving and programming. The class includes both classroom presentation and instructor-guided laboratory sessions. Small to medium size programming projects are completed. Prerequisite: a working knowledge of the Windows operating system. Cr 3.

COS 142 Visual Basic II
The concepts of COS 141 are extended to present programming in an application development environment. Topics covered in this course include static and dynamic arrays, user defined data types, class modules and dynamic link library development, serial and random access files, database connectivity, advanced Visual Basic controls, ActiveX controls, and Web programming using Active Server Pages. Component Object Modeling (COM) topics will be included. Small to medium size programming projects and a comprehensive final project will be completed. Prerequisite: COS 141 or permission of the instructor. Cr 3.

COS 160 Structured Problem Solving: Java
An introduction to the use of digital computers for problem solving, employing the Java programming language as a vehicle. Content includes elementary control structures and data representation methods provided by Java and the object-oriented programming methodology. Course requirements include a substantial number of programming projects. This course must be taken concurrently with COS 170. Offered each semester. Prerequisite: successful completion of the USM mathematics proficiency requirement. Cr 3.

COS 161 Algorithms in Programming
The development of algorithms and their implementations in a higher-level programming language, with emphasis on proper design principles and advanced programming concepts. Introduction to the performance analysis of algorithms. Course requirements include substantial programming projects. Offered each semester. Prerequisites: COS 160, and working knowledge of word processing and Web browsing. Cr 4.

COS 170 Structured Programming Laboratory
Computational experiments will be designed to teach students how to construct reliable software using Java. Topics to be covered include: Windows system, conditional program flow, iteration, procedures and functions, and symbolic debugging. Offered each semester. This course must be taken concurrently with COS 160. Cr 1.

COS 211 The C Programming Language
A first course in the C programming language. This course should provide students with fundamental skills of C programming. Small to medium size programming projects will be written. Prerequisite: A previous course in problem solving and programming (e.g., COS 160) or instructor's permission. Cr 3.

COS 214 C++ for Programmers
Introduces the basics of C++ programming. Covers types, expressions, control structures, functions, and a brief introduction to classes and objects. This course will prepare students for further object-oriented courses. Prerequisite: a previous college-level course in problem solving and programming or instructor's permission. Cr 3.

COS 215 Introduction to C++ for C Programmers
The changes in the syntax and semantics of C that resulted in C++ are presented. C++ will be covered up to and including a brief introduction to classes and objects. This course will prepare students for further object-oriented courses. Prerequisite: a previous course in problem solving and programming in C (e.g., COS 211) or instructor's permission. Cr 1.

COS 230 Programming in COBOL
A study of the programming language used primarily in business. Prerequisite: COS 160 or analogous experience. Cr 3.

COS 241 Java Programming
Students will develop software using the Java programming language. Some work on connecting Java applets to Web pages using HTML will be included. Prerequisite: a previous course in problem solving and programming, or instructor's permission. Cr 3.

COS 246 Programming Topics
Topics to be covered may include programming languages not otherwise offered (e.g., Ada, Smalltalk), different programming methodologies (e.g., object-oriented programming), assembly languages, and other specific areas of programming. Prerequisite: COS 161 or permission of
COS 250 Computer Organization
The basic hardware, architecture, and software of computer systems are covered. Subjects include digital logic design, microprogramming, machine languages, assembly languages, and operating systems. Prerequisite: COS 161. This course must be taken concurrently with COS 255. Typically offered only in the spring semester. Cr 3.

COS 255 Computer Organization Laboratory
Students design, build, and test combinational and sequential logic circuits and write assembly language programs. Typically offered only in the spring semester. This course must be taken concurrently with COS 250. Cr 1.

COS 280 Discrete Mathematics II
Concepts of modern algebra, set theory, Boolean algebra and predicate logic, elements of graph theory, and their application to computer science. This course emphasizes a syntactic approach to proof discovery. Typically offered only in the fall semester. Prerequisites: MAT 145 and COS 160. Cr 4.

COS 285 Data Structures
Basic abstract data types and their representations, fundamental algorithms, and algorithm analysis. Consideration is given to applications. Specific topics include linked structures, trees, searching and sorting, priority queues, graphs, and hashing. Course requirements include a substantial programming component. Typically offered only in the fall semester. Prerequisites: COS 161 and either of MAT 145 or MAT 152, or their equivalents. Cr 3.

COS 350 Systems Programming
A study of systems programming concepts and software, including the C programming language and the Unix programming environment and operating system interface. Students develop their abilities in these areas through programming exercises and projects. Typically offered only in the spring semester. Prerequisites: COS 250, COS 285. Cr 3.

COS 360 Programming Languages
Students will acquire principles of programming languages and systems, such as (i) core notions (syntax, semantics, types, and implementation models), (ii) differing language paradigms (procedural, object-oriented, functional, logic), their design principles, and their implications for programming along with their mathematical foundations. These principles are studied as the basis for (i) applications in modeling and design of computer software, (ii) usage of modern techniques and tools associated with programming language. Typically offered only in the fall semester. Prerequisites: COS 285. Cr 3.

COS 368 Graphical User Interface Design
Principles of graphical user interface design are utilized to build working interfaces. The programming language used may vary from offering to offering. Possible languages include Java and C++. Students will work in an object-oriented, event-driven environment. Typically offered once every two years Prerequisite: COS 285 or instructor's permission. Cr 3.

COS 374 Numerical Analysis
A study of the theory and application of computational algorithms for interpolation, equation solving, matrix methods, integration; error analysis. Typically offered once every two years Prerequisites: MAT 252, MAT 295, COS 160, and permission of instructor. Cr 3.

COS 375 Web Applications Development
This course focuses on development of well designed web applications. Students will learn how to build rich user interfaces using client-side frameworks, develop web services, and use design patterns in their software applications. Course requirements include a substantial number of programming projects. Prerequisites: COS 285, or permission of instructor. Cr 4.

COS 398 Professional Ethics and Social Impact of Computing
A study of ethical perspectives and social responsibilities of computer professionals. Assigned readings provide the basis for class discussions of such issues as social control and privacy, computer viruses, ACM code of professional conduct, hacking, limits of correctness in computer software, military influence on computer science research and education. Prerequisite: junior or senior standing. Typically offered in spring semester only. Cr 3.

COS 399 Programming Autonomous Robots
Introduction to the programming concepts involved with autonomous robotic systems. Using off-the-shelf "robot kits" students will design a simple robotic platform to meet specific goals. Then, using a common platform for the remainder of the course, students will develop their programming capabilities. Simple open-ended, feedback, and artificial intelligence systems will be explored throughout the course. Several benchmarks and robot competitions will be used to demonstrate the platform and programming learned in the course. Typically offered once
COS 400 Introduction to Simulation Modeling
Introduction to general principles of discrete event simulation modeling. Topics include design of simulation models, their implementation in a computer simulation language, and analysis of simulation data. Applications will emphasize computer and communication science. Requirements include a substantial programming component. Typically offered once every two years Prerequisite: COS 285. Cr 3.

COS 420 Object-Oriented Design
This course will focus on the construction of object-oriented software. Students will learn conceptual models for organizing objects and object hierarchies, an object-oriented design notation, the application of design patterns, and the use of software development methodologies such as the Agile development process. The capabilities will be used to solve relatively complex problems in a group setting. Typically offered once every two years. Prerequisite: COS 285. Cr 4.

COS 430 Software Engineering
This course covers methods, techniques and tools for modern software development, including topics such as requirements analysis and specification, software design, object-oriented software construction, software verification, and software maintenance. The course relies mostly on object-oriented software technology and related tools. UML is the modeling tool used in this course extended with object-oriented assertion languages such as OCL. In addition to Java, the C# technology is used as an implementation technology in order to expand the students' professional background and make use of the most recently developed industrial tools. Modern specification and verification tools such as JML (Java Modeling Language) and Spec# are used in this course. No prior knowledge of C# and its related tools is required. The course includes assignments involving analysis, design, specification, implementation and verification of object-oriented software. This course satisfies the Core Curriculum Capstone requirement. Typically offered once every two years. Prerequisites: COS 285 or COS 360 or permission of the instructor. Cr 3.

COS 441 Software Architecture
Successful design of complex software systems requires the ability to describe, evaluate and create systems at an architectural level of abstraction. This course introduces architectural design of complex software systems. The course considers commonly-used software system structures, techniques for designing and implementing these structures, models and formal notations for characterizing and reasoning about architectures, tools for generating specific instances of an architecture, and case studies of actual system architectures. It teaches the skills and background needed to evaluate the architectures of existing systems and to design new systems in principled ways using well-founded architectural paradigms. Prerequisite: COS 420 or COS 430. Cr 3.

COS 444 Software Project Management
The course covers project life cycle, including developing the charter, plans and justification, outsourcing and procurement decisions, scope management, time and cost estimation, quality control, personnel management, risk assessment, and the critical role of communication, both internal and external, to the project. Students will learn to lead and participate in significant software projects. Experts from industry will present case studies of success and failure. Typically offered once every two years. Prerequisite: COS 420 or COS 430. Cr 3.

COS 450 Operating Systems
Bottom up construction of a layered operating system beginning with the hardware interface and ending with the user interface. Specific topics covered include concurrent processes, process management, I/O, virtual memory, file management, resource scheduling, and performance measurement. Students are assumed to be familiar with general machine architecture, functions of system software (compilers, loaders, editors, etc.), data structures, and to have some experience with UNIX or another multiprogramming operating system. Typically offered once every two years. Prerequisites: COS 250, COS 350. Cr 3.

COS 452 Computer Graphics
A study of the techniques involved in computer graphics systems. Topics include: point-plotting and line drawing in two- and three-dimensional space; clipping and windowing; geometric modeling; algorithmic solutions to the hidden line and hidden surface problems. Typically offered once every two years. Prerequisite: COS 285. Cr 4.

COS 455 Computer Architecture
Fundamentals of the design and organization of digital computers. Topics include applications of Boolean algebra to logical design; machine algorithms used in addition, subtraction, multiplication, etc.; types of memory; synchronous and asynchronous operation; minimization of logic circuits. Also, concepts from microprocessors and large parallel computers. Typically offered once every two years. Prerequisite: COS 250. Cr 3.

COS 457 Database Systems
Study of the methods and principles of database management systems (DBMS). Topics addressed include DBMS objectives and architecture, data models, the SQL data definition and data manipulation language, and providing Internet access to databases. The entity-relationship and relational models are emphasized and their use required in a design project. Typically offered once every two years. Prerequisites: COS 280, COS 285. Cr 3.

COS 460 Computer Networks
An introduction to computer networks. Computer network architecture is described. Other topics include digital data communication, local area networks, wide area networks, internetworks, and the Internet. Specific technologies, including Ethernet and ATM, and protocols, including
COS 465 Distributed Systems
An introduction to the design and operation of distributed systems. Topics include client-server models, interprocess communications, RPC, replication and consistency, online transaction processing, error and fault recovery, encryption and security. Examples will be taken from extant distributed systems. Prerequisites: COS 450 and COS 460, or their equivalents, or permission of the instructor. Cr 3.

COS 467 Performance Analysis of Distributed Systems
The objective of the course is to learn techniques that enable assessing the performance of applications running on distributed systems. This is an important topic because software developers should have a good understanding regarding the performance of the distributed applications they develop. This course presents techniques such that the performance of distributed applications can be evaluated. Topics to be covered include queueing theory, simulation, availability, and performability modeling. Other techniques used to assess the performance of distributed systems will be introduced as needed. Prerequisites: COS 450 or COS 460, and MAT 281 or MAT 380. Cr 3.

COS 469 Compiler Construction
Definition of languages via context-free grammars. Organization of a compiler into phases of lexical analysis, parsing, code generation, and optimization. Students will implement a compiler for a Pascal-like language. Typically offered every two years Prerequisite: COS 360. Cr 3.

COS 470 Topics in Computer Science
Topics to be covered may include philosophy of computers, history of computers, computers and society, simulation, graphics, and other advanced topics. Typically offered every two years Prerequisite: COS 285 or permission of the instructor. Cr 3.

COS 471 Advanced Database Systems
This course covers object-oriented and XML database technologies, their interfacing and integration. Object-oriented topics include developments from industrial standards such as ODMG and Java Data Objects, query languages such as OQL, Java database technology, object-relational systems, and language integrated queries such as LINQ. The XML technology is represented by schema languages such as XML Schema and query languages such as XQuery. Object-oriented interfaces to XML include DOM, LINQ to XML, LINQ to XSD, as well as other industrial developments. The course includes hands-on experience with advanced database management systems. The requirements include an object-oriented software and database development project, addressed by teams, and a term paper. Typically offered every two years Prerequisite: permission of the instructor. Cr 3.

COS 472 Artificial Intelligence and Data Mining
An introduction to the underlying concepts and applications of intelligent systems. Topics include heuristic search techniques, pattern matching, rule-based systems, computer representations of knowledge, and machine learning and data mining techniques. Course work includes regular labs and larger projects. Students will learn to conduct research in artificial intelligence and will complete a modest research project. Typically offered every two years. Prerequisite: COS 350 or permission of instructor. Cr 3.

COS 476 Advanced Object-Oriented Design
This course considers developing object-oriented, multi-tier, Web-based applications. Topics will include object-oriented design patterns in distributed environments, software components, and software frameworks. The course also has a significant hands-on implementation component, and after having completed this course, students will have practical experience with several leading distributed object technologies, including AJAX, Web Services, Enterprise JavaBeans, JDBC, and Servlets. The course is structured so that students will work in teams to develop a medium-sized, multi-tier application that incorporates several of the technologies mentioned above. Lectures will provide an introduction to the technologies and discuss principled ways to apply these technologies. Typically offered every two years Prerequisite: COS 420 or permission of instructor. Cr 3.

COS 478 Advanced Java Technology
The goal of this course is to provide an in-depth study of the most important and the more advanced components of the Java technology. The course covers topics such as concurrent object-oriented programming in Java, Java Core Reflection, the underlying virtual platform (the Java Virtual Machine), genericity (parametric polymorphism), persistence, and assertions. Programming assignments include concurrent programming, programming with parametric collection types, dynamic loading and compilation, usage of the Java reflective capabilities, and usage of persistent capabilities available in Java and in its extensions. The outcome of this course is a high-level of professional expertise in the overall Java technology. Typically offered every two years Prerequisite: COS 360. Cr 3.

COS 479 Software Specification and Verification
This course combines formal and practical object-oriented software techniques in developing the following main themes of object-oriented software technology: (i) object-oriented software systems that provide efficiency and reliability based on an advanced type system and (ii) correctness and behavioral compatibility in software re-use based on object-oriented assertion languages and programming by contract methodology. Practical implications and usage of the general notions such genericity, self typing and reflection in complex software systems will be based on type systems of major object-oriented languages such as Java, C# and Eiffel. The assertion languages demonstrating the main themes in this course are JML (Java Modeling Language) and Spec# (an assertion language for C#). The programming assignments are based on a pragmatic methodology for object-oriented software construction (programming by contract) along with the associated tools including program verification techniques and systems. Typically offered every two years Prerequisite: COS 360. Cr 3.
COS 480 Theory of Computation
Study of the theoretical foundations of computer science, including elements of set theory and logic, the specification of formal languages via finite automata, regular expressions, push-down automata, context free grammars, and Turing machines. Also introduces the concepts of recursive and recursively enumerable sets. Prerequisite: COS 280. Cr 3.

COS 485 Design of Computing Algorithms
An introduction to the design and analysis of algorithms. Techniques for designing algorithms, such as divide-and-conquer, greedy method, dynamic programming, and backtracking are emphasized and illustrated. Many problems of practical importance are covered including: minimum spanning tree, single source shortest path, traveling salesperson, and graph search. The concepts of NP-completeness are also considered. Substantial programming in a high-level language. Typically offered only in the spring semester. Prerequisite: COS 285. Cr 3.

COS 495 Advanced Web Architectures
The focus of communication over the Internet is shifting to computer-to-computer interaction. Standards for this interaction (ebXML, SOAP, WSFL) are now in place and maturing, and commercial use is exploding. We will survey these standards and evaluate their security, efficiency, and completeness. We will construct several case studies, including Web-based commerce. As a team, we will acquire and learn how to use available tooling, and we will put together working Web services and test their ability to interact with each other. Typically offered once every two years Prerequisites: COS 285 and junior standing. Cr 3.

COS 497 Independent Study in Computer Science
An opportunity for juniors and seniors who have demonstrated critical and analytical capability to pursue a project independently, charting a course and exploring an area of interest within their major field. At most, three credits of COS 497 can be used to satisfy degree requirements. Prerequisites: junior or senior standing and permission of the Department chair and instructor. Cr 1-3.

COS 498 Computer Science Internship
An opportunity for students to gain practical experience in computer science-related employment. The University internship program provides placement. This course is offered on a pass/fail basis only, does not fulfill any computer science requirement, and a maximum of 6 credits may be taken. Cr 3.

Graduate
Graduate level computer science courses are generally restricted to graduate students who have successfully gone through an admissions procedure, but others may take them by permission from the instructor.

COS 540 Computer Networks
An introduction to computer networks. Computer network architecture is described. Other topics include digital data communication, local area networks, wide area networks, internetworks, and the Internet. Specific technologies, including Ethernet and ATM, and protocols, including TCP/IP, will be considered in detail. Normally offered once every two years. Prerequisite: graduate standing. Cr 3.

COS 541 Software Architecture
Successful design of complex software systems requires the ability to describe, evaluate and create systems at an architectural level of abstraction. This course introduces architectural design of complex software systems. The course considers commonly-used software system structures, techniques for designing and implementing these structures, models and formal notations for characterizing and reasoning about architectures, tools for generating specific instances of an architecture, and case studies of actual system architectures. It teaches the skills and background needed to evaluate the architectures of existing systems and to design new systems in principled ways using well-founded architectural paradigms. Prerequisite: COS 420 or COS 430 or an equivalent. Cr 3.

COS 542 Distributed Systems
An introduction to the design and operation of distributed systems. Topics include client-server models, interprocess communications, RPC, replication and consistency, online transaction processing, error and fault recovery, encryption, and security. Examples will be taken from extant distributed systems. Students will design and implement a distributed system. Prerequisites: COS 450 and COS 460, or their equivalents, or permission of instructor. Cr 3.

COS 543 Distributed Systems: A Second Course
A continuation of COS 465/542, the course covers advanced topics relating to distributed systems that are not addressed in the first course. Specific topics include shared data, managing file replication, currency control, distributed transactions, fault tolerance and security. Case studies of existing systems and examination of new developments are also addressed. Normally offered once every two years. Prerequisites: COS 465 or COS 542. Cr 3.

COS 544 Software Project Management
Students will learn how to lead and participate in significant software projects. The course will cover the project life cycle, including developing the charter, plans, and justification; outsourcing and other procurement decisions; management of scope, time, cost, quality, personnel, and risk; and the critical role of communications inside and outside the project. Experts from industry will present case studies of success and failure. Prerequisite: previous bachelor's degree and COS 420 or COS 430. Cr 3.
COS 545 Wireless Data Communication
A seminar-based course that surveys the rapidly evolving field of wireless data networks. Wireless technologies, systems, and services are
investigated with emphasis on existing systems and standards. Topics cover mobile data and wireless LANs. Prerequisite: COS 460, an equivalent
course, or substantial experience with computer network architecture. Cr 3.

COS 550 Operating Systems
Topics include concurrent processes, process management, I/O, virtual memory, file management, resource scheduling and performance
measurement. Prerequisite: graduate standing. Cr 3.

COS 552 Advanced Computer Networks
This second course in computer networks explores recent developments with particular emphasis on fiber optic high speed networks. A laboratory
component involving performance evaluation of network protocols may be included. Prerequisite: MAT 380 and COS 460/540 or permission of
instructor. Cr 3.

COS 555 Advanced Computer Architecture
This course presents topics from research areas in computer architecture as well as advanced and emerging technologies. Possible topics are
parallel machines, content addressable memories, VLSI systems. Prerequisite: COS 455. Cr 3.

COS 558 Database Systems
Study of the methods and principles of database management systems (DBMS). Topics addressed include DBMS objectives and architecture, data
models, data definition and manipulation languages (in particular, SQL) and providing internet access to databases. The entity-relationship and
relational models are emphasized and their use required in a design project. Prerequisite: graduate standing. Cr 3.

COS 562 Performance Analysis
The course integrates system measurement, analytic modeling, and simulation modeling to develop computer system performance evaluation
techniques. The approach will be problem-oriented with emphasis on benchmarking, simulation modeling and queuing models. Subjects covered
will include system measurement, operational analysis, simulation modeling, analysis of simulation results, and mean value analysis. Prerequisites: MAT 380 or equivalent and some experience with an operating system. Cr 3.

COS 565 Software Design and Development
A study of techniques and approaches related to the design and development of large scale software products. Consideration of formal methods
for specification, analysis, design, implementation, and testing. A "large" group programming project will be the vehicle for much of the learning
in this course. Cr 3.

COS 566 Simulation and Analytical Modeling
The theoretical limitations of analytical modeling will be contrasted with the practical limitations of simulation. The BCMP family of analytical
models will be presented along with the computational solutions of these models. The use of simulation will be discussed with regard to a high
level language (such as SIM-SCRIPT). Such topics as model verification and evaluation of experimental results will be considered. Cr 3.

COS 567 Performance Analysis of Distributed Systems
The objective of the course is to learn techniques to assess the performance of applications running in a distributed manner. Such assessment is
important for developers to understand the behavior of the distributed applications they create, and to identify aspects of the applications that are
determining performance. The course presents a variety of evaluation techniques, including queueing theory, simulation, and availability and
performability modeling. Other techniques will be introduced as needed. Prerequisite: Previous bachelor's degree, COS 450 or COS 460, and
MAT 281 or MAT 380. Cr 3.

COS 569 Compiler Construction
Definition of languages via context-free grammars. Organization of a compiler into phases of lexical analysis, parsing, code generation, and
optimization. Students will implement a compiler for a Pascal-like language. Normally offered once every two years. Prerequisite: graduate
standing. Cr 3.

COS 570 Seminar: Advanced Topics in Computer Science
Topics vary from year to year. Will include current research, emerging technologies, case studies. Normally offered once every two years. Cr 3.

COS 571 Advanced Database Systems
This course covers advanced, post-relational database systems such as object-oriented databases, XML database technologies, integration of
different technologies such as LINQ, object oriented interfaces to XML and integration with the object-oriented technology. Object-oriented
topics include developments from industrial standards such as ODMG and Java Data Objects, query languages such as OQL, Java database
technology, object-relational systems and language integrated queries such as LINQ. Object-oriented interfaces to XML include DOM, LINQ to
XML, LINQ to XSD, as well as other industrial developments. The course includes hands-on experience with advanced database management
systems such as db4 and Objectivity, LINQ, and object-oriented interfaces to XML. The requirements include object-oriented software and
database development projects, and a term paper. Normally offered once every two years. Prerequisite: Permission of the instructor. Cr 3.
COS 572 Artificial Intelligence and Data Mining
An introduction to the underlying concepts and applications of intelligent systems. Topics include heuristic search techniques, pattern matching, rule-based systems, computer representations of knowledge, and machine learning and data mining techniques. Course work includes regular labs and larger projects. Students will learn to conduct research in artificial intelligence and will complete a modest research project. Typically offered once every two years. Prerequisite: COS 350 or permission of instructor. Cr 3.

COS 574 Advanced Computer Graphics
Advanced computer graphics techniques are described and analyzed. Subjects considered include the projection of 3D objects to 2D, hierarchical object representation, representation of 3D curves and surfaces, illumination and shading, solid modeling, and advanced graphics hardware. Prerequisite: COS 452 or permission of instructor. Cr 3.

COS 576 Advanced Object-Oriented Design
This course considers developing object-oriented, multi-tier, Web-based applications. Topics will include object-oriented design patterns in distributed environments, software components, and software frameworks. The course also has a significant hands-on implementation component, and, after completing this course, students will have practical experience with several leading-edge distributed object technologies, including AJAX, Web Services, Enterprise JavaBeans, JDBC, and Servlets. The course is structured so that students will work in teams to develop a medium-sized, multi-tier application that incorporates several of the technologies mentioned above. Lectures will provide an introduction to the technologies and discuss principled ways to apply these technologies. Normally offered once every two years. Prerequisites: COS 420 or COS 430, or permission of instructor. Cr 4.

COS 577 Advanced Java Technology
The goal of this course is to provide an in-depth study of the most important and the more advanced components of the Java technology. The course covers topics such as concurrent object-oriented programming in Java, Java Core Reflection, the underlying virtual platform (the Java Virtual Machine), genericity (parametric polymorphism), persistence, and assertions. Programming assignments include concurrent programming, programming with parametric collection types, dynamic loading and compilation, usage of the Java reflective capabilities, and usage of persistent capabilities available in Java and in its extensions. The outcome of this course is a high-level of professional expertise in the overall Java technology. Normally offered once every two years. Prerequisite: COS 360. Cr 3.

COS 579 Software Specification and Verification
This course combines formal and practical object-oriented software techniques in developing the following main themes of object-oriented software technology: (i) Object-oriented software systems that provide efficiency and reliability based on an advanced type system, and (ii) Correctness and component compatibility in software reuse based on object-oriented assertion languages and programming by contract methodology. Practical implications and usage of the general notions such as genericity and reflection in complex software systems will be based on type systems of major object oriented languages such as Java and C#. The emerging technology of object-oriented assertion languages and verification systems will be represented in this course by JML (Java Modeling Language), Spec# (an assertion language for C#), and Eiffel and Code Contracts. The programming assignments will be based on a pragmatic methodology for object-oriented software construction (programming by contract) along with the associated tools including program verification techniques and systems. The assignments will include usage of advanced typing notions, reflection, and static and dynamic verification of object-oriented software. Normally offered once every two years. Prerequisites: COS 360. Cr 3.

COS 580 Advanced Theory of Computation: Computability and Complexity
Explores the nature of computation from a mathematical point of view, and determines why many fundamentally important computational problems apparently have no efficient solution, or even no solution at all. Topics include models of computation, the Church-Turing thesis, computably enumerable sets, nondecidable problems, the Halting Problem, resource-bounded complexity classes, NP-complete and NP-hard problems, the Traveling Salesman and other optimization problems, and computational reducibility. Connections may also be drawn to the foundations of mathematics and Gödel's Incompleteness Theorem. Prerequisite: COS 480 or permission of instructor. Cr 3.

COS 582 Design and Analysis of Algorithms
Techniques for designing algorithms, such as divide-and-conquer, greedy method, dynamic programming, and backtracking are emphasized and illustrated. Many problems of practical importance are covered, including minimum spanning tree, single source shortest path, traveling salesperson, and graph search. The concepts of NP-completeness are also considered. Prerequisite: graduate standing. Cr 3.

COS 595 Advanced Web Architectures
The focus of communication over the Internet is shifting to "computer-to-computer" interaction. Standards for this interaction (ebXML, SOAP, WSFL) are now in place and maturing, and commercial use is exploding. We will survey these standards and critically evaluate their security, efficiency, and completeness. We will construct several case studies, including Web-based commerce. As a team we will acquire and learn how to use available tooling, and we will put together working Web services and test their ability to interact with each other. Normally offered once every two years. Prerequisite: graduate standing. Cr 3.

COS 598 Internship
Students apply their learning to a specific problem in a practical context under faculty and managerial supervision. See Departmental guidelines for more details. Prerequisites: full graduate standing and prior approval of proposal by instructor and Department chair. Cr 1-3.
COS 697 Independent Study
An opportunity for graduate students to pursue areas not currently offered in the graduate curriculum. Cr 3.

COS 698 Master's Thesis
A six-credit thesis that is one of two options for completing the Master's degree requirements. The thesis project must be supervised by a committee and the project proposal approved in advance. Offered only as a pass/fail course. Prerequisites: full graduate standing and faculty approval. Cr 6.

COS 699 Master's Project
A three-credit project that is one of two options for completing the Master's degree requirements. The project must be supervised by a committee and the project proposal approved in advance. Offered only as a pass/fail course. Prerequisites: full graduate standing and faculty approval. Cr 3.

ELE 517 Robot Modeling
This course focuses on the concepts of kinematics, statics, and the dynamics of serial manipulators, as well as on the analysis and design of robotic structures. Students will conduct case studies of multiple platforms in the Robotics and Intelligence Systems Laboratory. This course complements ELE 418. Prerequisites: ELE 210, COS 160 or permission of instructor. (Lecture 3 hrs.) Cr 3.

ELE 542 Digital VLSI Circuits and Design
This course will examine the principles of internal circuit and layout design of digital VLSI circuits, with an emphasis on CMOS technology. Topics include NMOS and CMOS processes, device physics and SPICE models, logic circuits, electrical and physical design of logic gates, dynamic CMOS circuits, memory, chip layout principles, parasitics, and performance estimation. Simulation, layout, and electronic design automation tools are demonstrated and used. Prerequisites: ELE 172, ELE 342. (Lecture 3 hrs; Lab 1 hr.) Cr 3.

ELE 544 Analog Integrated Circuits and Design
This course will examine the principles of internal circuit operation and design of analog integrated circuits, with emphasis on CMOS technology. Topics include analog CMOS processes, devices and device models, bias and reference sources, differential and high gain amplifiers, OTAs and operational amplifiers, frequency response, feedback, stability, and internal compensation with emphasis on the design of CMOS operational amplifiers, power stages, and dc regulators. SPICE simulation, layout, and electronic design automation tools are demonstrated and used in homework assignments and design projects. Prerequisite: ELE 343 or permission. (Lecture 3 hrs; Lab 1 hr.) Cr 3.

ELE 545 Special Topics in CMOS Integrated Circuit Design
This course will cover special topics, such as, high performance operational amplifiers, silicon integrated sensors and sensor interface circuits, switched capacitor circuits, oscillators and integrated waveform generators, phase-locked-loop circuits, and memory, among others. Three chosen topics will be emphasized and students will conduct instructor-guided projects that will culminate with chip level design of these circuits. SPICE simulation verifications, layout, and electronic design automation tools will be used extensively. Prerequisite: ELE 442/542 or ELE 444/544. (Lecture 3 hrs; Lab 1 hr.) Cr 3.

ELE 586 Digital Signal Processing
This course will cover the basic principles of processing digital signals. Other concepts covered will include sampling and quantization, time and frequency domain representation, analysis of discrete-time signals and systems, FIR and IIR systems, digital filter design, review of classic analog filter design (Butterworth, Chebychev), quantization and finite-precision effects, and DSP hardware. Computers will be used to design and realize various signal processors. Prerequisites: ELE 314 and COS 160 or equivalent. (Lecture 3 hrs.) Cr 3.

ELE 589 Digital Image Processing
This course will focus on the theory and practice of digital processing of images by computer. Students will be introduced to two-dimensional signal processing theory, including sampling, transforms, and filters. Image acquisition and representation, enhancement methods, image coding, image analysis, and image processing hardware also will be covered. Prerequisites: ELE 314 and COS 160 or equivalent. (Lecture 3 hrs; Lab 1 hr.) Cr 3.
Engineering Overview

Chair of the Department: Jankowski

Professor: Guvench; Associate Professors: Ghorashi, Jankowski, Lück, Smith; Assistant Professor: Lin; Adjunct Professor: Masi.

Engineering is a challenging profession concerned with the design, development, fabrication, and control of physical devices and systems.

The mission of the Engineering Department is to provide a solid and complete engineering education built upon a foundation of mathematics, science, and liberal arts. Our undergraduate programs are broadly based, but there are opportunities to specialize. Computer usage is integrated throughout the curriculum. Internships and co-ops with our industrial partners are available to students at all levels.

The Department serves both traditional and nontraditional students who are diverse in academic background, age, and life experience. The Department also provides a technical resource to the community by linking the teaching, research, and public service capabilities of the Department with the needs of the industries, organizations, and institutions of southern Maine.

Engineering programs include bachelor of science degree programs in electrical engineering and in mechanical engineering, a concentration in computer engineering, minors in electrical and mechanical engineering, and a transfer program that delivers the first year or more for several other engineering specialties.

The Engineering Department is committed to maximizing the student's potential to achieve his or her academic goals. Upon admission, the student is assigned an advisor from the engineering faculty and staff. The student is then expected to meet with the advisor every semester before registering for classes. Regular contact with an advisor provides assistance for course selection and satisfactory progress toward meeting academic goals, but the primary responsibility for satisfying program requirements rests with the student. Courses are scheduled and rotated to provide maximum access to the breadth of technical electives and to make it possible for a full-time student to graduate in four years. Students are encouraged to pursue double majors, minors, concentrations, additional courses and co-ops to increase access and opportunities for a diverse and productive engineering career.

Engineering is constantly evolving and the curriculum reflects it. Newly matriculated students must always adopt the most recent catalog year. Current students or students transferring from other degree programs at USM may keep their existing catalog year or change to a more recent one. All options may be surveyed in usm.maine.edu/engineering/engineering-curricula.

Please visit our Web site at http://usm.maine.edu/engineering for additional and more recent information about the Department and its programs. Our mission statement is also found here.

BS in Electrical Engineering

Description

The electrical engineering program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

Graduates of the program are prepared to:

- function as engineers in technologically intensive firms;
- succeed in post-baccalaureate study;
- transfer their engineering skills to different environments; and
- contribute to society as broadly educated, articulate, and ethical professionals and citizens.

These objectives are complementary to and in addition to the general education objectives of the University.

Program Requirements
The course requirements are as follows (concurrent core curriculum requirements are noted in parenthesis for reference):

Mathematics
- MAT 152 Calculus A (Core: Quantitative Reasoning)
- MAT 153 Calculus B
- MAT 252 Calculus C
- MAT 380 Probability and Statistics

Computer Science
- COS 160 Structured Problem Solving: Java
- COS 170 Structured Programming Laboratory

Basic Science
- CHY 113 Principles of Chemistry I (Core: Science Explorations)
- CHY 114 Laboratory Techniques I (Core: Science Explorations)
- PHY 121 General Physics I
- PHY 114 Introductory Physics Laboratory I
- PHY 123 General Physics II
- PHY 116 Introductory Physics Laboratory II

Creative Expression (Core)
- THE 170 Public Speaking

Engineering Core
- EYE 112 Built Environment: Energy (Core: Entry Year Experience)
- ELE 216 Circuits I: Steady-State Analysis
- ELE 217 Circuits II: System Dynamics
- ELE 219 Circuits Laboratory
- EGN 248 Introduction to Differential Equations and Linear Algebra
- EGN 260 Materials Science for Engineers
- EGN 301 Junior Design Project and the Engineering Profession
- EGN 304 Engineering Economics (Core: Professional Practices Cluster)
- ELE 323 Electromechanical Energy Conversion
- EGN 402 Senior Design Project (Core: Capstone)

Electrical Engineering
- ELE 172 Digital Logic
- ELE 271 Microprocessor Systems
- ELE 314 Linear Signals and Systems
- EGN 325 Control Systems
- EGN 329 Electromechanical and Control Systems Laboratory
- ELE 342 Electronics I: Devices and Circuits
- ELE 343 Electronics II: Electronic Design
- ELE 351 Electromagnetic Fields
- ELE 486 Digital Signal Processing
- ELE 489 Analog and Digital Signals Laboratory

Technical Electives
- Completion of four (4) engineering courses with 3 or more credits each at the junior or senior level (ELE, EGN or MEE >300), in addition to those explicitly required above.

For graduation, electrical engineering majors must maintain an overall grade point average of 2.0 and a cumulative grade point average of 2.0 in engineering courses.

Permission from the student's advisor is required before taking any course outside USM to satisfy a requirement of the major.

University Core Curriculum requirements are outlined elsewhere in this catalog. Some requirements of the Bachelor of Science in Electrical Engineering degree program also satisfy Core Curriculum requirements, as noted.

Credits to graduate: 125

Computer Engineering Concentration
Students with a particular interest in the design and application of computer hardware and software systems may choose the computer engineering concentration. The requirements for the Bachelor of Science Degree in Electrical Engineering with a Concentration in Computer Engineering differ from the standard electrical engineering degree as follows: Students in the concentration are not required to take ELE 323, EGN 325, EGN 329, and ELE 351. Instead, they are required to take COS 161, COS 285, COS 350, and a junior- or higher-level computer science elective, as approved by the student's advisor.

For graduation, majors of electrical engineering with a concentration in computer engineering must maintain an overall grade point average of 2.0 and a cumulative grade point average of 2.0 in engineering and computer science courses.

Credits to graduate: 127

**Recommended Course Sequence**

The recommended course sequence in tabular and in graphical form can be viewed at [www.usm.maine.edu/engineering/engineering-curricula](http://www.usm.maine.edu/engineering/engineering-curricula).

**Admission Information**

Preparation for the Bachelor of Science in Electrical Engineering degree program should include a high school degree with 4 units of English, 2 units of social science, 1 unit of chemistry with lab, 1 unit of physics with lab, and 4 units of mathematics including algebra II and trigonometry. Incoming students who do not satisfy the admission requirements may enroll in remedial courses provided by the University. Transfer students require a transfer GPA of 2.25.

**BS in Mechanical Engineering**

**Description**

The mechanical engineering program officially began in the fall of 2006. ABET accreditation is currently being pursued. The ABET standards that are in use for the Electrical Engineering program are being extended to the new degree, namely, that graduates of the program are prepared to:

- function as engineers in technologically intensive firms;
- succeed in post-baccalaureate study;
- transfer their engineering skills to different environments; and
- contribute to society as broadly educated, articulate, and ethical professionals and citizens.

These objectives are complementary to and in addition to the general education objectives of the University.

**Program Requirements**

The course requirements are as follows (concurrent core curriculum requirements are noted for reference):

**Mathematics**

- MAT 152 Calculus A (Core: Quantitative Reasoning)
- MAT 153 Calculus B
- MAT 252 Calculus C
- MAT 380 Probability and Statistics

**Computer Science**

- COS 160 Structured Problem Solving: Java
- COS 170 Structured Programming Laboratory

**Basic Science**

- CHY 113 Principles of Chemistry I (Core: Science Explorations)
- CHY 114 Laboratory Techniques I (Core: Science Explorations)
- PHY 121 General Physics I
- PHY 114 Introductory Physics Laboratory I
- PHY 123 General Physics II
Creative Expression (Core)
THE 170 Public Speaking

Engineering Core
EYE 112 Built Environment: Energy (Core: Entry Year Experience)
ELE 216 Circuits I: Steady-State Analysis
ELE 217 Circuits II: System Dynamics
ELE 219 Circuits Laboratory
EGN 248 Introduction to Differential Equations and Linear Algebra
EGN 260 Materials Science for Engineers
EGN 301 Junior Design Project and the Engineering Profession
EGN 304 Engineering Economics (Core: Professional Practices Cluster)
ELE 323 Electromechanical Energy Conversion
EGN 402 Senior Design Project (Core: Capstone)

Mechanical Engineering
MEE 150 Applied Mechanics: Statics
MEE 230 Thermodynamics I: Laws and Properties
MEE 251 Strength of Materials
MEE 259 Statics and Strength of Materials Laboratory
MEE 270 Applied Mechanics: Dynamics
MEE 331 Thermodynamics II: Flows and Cycles
MEE 339 Thermodynamics Laboratory
MEE 360 Fluid Mechanics
MEE 372 Computer-Aided Design of Machine Elements
MEE 373 Design of Machines and Mechanisms
MEE 374 Theory and Applications of Vibrations
MEE 379 Dynamics and Vibrations Laboratory
MEE 432 Heat Transfer
MEE 439 Fluid Mechanics and Heat Transfer Laboratory

Technical Electives

- Completion of three (3) engineering courses with 3 or more credits each at the junior or senior level (ELE, EGN or MEE >300), in addition to those explicitly required above.

For graduation, mechanical engineering majors must maintain an overall grade point average of 2.0 and a cumulative grade point average of 2.0 in engineering courses.

Permission from the student's advisor is required before taking any course outside USM to satisfy a requirement of the major.

University Core Curriculum requirements are outlined elsewhere in this catalog. Some requirements of the Bachelor of Science in Mechanical Engineering degree program also satisfy Core Curriculum requirements, as noted.

Credits to graduate: 128

**Recommended Course Sequence**

The recommended course sequence in tabular and in graphical form can be viewed at [www.usm.maine.edu/engineering/engineering-curricula](http://www.usm.maine.edu/engineering/engineering-curricula).

**Admission Information**

Preparation for the Bachelor of Science in Mechanical Engineering degree program should include a high school degree with 4 units of English, 2 units of social science, 1 unit of chemistry with lab, 1 unit of physics with lab, and 4 units of mathematics including algebra II and trigonometry. Incoming students who do not satisfy the admission requirements may enroll in remedial courses provided by the University. Transfer students require a transfer GPA of 2.25.
Minor in Electrical Engineering

Description

The minor in electrical engineering is designed for students in other disciplines who desire an exposure to the theory and practice of electrical engineering. The minimum number of credits (exclusive of prerequisites) for the minor is 14. An electrical engineering faculty will be assigned as an advisor to assist with scheduling and track the student progress toward the minor.

Mechanical engineering majors may not use the minor in electrical engineering as a substitute for the thematic cluster requirement of the core curriculum.

Program Requirements

Successful completion of the following courses with a cumulative grade point average of 2.0: ELE 172, ELE 216, ELE 217, ELE 219, and one course from among ELE 271, ELE 314, and ELE 342.

Recommended Course Sequence

The recommended course sequence in tabular and in graphical form can be viewed at www.usm.maine.edu/engineering/engineering-curricula.

Admission Information

Please contact the Engineering Department at www.usm.maine.edu/engineering/contact-us to obtain information on how to add a Minor in Electrical Engineering to your degree program.

Minor in Mechanical Engineering

Description

The minor in mechanical engineering is designed for students in other disciplines who desire an exposure to the theory and practice of mechanical engineering. The minimum number of credits (exclusive of pre-requisites) for the minor is 13. A mechanical engineering faculty will be assigned as an advisor to assist with scheduling and track the student progress toward the minor.

Electrical engineering majors may not use the minor in mechanical engineering as a substitute for the thematic cluster requirement of the core curriculum.

Program Requirements

Successful completion of the following courses with a cumulative grade point average of 2.0: MEE 150, MEE 230, MEE 251, MEE 259, and MEE 270.

Recommended Course Sequence

The recommended course sequence in tabular and in graphical form can be viewed at www.usm.maine.edu/engineering/engineering-curricula.

Admission Information

Please contact the Engineering Department at www.usm.maine.edu/engineering/contact-us to obtain information on how to add a Minor in Mechanical Engineering to your degree program.
Transfer Program in Engineering

Description

The transfer program in engineering prepares students to begin engineering studies at USM and then complete engineering degrees at the University of Maine or elsewhere. It also allows students who are undecided or who do not yet meet all admission requirements to become matriculated in engineering and begin taking classes prior to transferring to an engineering degree program. All University of Southern Maine students in this program are eligible to transfer to any accredited engineering program in the country for the completion of the degree.

Program Requirements

Requirements vary depending on the requirements of the program a student will transfer to for the completion of the degree. Please contact the Engineering Department at www.usm.maine.edu/engineering/contact-us to inquire.

Recommended Course Sequence

The recommended course sequence in tabular and in graphical form can be viewed at www.usm.maine.edu/engineering/engineering-curricula.

Admission Information

Preparation for the transfer program in engineering should include a high school degree with 4 units of English, 2 units of social science, 1 unit of chemistry with lab, 1 unit of physics with lab, and 4 units of mathematics including algebra II and trigonometry. Incoming students who do not satisfy the admission requirements may enroll in remedial courses provided by the University. Transfer students require a transfer GPA of 2.25.

Course Descriptions

We offer a wide array of courses in support of our degree programs. Courses that are currently being offered on a regular basis have the frequency stated in their respective course descriptions, such as 3 times/year, twice/year, once/year and once every 2 years (see the Course Offering Plan). The description of these and other courses can also be found in the University Catalog.

Program Codes:

- COMP-ENGR: Concentration in Computer Engineering, a sub-plan of EE-BS
- EE-BS: Bachelor of Science in Electrical Engineering
- EE-MIN: Minor in Electrical Engineering
- MEE-BS: Bachelor of Science in Mechanical Engineering
- MEE-MIN: Minor in Mechanical Engineering
- NGR-PR: Transfer Program in Engineering

Freshman Courses:

EYE 112_ Built Environment: Energy
EGN 181_ Engineering Tools: Mathematica
EGN 182_ Engineering Tools: SolidWorks
EGN 183_ Engineering Tools: LabView
EGN 184_ Engineering Tools: Industrial Power
EGN 185_ Engineering Tools: Materials Processing 1
EGN 186_ Engineering Tools: MATLAB
EGN 187_ Engineering Tools: PSpice
EGN 188_ Engineering Tools: Materials Processing 2

MEE 150_ Applied Mechanics: Statics

Sophomore Courses:

EGN 248_ Introduction to Differential Equations and Linear Algebra
EGN 260 Materials Science for Engineers
EGE 216 Circuits I: Steady-State Analysis
ELE 217 Circuits II: System Dynamics
ELE 219 Circuits Laboratory

ELE 172 Digital Logic
ELE 271 Microprocessor Systems

MEE 230 Thermodynamics I: Laws and Properties
MEE 251 Strength of Materials
MEE 259 Statics and Strengths of Materials Laboratory
MEE 270 Applied Mechanics: Dynamics

Junior and Senior Required Courses:

EGN 301 Junior Design Project and the Engineering Profession
EGN 304 Engineering Economics
EGN 402 Senior Design Project
ELE 323 Electromechanical Energy Conversion

EGN 325 Control Systems
EGN 329 Electromechanical and Control Systems Laboratory
ELE 314 Linear Signals and Systems
ELE 342 Electronics I: Devices and Circuits
ELE 343 Electronics II: Electronic Design
ELE 351 Electromagnetic Fields
ELE 486 Digital Signal Processing
ELE 489 Analog and Digital Signals Laboratory

MEE 331 Thermodynamics II: Flows and Cycles
MEE 339 Thermodynamics Laboratory
MEE 360 Fluid Mechanics
MEE 372 Computer-Aided Design of Machine Elements
MEE 373 Design of Machines and Mechanisms
MEE 374 Theory and Applications of Vibrations
MEE 379 Dynamics and Vibrations Laboratory
MEE 432 Heat Transfer
MEE 439 Fluid Mechanics and Heat Transfer Laboratory

Technical Elective Courses:

EGN 394 Engineering Internship
EGN 403 Advanced Design Project
EGN 497 Independent Study

EGN 317 Introduction to Robotics
EGN 446 Micro Electromechanical Systems
EGN 498 Selected Topics in Engineering

ELE 327 Energy and Power Systems
ELE 444 Analog Integrated Circuits and Design
ELE 498 Selected Topics in Electrical Engineering

MEE 352 Analysis and Design of Composite Structures
MEE 361 Physical Metallurgy
MEE 375 Engineering Acoustics
MEE 498 Selected Topics in Mechanical Engineering

Technical Electives Offered in Recent Years:

EGN 368 Advanced Engineering Materials
EGN 417 Robot Modeling
EGN 418 Robot Intelligence
EYE 112 Built Environment: Energy

Course Description: A substantial component of the world we live in is the built environment – the world that people have invented, designed, built and used. People have seen the natural environment to be sacred, to be a part of, to be enjoyed, to be used, and to be dominated. In recent times it has become recognized that human activities can seriously affect the natural environment. This semester we focus on a particular part of the natural environment – energy. You will learn what energy is, where various forms of energy come from and how they are transformed and used. Forms of energy studied include, for example, fossil, solar, wind, hydro, biomass, and nuclear. You will study the social, economic, political and environmental issues related to the acquisition, processing and use of energy. Integral to the course are lectures, reading, writing, group activities, laboratory exercises and experiments, and a team project. Students should have very basic algebra skills. This course is not required for transfer students with more than 24 credits applied toward one of our engineering degree programs.

- Program(s): COMP-ENGR required, EE-BS required, MEE-BS required, core curriculum Entry Year Experience
- Prerequisite(s): None
- Co-requisite(s): ENG 100
- Instructor: Lin Lin
- Format: Lecture 2 hrs., Lab 2 hrs.
- Frequency: Fall, Spring
- Credits: 3

EGN 181 Engineering Tools: Mathematica

Course Description: An introduction to Mathematica as a general-purpose computational and visualization tool. Topics covered include symbolic and numerical computations, graphics and visualization, and basics of the Mathematica programming language. Students will use Mathematica in several hands-on exercises to solve typical computational problems.

- Program(s): General elective
- Prerequisite(s): None
- Co-requisite(s): None
- Instructor: Mariusz Jankowski
- Format: Lecture 1 hr., Lab. 1 hr.
- Frequency: Fall, even year
- Credits: 1

EGN 182 Engineering Tools: SolidWorks

Course Description: An introduction to SolidWorks and its use as a design tool for engineering. Students will use hands-on labs to create three dimensional solid models together with their orthographic views and convert them to computer design files. Students will learn the basics of building parts, dimensioning, tolerances, manufacturing drawings, assemblies, assembly drawings, and bills of material. They learn best practices, essential parametric sketching techniques, and time-saving shortcuts for making three dimensional parts and assemblies.

- Program(s): General elective
- Prerequisite(s): None
• Co-requisite(s): None
• Instructor: Mehrdaad Ghorashi
• Format: Lecture 1 hr., Lab. 1 hr.
• Frequency: Fall, even year
• Credits: 1

EGN 183 Engineering Tools: LabView

Course Description: An introduction to LabView and its use as a GUI programming tool for automated data acquisition, computer-instrument interfacing and control, and data processing. Students will learn the basics of LabView programming and use it in hands-on lab exercises to gain enough experience to start their own data acquisition and measurement project.

• Program(s): General elective
• Prerequisite(s): None
• Co-requisite(s): None
• Instructor: Mustafa Guvench
• Format: Lecture 1 hr., Lab. 1 hr.
• Frequency: Spring, odd year
• Credits: 1

EGN 184 Engineering Tools: Industrial Power

Course Description: An introduction to hydraulics, pneumatics, and programmable logic controllers (PLCs). Students will work with input and output components and learn the basics of PLC programming and downloading. During these hands-on lab exercises, Allen Bradley PLCs will be interfaced and control pneumatic power systems.

• Program(s): General elective
• Prerequisite(s): None
• Co-requisite(s): None
• Instructor: John Marshall
• Format: Lecture 1 hr., Lab. 1 hr.
• Frequency: Spring, odd year
• Credits: 1

EGN 185 Engineering Tools: Materials Processing 1

Course Description: An introduction to material processing operations. Topics include safety considerations, casting and metal forming techniques, material selection, material removal technology; lathes, milling machines, saws, drills, tool and parameter selection. Materials joining technology, welding, brazing, soldering. Heat treatment and metallographic examination.

• Program(s): General elective
• Prerequisite(s): None
• Co-requisite(s): None
• Instructor: James Smith
• Format: Lecture 1 hr., Lab. 1 hr.
• Frequency: Fall, odd year
• Credits: 1

EGN 186 Engineering Tools: MATLAB

Course Description: An introduction to the MATLAB and Simulink environments. Topics include basic calculations, variables, arrays and matrix operations, solution of linear algebraic equations, graphs, mesh and surface plots, basic programming in MATLAB, MATLAB functions, mfiles, calculus with MATLAB, Simulink, rational and logic operators, solution of nonlinear algebraic equations, case studies and applications.
EGN 187 Engineering Tools: PSpice

Course Description: An introduction to PSpice and its use as a GUI schematics entry tool for circuit simulation, including DC, small signal AC, sinusoidal and transient analysis. Students will learn the basics of PSpice and use it in hands-on lab exercises to gain enough experience to draw, simulate and do virtual testing of their circuit designs.

EGN 188 Engineering Tools: Materials Processing 2

Course Description: An introduction to material processing operations. Topics include safety considerations, casting and metal forming techniques, material selection, material removal technology; lathes, milling machines, saws, drills, tool and parameter selection. Materials joining technology, welding, brazing, soldering. Heat treatment and metallographic examination.

EGN 248 Introduction to Differential Equations and Linear Algebra

Course Description: Introduction to linear algebra and differential equations for engineering and science students. Standard methods for solving differential equations as they arise in engineering and science, linear algebra concepts needed to solve linear algebraic systems and linear systems of differential equations, and computational skills in matrix theory needed in computational linear algebra. Topics will include matrix algebra, determinants, linear independence, linear systems, linear transformations, eigenvalues and eigenvectors, vector spaces, first-order ODEs, higher-order linear ODEs, linear systems of ODEs, Laplace transform, and mathematical modeling and numerical methods. May be replaced by MAT 295 and MAT 350.
EGN 260 Materials Science for Engineers

Course Description: Concepts and relationships between structure, composition, and thermal, optical, magnetic, electrical and mechanical properties of technologically important materials. Replaces EGN 362 and ELE 262.

- Program(s): COMP-ENGR required, EE-BS required, MEE-BS required, Applied Science and Technology Cluster
- Prerequisite(s): CHY 113, MAT 153, PHY 123
- Co-requisite(s): None
- Instructor: Mustafa Guvench
- Format: Lecture 3 hrs.
- Frequency: Fall, Spring
- Credits: 3

EGN 301 Junior Design Project and the Engineering Profession

Course Description: The fundamental mission of engineering is design. Students, working in teams, learn the fundamentals of developing a specific problem statement, flowcharting, researching, project management, and design actualization, incorporating appropriate engineering standards and multiple realistic constraints. Professional issues such as ethics, intellectual property, interview skills, and resume preparation are explored. The student is challenged to consider the work of the engineer in the broader context of societal, personal, and professional responsibility.

- Program(s): COMP-ENGR required, EE-BS required, MEE-BS required
- Prerequisite(s): Advisor permission, graduating is 3 semesters
- Co-requisite(s): None
- Instructor: James Smith
- Format: Lecture 3 hrs.
- Frequency: Spring
- Credits: 3

EGN 304 Engineering Economics

Course Description: Introduction to making economic decisions, supply, demand and equilibrium in economics, ethical considerations and ethical dilemmas, Pareto efficiency, investment and cost analysis, time value of money, cash flow, the present value of a cash flow, rate of return of a project, cost-benefit study, breakeven analysis, evaluation of alternatives under budget constraint, sensitivity analysis of economic decisions with respect to changes in economic factors, expected value and economic decision-making under uncertainty, taxes, subsidies and rationing defender challenger problem and replacement analysis, inflation, computer-aided engineering economics using spreadsheets.

- Program(s): COMP-ENGR required, EE-BS required, MEE-BS required, Professional Practices Cluster
- Prerequisite(s): MAT 152
- Co-requisite(s): None
- Instructor: Mehrdaad Ghorashi
- Format: Lecture 3 hrs.
- Frequency: Spring
- Credits: 3

EGN 317 Introduction to Robotics

Course Description: Kinematic modeling of serial manipulators. Trajectory, path and motion planning. Actuators and sensors, artificial intelligence, and programming of robotic devices. Examples of multiple platforms in the Robotics and Intelligence Systems Laboratory.

- Program(s): COMP-ENGR elective, EE-BS elective, MEE-BS elective
- Prerequisite(s): COS 160, EGN 248
- Co-requisite(s): None
- Instructor: Carlos Lück
EGN 325 Control Systems

Course Description: Laplace transform, transfer function, modeling control systems by block diagrams, transient and steady-state responses of SISO systems in time domain, error analysis, frequency-response analysis using Bode and Nyquist diagrams, root-locus and Routh’s stability methods, analysis and design of control systems using root-locus analysis, operational amplifiers, compensation and design of feedback control systems using lead-lag compensators and PID controllers, state space method for analysis of MIMO systems.

Program(s): COMP-ENGR elective, EE-BS required, MEE-BS elective
Prerequisite(s): EGN 248, ELE 217
Co-requisite(s): None
Instructor: Carlos Lück
Format: Lecture 3 hrs.
Frequency: Spring
Credits: 3

EGN 329 Electromechanical and Control Systems Laboratory

Course Description: Exploration of theory and applications of electromechanical and control systems in the laboratory.

Program(s): EE-BS required
Prerequisite(s): ELE 323
Co-requisite(s): EGN 325
Instructor: Carlos Lück
Format: Lab 2 hrs.
Frequency: Spring
Credits: 1

EGN 368 Advanced Engineering Materials

Properties of conductive, dielectric, polar, magnetic, and other technologically important materials with a view toward understanding their behavior and application in electronic devices. Measurement techniques and production technology will be considered. Part of the course will deal with reading and interpreting published articles in technical journals. Electrical or mechanical engineering elective. Prerequisite: EGN 260. Lecture 3 hrs. Cr 3.

EGN 394 Engineering Internship

Course Description: Work experience in engineering. An opportunity for students to obtain credit for a project or study sequence completed while employed. The activity must have both components of design and analysis.

Program(s): COMP-ENGR elective, EE-BS elective, MEE-BS elective if accumulated 3 or more credits
Prerequisite(s): Completion of all sophomore engineering classes in the respective major, instructor permission
Co-requisite(s): None
Instructor: Engineering Faculty
Format: Project
Frequency: Fall, Spring, Summer
Credits: 1-3

EGN 402 Senior Design Project

Course Description: Design and implementation of a device or system to perform an engineering function. May be done individually or in small
groups, but the contribution is evaluated on an individual basis. Project outcomes include an oral presentation, a demonstration of the device or system, and a final report. The final report must contain a description of the engineering standards that were investigated and/or applied and how the realistic constraints were observed.

- **Program(s):** COMP-ENGR required, EE-BS required, MEE-BS required
- **Prerequisite(s):** EGN 301, the Core Curriculum requirement of Ethical Inquiry, Social Responsibility, and Citizenship, and instructor permission
- **Co-requisite(s):** None
- **Instructor:** Engineering Faculty
- **Format:** Project
- **Frequency:** Fall, Spring, Summer
- **Credits:** 3

EGN 403 Advanced Design Project

**Course Description:** In-depth design and implementation of a device or system to perform an engineering function, or an engineering research project. May be done individually or in small groups, but the contribution is evaluated on an individual basis.

- **Program(s):** COMP-ENGR elective, EE-BS elective, MEE-BS elective
- **Prerequisite(s):** EGN 402 with a grade of B or better, and instructor permission
- **Co-requisite(s):** None
- **Instructor:** Engineering Faculty
- **Format:** Project
- **Frequency:** Fall, Spring, Summer
- **Credits:** 3

EGN 417 Robot Modeling


EGN 418 Robot Intelligence

Motion control, trajectory and path planning, actuators and sensors, artificial intelligence, and programming of robotic devices. Case study of multiple platforms in the Robotics and Intelligence Systems Laboratory. Compliments EGN 417. Electrical or mechanical engineering elective. Prerequisites: ELE 217, COS 160. Lecture 3 hrs., Lab. 1 hr. Cr 3.

EGN 446 Micro Electromechanical Systems

**Course Description:** Topics include microfabrication, principles of electromechanical energy conversion and transduction, sensors and actuators, materials used for MEMS and their thermal, electrical, and mechanical properties. Standard MEMS fabrication processes and MEMS design.

- **Program(s):** COMP-ENGR elective, EE-BS elective, MEE-BS elective
- **Prerequisite(s):** EGN 260, ELE 217, or instructor permission
- **Co-requisite(s):** None
- **Instructor:** Mustafa Guvenc
- **Format:** Lecture 3 hrs, Lab 1 hr.
- **Frequency:** Spring, even year
- **Credits:** 3

EGN 497 Independent Study

**Course Description:** An opportunity for the student to explore topics not covered in available courses or to pursue a topic of interest in-depth.

- **Program(s):** COMP-ENGR elective, EE-BS elective, MEE-BS elective if accumulated 3 or more credits
- **Prerequisite(s):** Instructor permission
- **Co-requisite(s):** None
EGN 498 Selected Topics in Engineering

Course Description: Topics in engineering not regularly covered in other courses. The content can be varied to suit current needs. The course may, with advisor permission, be taken more than once. Consult the Department for current offerings and prerequisites.

- **Program(s):** COMP-ENGR elective, EE-BS elective, MEE-BS elective
- **Prerequisite(s):** Varied
- **Instructor:** Engineering Faculty
- **Format:** Varied
- **Frequency:** Varied
- **Credits:** 3

ELE 172 Digital Logic

Course Description: Introduction to the design of binary logic circuits. Combinatorial and sequential logic systems. Design with small and medium scale integrated circuits and programmable logic devices (PLDs). Registers, counters, and random access memories (RAMs). The algorithmic state machine (ASM).

- **Program(s):** COMP-ENGR required, EE-BS required, EE-MIN required
- **Prerequisite(s):** None
- **Co-requisite(s):** None
- **Instructor:** Mariusz Jankowski
- **Format:** Lecture 3 hrs., Lab 2 hrs.
- **Frequency:** Fall
- **Credits:** 4

ELE 216 Circuits I: Steady-State Analysis

Course Description: An examination of fundamental circuit laws and theorems, network analysis, physical properties and modeling of resistors, inductors, and capacitors, review of engineering standards applicable to circuits and components. Sinusoidal steady-state operation: phasors, and impedance. Frequency domain analysis, transfer functions, poles and zeros, frequency response, and basic filtering.

- **Program(s):** COMP-ENGR required, EE-BS required, EE-MIN required, MEE-BS required, Applied Science and Technology Cluster
- **Prerequisite(s):** MAT 153, PHY 123
- **Co-requisite(s):** None
- **Instructor:** Carlos Lück
- **Format:** Lecture 3 hrs.
- **Frequency:** Fall, Spring
- **Credits:** 3

ELE 217 Circuits II: System Dynamics

Course Description: Time-domain analysis of first- and second-order systems, based on electric circuits, but drawing analogy to mechanical, fluid, and thermal systems. AC power, magnetic coupling. Resonance, Bode plots, frequency response design. Study and application of the Laplace transform for the solution of differential equations governing dynamic systems.

- **Program(s):** COMP-ENGR required, EE-BS required, EE-MIN required, MEE-BS required
- **Prerequisite(s):** ELE 216
**ELE 219 Circuits Laboratory**

**Course Description:** Exploration of theory and applications of circuits in the laboratory.

- **Program(s):** COMP-ENGR required, EE-BS required, EE-MIN required, MEE-BS required
- **Prerequisite(s):** None
- **Instructor:** Carlos Lück
- **Format:** Lab 2 hrs.
- **Frequency:** Spring
- **Credits:** 1

**ELE 271 Microprocessor Systems**

**Course Description:** The organization of microprocessor-based computers and microcontrollers. Architecture and operation, flow of digital signals, timers, memory systems. Assembly programming, instruction sets, formats and addressing modes. Input-output concepts: programmed I/O, interrupts and serial communication. Microprocessor arithmetic. Laboratory experience programming the Texas Instruments MSP430 16-bit microcontroller in assembly and in C.

- **Program(s):** COMP-ENGR required, EE-BS required, EE-MIN elective
- **Prerequisite(s):** COS 160, ELE 172
- **Instructor:** Carlos Lück
- **Format:** Lecture 3 hrs., Lab 2 hrs.
- **Frequency:** Spring
- **Credits:** 4

**ELE 314 Linear Signals and Systems**

**Course Description:** Introduction to the theory of linear signals and systems. Linear time-invariant system properties and representations; differential and difference equations; convolution; Fourier analysis; Laplace and Z transforms. Selected topics in sampling, filter design, digital signal processing, and modulation.

- **Program(s):** COMP-ENGR required, EE-BS required, EE-MIN elective, MEE-BS elective
- **Prerequisite(s):** EGN 248, ELE 217
- **Instructor:** Mariusz Jankowski
- **Format:** Lecture 3 hrs.
- **Frequency:** Fall
- **Credits:** 3

**ELE 323 Electromechanical Energy Conversion**

**Course Description:** Basic concepts of magnetic circuits and transformers. Three-phase system and power transmission. Conversion between electrical and mechanical energy through magnetic fields. Study of direct current motors and generators. Study of alternating current machines: induction motors, synchronous machines, and single-phase motors.
ELE 327 Energy and Power Systems

Course Description: Alternative energy sources for power generation. Polyphase systems, symmetrical components, power transformers, transmission lines, power flow, fault analysis, power system controls.

Program(s): COMP-ENGR elective, EE-BS elective, MEE-BS elective
Prerequisite(s): EGN 248, ELE 323
Instructor: Carlos Lück
Format: Lecture 3 hrs.
Frequency: Spring, odd year
Credits: 3

ELE 342 Electronics I: Devices and Circuits


Program(s): COMP-ENGR required, EE-BS required, EE-MIN elective, MEE-BS elective
Prerequisite(s): EGN 260, ELE 217
Instructor: Mustafa Guvench
Format: Lecture 3 hrs., Lab 2 hrs.
Frequency: Fall
Credits: 4

ELE 343 Electronics II: Electronic Design

Course Description: Analysis and design of electronic circuits with BJTs, FETs and OpAmps for applications in signal generation, amplification, waveshaping, and power control. Topics include differential, multi-stage, linear and power amplifiers; real operational amplifiers and OpAmp applications; design for frequency response, active filters; feedback, stability and oscillators. Simulation and design verification with SPICE. Replaces ELE 346.

Program(s): COMP-ENGR required, EE-BS, MEE-BS elective
Prerequisite(s): ELE 342
Instructor: Mustafa Guvench
Format: Lecture 3 hrs., Lab 2 hrs.
Frequency: Spring
Credits: 4

ELE 351 Electromagnetic Fields

Course Description: Static electric and magnetic fields; properties of dielectric and ferromagnetic materials; time varying fields, Faraday’s law, Maxwell’s equations; plane waves in dielectric and conducting media; calculation of the fields and other properties of common transmission lines
Program(s): COMP-ENGR elective, EE-BS required, MEE-BS elective
Prerequisite(s): ELE 217, MAT 252
Co-requisite(s): None
Instructor: James Smith
Format: Lecture 3 hrs.
Frequency: Fall
Credits: 3

ELE 363 Solid State Electronic Devices
Theory of selected solid state electronic devices and their fabrication. The devices studied include advanced bipolar, CMOS, and optoelectronic devices. Device characterization, modeling and simulation. An occasional laboratory period may be substituted for equivalent class time. Electrical engineering elective. Prerequisite: ELE 342. Lecture 3 hrs., Lab. 1 hr. Cr 3.

ELE 364 Microelectronic Fabrication

ELE 367 Optoelectronics
Properties and applications of optoelectronic devices and systems. Topics include radiation sources (LEDs and semiconductor lasers), photo detectors and detector circuits, solar cells, fiber optics, and electro-optical system components. Electrical engineering elective. Prerequisite: ELE 342. Lecture 3 hrs., Lab. 1 hr. Cr 3.

ELE 373 Digital System Architecture and Design
Algorithmic approaches to digital system design. Methods of design and testing of multi-input, multi-output logic systems including arithmetic units, logic controllers, and microprocessors. Logic design with PLDs, FPGAs, and VHDL. Electrical engineering elective. Prerequisite: ELE 172. Lecture 3 hrs., Lab. 1 hr. Cr 3.

ELE 412 Power Electronics
Introduction to power electronics and power semiconductor devices. Analysis, performance characterization, and design of power electronics converters such as: rectifiers, DC choppers, AC voltage controllers, and single-phase inverters. Operation of DC motor drives. Electrical engineering elective. Prerequisite: ELE 343. Lecture 3 hrs. Cr 3.

ELE 442 Digital VLSI Circuits and Design
Principles of internal circuit and layout design of digital VLSI circuits. CMOS technology is emphasized. Topics include NMOS and CMOS processes, device physics and SPICE models, logic circuits, electrical and physical design of logic gates, dynamic CMOS circuits, memory, chip layout principles, parasitics, and performance estimation. Simulation, layout, and electronic design automation tools are demonstrated and used. Electrical engineering elective. Prerequisites: ELE 172, ELE 343. Lecture 3 hrs., Lab. 1 hr. Cr 3.

ELE 444 Analog Integrated Circuits and Design
Course Description: Principles of internal circuit operation and design of analog integrated circuits with emphasis on CMOS technology. Topics include analog CMOS processes, devices and device models, bias and reference sources, differential and high gain amplifiers, OTAs and operational amplifiers, power stages, frequency response, feedback, stability and internal compensation applied to the design of CMOS operational amplifiers and other CMOS analog integrated circuits. SPICE simulation, layout and electronic design automation tools are demonstrated and used in homework and design projects.

Program(s): COMP-ENGR elective, EE-BS elective, MEE-BS elective
Prerequisite(s): ELE 343
Co-requisite(s): None
Instructor: Mustafa Guvench
Format: Lecture 3 hrs., Lab 1 hr.
Frequency: Fall, even year
Credits: 3

ELE 445 Special Topics in CMOS Integrated Circuit Design
Special topics such as high performance operational amplifiers, silicon integrated sensors and sensor interface circuits, switched capacitor...
circuits, oscillators and integrated waveform generators, phase-locked-loop circuits, memory, etc., are covered with emphasis on three chosen topics with instructor guided projects leading to chip level design of these circuits. SPICE simulation verifications, layout and electronic design automation tools are used extensively. Electrical engineering elective. Prerequisite: ELE 343. Lecture 3 hrs., Lab. 1 hr. Cr 3.

**ELE 483 Communications Engineering**

**ELE 486 Digital Signal Processing**

*Course Description:* Basic principles of processing digital signals. Sampling and quantization. Time and frequency domain representation and analysis of discrete-time signals and systems. FIR and IIR systems. Digital filter design; review of classic analog filter design (Butterworth, Chebychev). Quantization and finite-precision effects. DSP hardware. Computers will be used to design and realize various signal processors.

- **Program(s):** COMP-ENGR required, EE-BS required, MEE-BS elective
- **Prerequisite(s):** COS 160, ELE 314
- **Co-requisite(s):** ELE 489
- **Instructor:** Mariusz Jankowski
- **Format:** Lecture 3 hrs.
- **Frequency:** Spring
- **Credits:** 3

**ELE 487 Digital Image Processing**
The theory and practice of digital processing of images by computer. Introduction to two-dimensional signal processing theory: sampling, transforms, and filters. Image acquisition and representation; enhancement methods; image coding; image analysis; and image processing hardware. Electrical engineering elective. Prerequisites: ELE 314, COS 160. Lecture 3 hrs., Lab. 1 hr. Cr 3.

**ELE 489 Analog and Digital Signals Laboratory**

*Course Description:* Exploration of theory and applications of analog and digital signals in the laboratory.

- **Program(s):** COMP-ENGR required, EE-BS required
- **Prerequisite(s):** None
- **Co-requisite(s):** ELE 486
- **Instructor:** Mariusz Jankowski
- **Format:** Lab 2 hrs.
- **Frequency:** Spring
- **Credits:** 1

**ELE 498 Selected Topics in Electrical Engineering**

*Course Description:* Topics in electrical engineering not regularly covered in other courses. The content can be varied to suit current needs. The course may, with advisor permission, be taken more than once. Consult the Department for current offerings and prerequisites.

- **Program(s):** COMP-ENGR elective, EE-BS elective, MEE-BS elective
- **Prerequisite(s):** Varied
- **Co-requisite(s):** None
- **Instructor:** Engineering Faculty
- **Format:** Varied
- **Frequency:** Varied
- **Credits:** 3
Course Description: Equilibrium of particles, moment of a force, couple, equilibrium of rigid bodies, centroid and center of mass, analyzing trusses, frames and machines, shear force and bending moment in beams, dry friction, wedges, area moment of inertia, parallel axis theorem, mass moment of inertia, Mohr’s circle for moments of inertia, method of virtual work.

- Program(s): MEE-BS required, MEE-MIN required
- Prerequisite(s): MAT 152, PHY 121
- Co-requisite(s): None
- Instructor: Mehrdaad Ghorashi
- Format: Lecture 3 hrs.
- Frequency: Fall, Spring
- Credits: 3

MEE 230 Thermodynamics I: Laws and Properties

Course Description: Basic concepts and definitions; thermodynamic properties of gases, vapors, and gas-vapor mixtures; energy and energy transformations; the first and second Laws of thermodynamics; first and second law applied to systems and control volumes; thermodynamic properties of systems.

- Program(s): MEE-BS required, MEE-MIN required, Applied Science and Technology Cluster
- Prerequisite(s): MAT 153, PHY 121
- Co-requisite(s): None
- Instructor: Lin Lin
- Format: Lecture 3 hrs.
- Frequency: Spring
- Credits: 3

MEE 251 Strength of Materials

Course Description: Normal and shear stress and strain in structural members under axial, torsion, bending and transverse loadings, calculation of combined stresses, transformation of stress and principal values of stress and strain, deflection of beams.

- Program(s): MEE-BS required, MEE-MIN required
- Prerequisite(s): MAT 153, MEE 150
- Co-requisite(s): MEE 259
- Instructor: Mehrdaad Ghorashi
- Format: Lecture 3 hrs.
- Frequency: Fall
- Credits: 3

MEE 259 Statics and Strength of Materials Laboratory

Course Description: Exploration of theory and applications of statics and strength of materials in the laboratory.

- Program(s): MEE-BS required, MEE-MIN required
- Prerequisite(s): None
- Co-requisite(s): MEE 251
- Instructor: Mehrdaad Ghorashi
- Format: Lab 2 hrs.
- Frequency: Fall
- Credits: 1

MEE 270 Applied Mechanics: Dynamics
Course Description: Kinematics of particles and rigid bodies. Kinetics of particles and rigid bodies using Newton, impulse/momentum and work-energy methods.

- **Program(s):** MEE-BS required, MEE-MIN required
- **Prerequisite(s):** MEE 150
- **Co-requisite(s):** MAT 252
- **Instructor:** Mehrdad Ghorashi
- **Format:** Lecture 3 hrs.
- **Frequency:** Spring
- **Credits:** 3

MEE 331 Thermodynamics II: Flows and Cycles

Course Description: Thermodynamic properties of system; energy system analysis including power cycles, and refrigeration systems; energy availability; general thermodynamic relations, thermodynamics of mixtures; Introduction to chemical thermodynamics; thermodynamics of fluid flow; design and optimization of thermal systems.

- **Program(s):** COMP-ENGR elective, EE-BS elective, MEE-BS required
- **Prerequisite(s):** MEE 230
- **Co-requisite(s):** MEE 339
- **Instructor:** Lin Lin
- **Format:** Lecture 3 hrs.
- **Frequency:** Fall
- **Credits:** 3

MEE 339 Thermodynamics Laboratory

Course Description: Exploration of theory and applications of thermodynamics in the laboratory.

- **Program(s):** MEE-BS required
- **Prerequisite(s):** None
- **Co-requisite(s):** MEE 331
- **Instructor:** Lin Lin
- **Format:** Lab 2 hrs.
- **Frequency:** Fall
- **Credits:** 1

MEE 352 Analysis and Design of Composite Structures

Course Description: Advantages and limitations of composite materials, fibers and matrices, anisotropic, orthotropic and transversely isotropic materials, fabrication processes of composites, axial deformation and bending of sandwich beams and reinforced concrete, elastic behavior and strength of unidirectional lamina, elastic constants of a lamina along an arbitrary direction, elastic behavior of multidirectional laminate, failure criteria of laminates, joining and assembly, case studies, mechanical test methods, experimental determination of engineering constants of composites, computer-aided analysis and design of composite structures.

- **Program(s):** COMP-ENGR elective, EE-BS elective, MEE-BS elective
- **Prerequisite(s):** EGN 248, MEE 251
- **Co-requisite(s):** None
- **Instructor:** Mehrdad Ghorashi
- **Format:** Lecture 3 hrs., Lab 1 hr.
- **Frequency:** Fall, odd year
- **Credits:** 3
MEE 360 Fluid Mechanics

Course Description: Fluid statics, fluid kinematics, Bernoulli equation, energy equation, viscosity, control volume analysis, differential analysis, dimensional analysis, laminar flow and turbulent flow, internal flow, external flow, boundary layers, lift and drag, numerical methods, computational fluid dynamics, turbomachinery.

- Program(s): COMP-ENGR elective, EE-BS elective, MEE-BS required
- Prerequisite(s): EGN 248, MEE 270
- Co-requisite(s): None
- Instructor: Lin Lin
- Format: Lecture 3 hrs.
- Frequency: Fall
- Credits: 3

MEE 361 Physical Metallurgy

Course Description: Introduction to the current state of metallurgical technology. It builds on basic principles, particularly crystal structure and phase equilibria, to introduce students to contemporary metallurgical literature. Topics such as defect structures and the effect of heat treatment are introduced in a “just in time” fashion.

- Program(s): COMP-ENGR elective, EE-BS elective, MEE-BS elective
- Prerequisite(s): EGN 260
- Co-requisite(s): None
- Instructor: James Smith
- Format: Lecture 3 hrs.
- Frequency: Spring, odd year
- Credits: 3

MEE 372 Computer-Aided Design of Machine Elements

Course Description: Elements of mechanical engineering design, introduction to computer aided drafting, stress analysis, deflection and stiffness analysis, Castigliano’s theorem, Euler buckling, static failure criteria, fatigue failure criteria, design of shafts and bearings, limits and fits, critical speed of shafts, detachable and permanent joints and springs. Design is performed by available formulas and standards as well as computer aided design by simulation software. Includes a student design project.

- Program(s): COMP-ENGR elective, EE-BS elective, MEE-BS required
- Prerequisite(s): EGN 260, MEE 251
- Co-requisite(s): None
- Instructor: Mehrdaad Ghorashi
- Format: Lecture 3 hrs., Lab 2 hrs.
- Frequency: Fall
- Credits: 4

MEE 373 Design of Machines and Mechanisms

Course Description: Mobility and degrees of freedom in mechanisms, review of kinematics, instant centers, cam and follower design, gears, gear trains, interference and undercutting, synthesis of linkages, static and dynamic force analysis, measuring mass moment of inertia, free and forced vibrations, dynamics of reciprocating engines, static and dynamic balancing, Euler’s equations of motions, rolling-contact bearings, journal bearings, flywheels, gyroscopes, governors, clutches and brakes. Design is performed by available formulas and standards as well as computer aided design by simulation software. Includes a student design project.

- Program(s): COMP-ENGR elective, EE-BS elective, MEE-BS required
- Prerequisite(s): MEE 270, MEE 372
- Co-requisite(s): None
- Instructor: Mehrdaad Ghorashi
MEE 374 Theory and Applications of Vibrations

Course Description: Free undamped and damped vibrations of one degree of freedom (DOF) systems, forced vibrations of one DOF systems with harmonic and non-harmonic excitations, resonance, free vibrations of multi DOF systems, mode shapes, forced vibrations of multi DOF systems and dynamic vibration absorber.

- Program(s): COMP-ENGR elective, EE-BS elective, MEE-BS required
- Prerequisite(s): EGN 248, ELE 217
- Co-requisite(s): MEE 379 for MEE-BS
- Instructor: James Smith
- Format: Lecture 3 hrs.
- Frequency: Spring
- Credits: 4

MEE 375 Engineering Acoustics

Course Description: Vibrating systems, acoustic wave equation, waves in solids and fluid media, reflection and transmission at interfaces, absorptions and dispersion, Green’s function, waveguides, resonators and filters, noise, ultrasonics, nondestructive evaluation, acoustical imaging, selected topics in ocean acoustics, noise control, environmental and architectural acoustics.

- Program(s): COMP-ENGR elective, EE-BS elective, MEE-BS elective
- Prerequisite(s): EGN 248, ELE 217
- Co-requisite(s): None
- Instructor: Lin Lin
- Format: Lecture 3 hrs., Lab 1 hr.
- Frequency: Fall, even year
- Credits: 3

MEE 379 Dynamics and Vibrations Laboratory

Course Description: Exploration of theory and applications of dynamics and vibrations in the laboratory.

- Program(s): MEE-BS required
- Prerequisite(s): MEE 270
- Co-requisite(s): MEE 374
- Instructor: Mehrdaad Ghorashi
- Format: Lab 2 hrs.
- Frequency: Spring
- Credits: 1

MEE 432 Heat Transfer

Course Description: Study of fundamental laws of heat transfer by conduction, convection, and radiation. Steady heat conduction, thermal circuit modeling, fins, transient heat conduction, forced convection, natural convection, radiation heat transfer, heat exchanger, boiling and condensation, and numerical methods in heat transfer.

- Program(s): COMP-ENGR elective, EE-BS elective, MEE-BS required
- Prerequisite(s): MEE 230, MEE 360
- Co-requisite(s): MEE 439
MEE 435 Advanced Thermal Systems
Apply the principles of thermodynamics, fluid mechanics, and heat transfer to engineering systems. These systems include but are not limited to power generation, heating ventilating and air conditioning (HVAC), internal combustion engines, manufacturing processes. The concept of energy efficiency will be emphasized. Mechanical engineering elective. Prerequisites: MEE 366, MAT 350. Lecture 3 hrs. Cr 3.

MEE 439 Fluid Mechanics and Heat Transfer Laboratory

Course Description: Exploration of theory and applications of fluid mechanics and heat transfer in the laboratory.

• Program(s): MEE-BS required
• Prerequisite(s): None
• Co-requisite(s): MEE 432
• Instructor: Lin Lin
• Format: Lab 2 hrs.
• Frequency: Fall
• Credits: 1

MEE 498 Selected Topics in Mechanical Engineering

Course Description: Topics in mechanical engineering not regularly covered in other courses. The content can be varied to suit current needs. The course may, with advisor permission, be taken more than once. Consult the Department for current offerings and prerequisites.

• Program(s): COMP-ENGR elective, EE-BS elective, MEE-BS elective
• Prerequisite(s): Varied
• Co-requisite(s): None
• Instructor: Engineering Faculty
• Format: Varied
• Frequency: Varied
• Credits: 3
Environmental Science Overview

Chair of the Department: Robert Sanford, 106 Bailey Hall, Gorham

Professors: Langley-Turnbaugh, Sanford; Associate Professor: Wagner; Assistant Research Professors: Wilson, Martinez; Lecturer: Staples; Adjunct Assistant Research Professor: Willis

The Department of Environmental Science offers two degrees: a B.A. in environmental planning and policy and a B.S. in environmental science. Each prepares students for a variety of professional roles in the environmental fields, and encourages students to pursue graduate academic and professional degrees and professional certifications. Our graduates find employment in many environmental settings, including federal, state, and local government, environmental consulting and engineering, environmental education and teaching, private industry ranging from health care to semi-conductor manufacturing, applied research, environmental advocacy, and community planning.

All students in the Department of Environmental Science complete a core set of courses and laboratory training in a broad range of perspectives and skills including field methods, environmental science, ecology, chemistry, communication, environmental regulations, impact assessment, and research methods. Additionally, the program requires students to specialize in an area of choice. Students choosing the environmental science option will study topics such as forest, wetland and plant ecology, energy management, or soil and water quality. Students choosing the environmental planning and policy option will study topics such as natural resource policy, pollution, solid waste, or energy policy. Most of our students also pursue a minor to complement their skill-set with such minors as environmental sustainability, applied energy, chemistry, economics, or biology. Near the end of their programs, all students apply their knowledge in a professional setting with a required internship.

A core interdisciplinary faculty representing all these areas is on hand to work with and guide students who are encouraged to participate in research with Departmental faculty. Faculty stress problem-based service learning by examining and solving local environmental problems.

Our location in greater Portland provides opportunities to examine a broad range of environmental problems and issues in both rural (agricultural or forested) and urban (industrial and commercial) settings.

Admission Requirements

Admission to the major is competitive, usually requiring grades equivalent to a B average or higher and completion of three high school laboratory science courses and advanced algebra. Transfer students and USM students wishing to change majors must meet the admission and coursework requirements for the major. The program committee may admit, on a conditional basis, students who do not meet the general admission requirements, subject to specific agreement with the student to complete a series of prerequisite science and math courses with a grade of C or better within a specified time period.

BA in Environmental Planning and Policy

Description

The Department of Environmental Science offers a Bachelor of Arts (B.A.) degree in Environmental Planning and Policy. The combination of these two disciplines recognizes the inherent interconnection in conjunction with DES’s basic environmental science core courses. The degree is designed to prepare students for graduate school and careers in federal, state, and local government; the private sector; nonprofit organizations; and citizen advocacy groups. Many of our graduates have immediately entered professions in landscape design, regulatory compliance, land-use or community planning, urban renewal, environmental consulting, education, and as environmental technicians.

We seek to educate individuals who make a difference by contributing to solving environmental problems, making public and private institutions more responsive to social and economic needs of communities, and by moving toward a more sustainable society. Our curriculum emphasizes application as well as theory by focusing on real problems and projects affecting the region. The opportunity to gain practical planning and policy experience is also provided to our students through their participation in field-based courses and an internship.

The environmental planning aspect of the degree is intended to introduce students to the foundations of community and natural resource planning. Through a series of core courses, students examine the spatial and non-spatial aspects of environmental problems. The environmental
policy aspect trains students on policy development, formulation and implementation, through an in-depth examination of policy science, assessment, environmental impact analysis, and environmental economics. Students can also explore a particular topic of interest such as pollution, natural resources management, and international policy, or water resources.

DES offers an accelerated admissions opportunity for students in the BA program. They can combine their senior year with the first year of graduate work in USM's Muskie School master's degree program in Community Planning & Development. To do this, Environmental Planning & Policy majors in the spring semester of their junior year may apply for conditional admission to the Program in Community Planning & Development. If accepted, the students will take courses throughout their senior year that will count toward completion of both their undergraduate and master's degrees. Seniors can complete up to 24 credits which can be applied toward the 48 credits required for the master's degree. Upon completion of their senior year, those students who have met minimum grade requirements will transition to full graduate student status. This fast track can save tuition and time.

**Program Requirements**

The minimum number of credits required for the major is 66. Some of these courses also meet the 43 to 52 credits required for the University's Core curriculum. All students must have at least 120 total credits and must not require any remedial work. A student must achieve at least a 2.0 grade point average and must earn at least a C- in each course applied toward completion of the major.

Required courses for all majors in the department

- ESP 101 Fundamentals of Environmental Science
- ESP 102 Fundamentals of Environmental Science Lab
- ESP 125 Introduction to Environmental Ecology
- ESP 126 Introduction to Environmental Ecology Lab
- ESP 150 Field Immersion
- ESP 197 Research Skills Lab
- ESP 203 Environmental Communication
- ESP 280 Research and Analytical Methods
- ESP 340 Environmental Regulations
- ESP 400 Internship (between junior and senior year)
- ESP 401 Environmental Impact Assessment and Lab (capstone)
- ESP 475 Senior Seminar

Choose one tools course

- Suggested tools courses include: MAT 120, MAT 220, ESP/GEO 108, GEO 205, GEO 308

Required courses specific to students in the BA in Environmental Planning and Policy

- ESP 220 Introduction to Environmental Policy
- ESP 305 Community Planning Workshop
- ESP 375 Environmental Risk Assessment and Management
- ESP 417 Site Planning and Assessment
- ESP 421 Natural Resource Policy
- CHY 1XX Chemistry Lecture
- CHY 1XX Chemistry Lab
- GEO 209 Land Use Planning
  - or ESP 200 Environmental Planning
- ECO/ESP 326 Environmental Economics
  - or ECO/ESP 327 Natural Resource Economics

Electives:

Choose two environmental science classes 200-level or higher.

**BS in Environmental Science**

**Description**
Environmental science students receive a broad range of environmental courses. They may choose to focus on water resources, energy, or applied ecology. Students studying water resources focus on the flows and quality of water in various environments including streams, lakes, aquifers, and soils, and receive comprehensive training in the biology, chemistry, and ecology of soils and water bodies. The focus is on human-influenced and natural processes affecting soil quality and water quality. Courses emphasize watershed and groundwater hydrology and hydrogeology, water quality assessment and control, soil and water conservation, bioremediation and phytoremediation, and watershed management and planning. Students are often involved in faculty research programs, and present the results of their research at local and national conferences.

For students interested in becoming certified to teach 7-12 science in Maine, DES offers a pathway in Secondary Education as part of the BS in Environmental Science.

Students who focus on energy take courses in energy efficiency, renewable energy, and energy systems, in addition to their ecological and environmental courses.

Applied Ecology is the study of interrelationships between organisms and their environment, within the context of seeking to understand and mitigate the impacts of human activities on those systems. Students are provided with the core science background necessary to conduct environmental field and laboratory research. Students then gain familiarity with specific ecological systems, concepts, and methods through courses such as Water Quality Assessment, Forest Ecology, Wetlands Ecology, Field Methods, Environmental Entomology, Limnology and Plant Ecology.

Applied ecology courses are laboratory-intensive and quantitative, a major goal being the acquisition of advanced skills in utilizing analytical tools - such as statistical software, mapping applications and geographic information systems (GIS). This combination of a strong science core with applied environmental technologies allows an Environmental Science graduate to pursue either graduate study in the sciences or immediate entry-level employment with an environmental engineering firm, government agency or non-governmental organization.

**Program Requirements**

The minimum number of credits required for the major is 72 (depending on which of the degrees is selected) plus the 34 credits required of the University's Core curriculum. Note that these Departmental major requirements include 13 credits of Core curriculum. In order to graduate with a minimum of 120 credits, the student must not require any remedial work and all electives (taken here or transferred) must fit into the student's program of study, which is approved for each student by the Departmental faculty. A student must achieve at least a 2.0 grade point average and must earn at least a C- in each course applied toward completion of the major.

Required courses for all majors in the department

- ESP 101 Fundamentals of Environmental Science
- ESP 102 Fundamentals of Environmental Science Lab
- ESP 125 Introduction to Environmental Ecology
- ESP 126 Introduction to Environmental Ecology Lab
- ESP 150 Field Immersion
- ESP 197 Research Skills Lab
- ESP 203 Environmental Communication
- ESP 280 Research and Analytical Methods
- ESP 340 Environmental Regulations
- ESP 400 Internship (between junior and senior year)
- ESP 401 Environmental Impact Assessment and Lab (capstone)
- ESP 475 Senior Seminar

Choose one tools course

- Suggested tools courses include: MAT 120, MAT 220, ESP/GEO 108, GEO 205, GEO 308

Required courses specific to students in the BS in Environmental Science

- CHY 113 Principles of Chemistry I
- CHY 114 Laboratory Techniques I
- CHY 115 Principles of Chemistry II
- CHY 116 Laboratory Techniques II
- CHY 233 Analytical Chemistry & Lab
- MAT 152 Calculus A
- ESP 250 Soils and Land Use
- ESP 360 Water Quality Assessment and Control
- ESP 260 Soil and Water Conservation Engineering
  or ESP 412 Field Ecosystem Ecology
Choose Physics or Biology lecture and lab:
PHY 111 Elements of Physics I and
PHY 114 Introduction to Physics Lab
OR
BIO 105 Biological Principles I: Cellular Biology
BIO 106 Laboratory Biology

Electives:
Choose two environmental science classes 200-level or higher.

Certificate in Applied Energy

Description
The Department of Environmental Science offers a certificate in Applied Energy designed for students and professionals in area industry, consulting, government, and non-governmental organizations. The certificate is designed to develop an individual's skills in applied energy thorough a combination of laboratory, field work, and advanced analysis in energy efficiency, production, and life cycle assessment.

Program Requirements
Candidates must apply to the chairperson of the Department of Environmental Science.

The certificate is awarded after the successful completion of 18 credit hours of study of the following courses (a student must receive a C- or greater in each course):
ESP 108 GIS Applications
ESP 275 Energy Use and Societal Adaptation
ESP 308 Global Environmental Problems and Sustainability
ESP 311 Energy Efficiency
ESP 313 Renewable Energy

Must choose one of the following
BUS 200 Introduction to Business
EYE 112 Built Environment: Energy
ITC 100 Introduction to Construction management
ESP 450 Research Practicum

Certificate in Environmental Education

Description
This certificate is designed for teachers, scientists, public officials, consultants, field naturalists, environmental interpreters, and others having responsibility for educating or informing people about the environment.

Program Requirements
The certificate is awarded after the successful completion of 18 credit hours of study selected from the courses listed below. Candidates must apply to the chairperson of the Environmental Science Department, be assigned an advisor, and have their course of study approved by the Department chairperson. Up to 8 prior credits may be applied toward the certificate program.

Required:
ESP445/EPB545 Environmental Education and Interpretation
ESP 400 Internship (with an environmental education/interpretation host)

At least one of the following is required:
  EPA 530 Science of Maine Forests
  EPA 542 Environmental Science Concepts and Strategies for Middle School Teachers
  EPB 525 Science Content for Elementary School Teachers
  HRD 339 Adult Learning and Development

Choose from DES offerings to complete the credit requirements.

Certificate in Environmental Policy Analysis

Description

The Department of Environmental Science offers a certificate in environmental policy analysis, designed for students and professionals in area industry, consulting, government, and non-governmental organizations. The certificate is designed to develop an individual's skills in identifying environmental policy problems, formulating policy solutions, and evaluating policies.

Program Requirements

Candidates must apply to the chairperson of the Department of Environmental Science, be assigned an advisor, and have their course of study approved by the Department chairperson.

The certificate is awarded after the successful completion of 21 credit hours of study. The requirements for the certificate are successful completion of the following courses:
  ESP 203 Environmental Communication
  ESP 220 Introduction to Environmental Policy
  ESP 375 Environmental Risk Assessment and Management
  ESH 341 Environmental Regulations
  ESP 421 Natural Resource Policy

Students also must select two courses from the following:
  ESP 270 Solid Waste Planning & Policy
  ESP 275 Energy Use and Societal Adaptation
  ESP 326 Environmental Economics
  ESP 475 Topics in Environmental Science/Senior Seminar
  ESP 212 Environmental Ethics
  POS 365 Environmental Politics and Policy
  POS 375 International Environmental Politics and Policy
  POS 453 Politics of American Policy Making

Minor in Applied Energy

Description

The Department of Environmental Science offers a minor in Applied Energy designed to develop a student's skills in applied energy through a combination of laboratory, field work, and advanced analysis in energy efficiency, production, assessment, and planning.

Program Requirements

A minor is awarded after the successful completion of 18 credit hours of study of the following courses (a student must receive a C- or greater in each course):
Minor in Environmental Policy

Description

The Department of Environmental Science offers a minor in environmental policy designed to develop a student's skills in applied policy analysis and formulation through a combination of multidisciplinary coursework.

Program Requirements

Required Courses

- ESP 203 Environmental Communication
- ESP 220 Introduction to Environmental Policy
- ESP 340 Environmental Regulations
- ESP 375 Environmental Risk Assessment
- ESP 421 Natural Resource Policy
- ECO/ESP 326 Environmental Economics
  or ECO/ESP 327 Natural Resource Economics

All courses taken to satisfy the requirements for a minor in environmental policy must be completed with a grade of C- or better. This minor is not available to students pursuing a BA in environmental planning and policy.

Minor in Environmental Science

Description

See Program Requirements

Program Requirements

Students in any non-DES major who want to minor in environmental science must complete 18 credits of environmental science courses with a grade of C- or higher. Students may transfer up to three (3) credits of comparable environmental science courses from other institutions. All students must complete ESP 101 and ESP 102 and collaborate with a Department faculty member to develop an individual course of study.

Minor in Environmental Sustainability

Description

The Department of Environmental Science offers a 19-credit minor in environmental sustainability.
There is growing realization that the human population must strive to live in a sustainable relationship with Earth's finite resources. The goal of the environmental sustainability minor is to provide broad, interdisciplinary training related to local and global environmental problems. Students in the environmental sustainability minor examine the scientific, cultural, economic, and policy aspects of sustainability and are provided skills in how to recognize and overcome barriers to achieving sustainability.

**Program Requirements**

**Required Courses**
- ESP 101/102 Fundamentals of Environmental Science and Lab
- ESP 275 Energy Use and Societal Adaptation
- ESP 308 Global Environmental Problems and Sustainability

**Interdisciplinary Course (select one)**
- BUS 347 Triple-Bottom-Line Business
- CRM 225 Crimes Against the Environment
- EYE 102 Sustainability, Culture, and the Environment
- EYE 112 The Built Environment: Energy
- EYE 129 The Chicken
- EYE 199 The Northern Forest Canoe Trail
- GEO 320 Conservation of Natural Resources

**Courses of Analysis (select two)**
- ESP/PHI 212 Environmental Ethics
- ESP 200 Environmental Planning
- ESP 220 Introduction to Environmental Policy
- ESP 470 Solid Waste Planning & Policy
- ECO/ESP 326 Environmental Economics
- ECO/ESP 327 Natural Resource Economics

All courses taken to satisfy the requirements for a minor in environmental sustainability must be completed with a grade of C- or better.

**Minor in Nature Tourism**

**Description**

The 18-credit nature tourism minor is jointly offered by the Department of Recreation and Leisure Studies and the Department of Environmental Science.

**Program Requirements**

For details about the minor, course requirements, and course descriptions visit the catalog section for Department of Recreation and Leisure Studies.

**Course Descriptions**

The following is a list of courses offered by the Department of Environmental Science. Consult the two-year rotation list for the tentative schedule of course offerings over the next two years.

**ESP 101 Fundamentals of Environmental Science**
This Science Exploration course is an examination of the science of environmental problems, processes, and solutions. Students will explore the interrelationships of the natural world, the environment, and impacts from humans. Specific topics will include land, air, and water pollution; biodiversity; global climate change; energy; public health; and sustainability. Prerequisites: successful completion of the University's writing and mathematics proficiency requirements. Corequisite: ESP 102. Cr 3.
ESP 102 Fundamentals of Environmental Science Laboratory
This Science Exploration laboratory course is designed to provide applied experience with some of the tools and techniques used in environmental science. Students will examine a variety of environmental issues using field kits, lab equipment, and computers. Prerequisites: successful completion of the University's writing and mathematics proficiency requirements. Corequisite: ESP 101. Cr 1.

ESP 108/GEO 108 Introduction to ArcGIS
An introduction to Geographic Information Systems (GIS), stressing the practical applications of popular graphical user interface (GUI) software packages such as ArcView. Topics covered include displaying, downloading, editing, analyzing, and printing public domain and user-created geographical data sets. The main emphasis of the course is on the acquisition of system operations skills. Cr 3.

ESP 125 Introduction to Environmental Ecology
This Science Exploration course is an introduction to the study of interactions between organisms and their environments. Students will explore the basic principles of ecology and systems with emphasis on forests, wildlife, freshwater, marine, and urban habitats. Environmental physiology and evolution will be a central theme throughout the course. Prerequisites: successful completion of the University's writing and mathematics proficiency requirements; ESP 101/102 or BIO 105/106. Corequisite: ESP 126. Cr 3.

ESP 126 Introduction to Environmental Ecology Laboratory
This Science Exploration laboratory course surveys the identification, measurement, and function of various ecosystems. A focus will be on the impact of human activity on ecosystems. Prerequisites: successful completion of the University's writing and mathematics proficiency requirements. Prerequisites: ESP 101/102 or BIO 105/106. Corequisite: ESP 125. Cr 1.

ESP 150 Environmental Science Field Immersion Session
This field immersion session is designed to teach basic environmental science field skills and build community in a long weekend format. The course includes components on forest, soil, aquatic, wildlife, and human systems. Basic orienteering and map reading, topographical surveying, GPS operation, and dichotomous key use are emphasized. This required course is for all new majors and transfer students. Students must be present for the entire immersion session. Prerequisite: ESP major/minor or permission of instructor. Cr 3.

ESP 197 Research Skills Lab
This ten-week, lab-style course is designed to develop students' study and research skills to foster academic success as a major in the Department of Environmental Science. Topics will include literature searching, website evaluation, peer review process, critical thinking, finding articles and books, plagiarism, proper citation, primary and secondary sources, and the writing process. The final project is a written literature review on a selected environmental topic. Cr. 1.

ESP 200 Environmental Planning
This course introduces the central concepts of environmental planning theory and practice, including components of rural, regional, and community planning. Concepts and issues studied include planning history and regulations, natural resources inventory, spatial patterns and analysis, zoning techniques, growth management, and planning research. The course meets the Ethical Inquiry core requirement and is a prerequisite for ESP 305 Community Planning Workshop. Prerequisite: ESP 101/102 or permission of instructor. Cr 3.

ESP 203 Environmental Communication
Students study environmental communication to understand the influence of socio-economic, political, and scientific factors on the social construction of environmental problems. Topics include basic communication theory and its application to the social definition of environmental problems and the perception and communication of risk, how communication is used to persuade/dissuade the public regarding environmental problems, and how the environment is used to manipulate consumer behavior. Students also will explore the basics of social science research and its application to environmental communication. Prerequisites: College Writing, ESP 101/102 and sophomore standing. Cr 3.

ESP 207/GFY 207 Atmosphere: Science, Climate, and Change
Students will be introduced to the physical and chemical processes active in the earth's atmosphere. Specific topics include atmospheric circulation, atmospheric chemistry, climate patterns, storms, natural atmospheric change in recent geologic time, human-induced atmospheric change, and atmospheric pollution. Prerequisite: CHY 113. Cr 3.

ESP 210/GEO 210 Planning Maine Communities: Current Issues and Directions
This course will examine the issues facing Maine communities such as providing affordable housing, maintaining and improving the community's physical facilities such as streets, sewers, playgrounds, etc., disposing of solid and hazardous wastes, stimulating jobs and economic development, providing adequate transportation facilities, and preserving Maine's environment and lifestyle in the face of growth. It will also address how these issues can be addressed through the use of the planning process and sound planning techniques. Cr. 3.

ESP 212/PHI 212 Environmental Ethics
This course analyzes the relations between human beings and the environment in terms of the concepts of justice, the good, and human responsibilities. It attempts to provide a new cosmological model for adjudicating between conflicting rights and duties. Issues to be discussed include animal rights, environmental protection, and ecological harmony. Prerequisite: any PHI 100-level course. Cr 3.

ESP 220 Introduction to Environmental Policy
This course is an intensive introduction to the field of applied environmental policy within the framework of the rational policy process. The course will focus on the policy process, including environmental problem identification, root cause analysis, solution analysis, analysis and use of environmental policy tools, decision making, and policy implementation. Particular emphasis is given to air and water pollution and solid waste management. Prerequisites: ESP 203. Cr 3.

**ESP 223/REC 223 Nature-based Tourism**
This course covers the basics of natural tourism—a fast-growing, broad category that covers ecotourism and adventure tourism. An emphasis is placed on a variety of tourist activities and programs involving the outdoors in Maine and northern New England. This is a required course for a minor in nature tourism. Cr 3.

**ESP 250 Soils and Land Use**
Study and description of soils as natural materials in the landscape. The course includes an examination of physical, chemical, and biological properties of soils as they affect soil-plant-water relations. Other topics include soil classification and suitability for agriculture, urban development, and contaminant remediation. Laboratory exercises include field examinations of soils and physical and chemical soil analyses. Prerequisites: ESP 101/102 and one semester of chemistry lecture/lab or permission of instructor. Cr 3.

**ESP 260 Soil and Water Conservation Engineering**
A study of the utilization, improvement, and protection of two essential resources—soil and water. Primary focus is on applying scientific and engineering principles to the problem areas of soil erosion and flood control. Students will design practical solutions to remediate these problems. Prerequisite: math proficiency. Cr 3.

**ESP 275 Energy Use and Societal Adaptation**
This course focuses on the topic of energy, its utility, its use, and its impact on society and the environment. Subjects to be explored include: 1) traditional, modern and future energy resources; 2) energy consumption; 3) energy technologies; 4) energy and the environment and 5) sustainable development. The class will consist of a combination of lectures and seminars using a variety of media, including textbooks, technical articles, print, and video. Prerequisites: ESP 101/102 or permission. Cr 3.

**ESP 280 Research and Analytical Methods**
A focus on analytical and research techniques for environmental science and policy. The course is centered on the use of instrumentation and investigative research to address a thematic environmental issue. Topics include defining research problems, experiment design, measurement, sampling, and analysis. Students will complete group research projects. Prerequisites: ESP 101/102, ESP 197, and ESP 125/126 or one semester chemistry lecture/lab. Cr 4.

**ESP 303 Wetlands Ecology**
This lecture course examines wetlands from the perspectives of science and policy. Topics will include basic wetlands ecology and biology, wetland definitions, classification, and regional and national trends in habitat destruction and management. Prerequisites: ESP 125 or BIO 107, and one semester chemistry lecture/lab, or permission of instructor. Cr 3.

**ESP 305 Community Planning Workshop**
This course provides a practical approach to local community planning problems. Students will conduct field work to explore community decision-making processes regarding the use of natural, social and economic resources. Basic planning concepts are refined and applied to real-world problems in a collaborative manner. Prerequisites: ESP 101, ESP 102, and GEO 209 or ESP 200, or permission of instructor. Cr 3.

**ESP 308 Global Environmental Problems and Sustainability**
This course is a thorough examination of global environmental problems and the need for the principles of sustainability to solve these problems. Topics will include frameworks, tools, and applications of sustainability including sustainability science, life cycle assessment, zero waste, industrial ecology, pollution prevention, natural step, and community-based social marketing. Prerequisites: ESP 101/102 and ESP 203, or permission of instructor. The course meets the Ethical Inquiry and International core requirements. Cr 3.

**ESP 311 Energy Efficiency**
This course provides students with an understanding of how to identify opportunities for energy savings in all economic sectors, with an emphasis at the residential building level. Laboratories will be modeled primarily after the findings of a typical home energy audit, with an emphasis on weatherization, indoor air quality, and utility use. The course culminates with a Maine-based case study. Prerequisite: ESP 275 or permission of instructor. Cr 3.

**ESP 313 Renewable Energy**
This course will equip students with knowledge of renewable energy systems (including solar, wind, water, geothermal, and biomass), their underlying physical and technological principles, their environmental impact, their economics, and how they can be integrated into current energy infrastructures. The course culminates with a renewable energy design project. Prerequisite: ESP 275 or permission of instructor. Cr 3.

**ESP 326/ECO 326 Environmental Economics**
This course considers the economic aspects of resource and environmental issues, such as pollution, the use and management of natural resources, environmental justice, and global climate change. In addressing each of these issues we will investigate the implications of various public policy
ESP 327/ECO 327 Natural Resource Economics
In this course, we will consider the economic aspects of natural resource management and use, including the economically sustainable management of fisheries, forests, water resources, and biodiversity, with applications to Maine and beyond. We will investigate the implications of public policy responses such as regulations, marketable permits, and tax incentives. Prerequisite: ECO 102 or permission of instructor. Cr 3.

ESP 340 Environmental Regulations
This online course is an intensive introduction to the federal and Maine environmental regulatory structure. This course is designed to provide basic competency in the knowledge and application of environmental regulations, including air, surface water, drinking water, spill reporting, and hazardous and solid waste. Prerequisite: ECO 102 or instructor permission. Cr 3.

ESP 341 Limnology
The study of inland waters with emphasis on the identification and ecology of aquatic organisms. This course meets on Fridays to allow time for extended field trips to local streams and lakes. Students will conduct independent research projects as part of the course. Prerequisites: ESP 125/126 or BIO 107, and one semester chemistry lecture/lab, or permission of instructor. Cr 4.

ESP 360 Water Quality Assessment and Control
A study of water-related legislation, methods for determining compliance with statutes, and control methods used for water quality attainment. Regional topics addressed include: waste-water treatment, drinking water standards, storm water runoff, eutrophication, best management practices, and biomonitoring for water quality assessment. Prerequisites: one semester chemistry lecture/lab or permission of instructor. Cr 4.

ESP 375 Environmental Risk Assessment and Management
The focus of this course is to provide students with a competency in quantitative human health risk assessment—an organized, multidisciplinary approach to evaluating scientific data by studying basic toxicology and fate and transport of contaminants using generally accepted principles and terminology used in the field. Students will study the scientific, political, social, ethical, and economic dimensions of managing risks. Prerequisites: ESP 101/102, ESP 203, or permission of instructor. Cr 3.

ESP 400 Internship
The internship provides professional experience related to a student's chosen option within the major. The emphasis is on understanding the host organization's structure and function within the environmental area. In addition to satisfactory work experience, an oral presentation and written report are required. Offered as pass/fail only. Intended to be taken between the junior and senior year. Prerequisites: sophomore standing or higher, faculty approval of host organization, work plan, and completed "Internship Approval" Form. Cr 3.

ESP 401 Environmental Impact Assessment and Lab
An overview of methods used to analyze the environmental impact of human decisions. The course will emphasize U.S. requirements for impact assessment as outlined in NEPA. Federal documents (DEIS, EIS, EIA, FONSI, and ROD) filed for past and on-going projects are reviewed. A laboratory session is taken concurrently and is writing-intensive. Focus is a hands-on application of assessment procedures to a thematic environmental issue. This is a capstone course. Prerequisites: Senior standing, ESP 280 or permission of instructor. Cr 4.

ESP 403 Bioremediation and Phytoremediation
A study of the interaction of soils and groundwater with organic and synthetic contaminants, and the role of soils in pollution control. Students investigate the physical, chemical, and microbiological properties of soil and water and compare conventional remediation with bioremediation techniques. Special emphasis is placed on regional pollution problems including agricultural runoff, landfill leachates, and leaking underground storage tanks. Prerequisites: ESP 101/102, one semester chemistry lecture/lab, and ESP 250, or permission of instructor. Cr 3.

ESP 412 Field Ecosystem Ecology
This course provides a fundamental understanding of ecosystem ecology, with an emphasis on forested and aquatic ecosystems and impacts of the physical and chemical environment on ecosystem functioning. The course is writing intensive and includes hypothesis generation, field research, computer analysis, and journal article interpretation and writing. The laboratory is field intensive and includes local field trips, team research exercises, and independent field research projects. Prerequisites: MAT 120 and ESP 125/126, or permission of instructor. Cr 4.

ESP 413 Forest Ecology
This course provides students with an understanding of what constitutes a healthy forest ecosystem and a sustainable forest environment. Special emphasis is placed on the function, spatial variability, evolution of forest ecosystems, and the need for forest ecology as the foundation of forest management. The laboratory session is field intensive. Prerequisites: ESP 125/126 or permission of instructor. Cr 4.

ESP 417 Site Planning and Assessment
An introduction to environmental planning and assessment concepts and skills associated with the development of sites for human use. Emphasis is given to the development of particular tracts or parcels of land in Maine. Prerequisites: ESP/GEO 108 or GEO 308, and GEO 209 or ESP 200, or permission of instructor. Cr 3.

ESP 421 Natural Resource Policy
This course focuses on the formulation, analysis, and implementation of natural resource based policies through the framework of the rational policy process. Subject areas will include commercial fisheries, river restoration, wildlife, and recreation. Special focus will be on open access conflicts and stakeholder resolutions. Prerequisite: ESP 220. Cr 3.

**ESP 445 Environmental Education and Interpretation**
Students explore the basics of classroom and non-formal environmental science education and interpretation using an inquiry-based approach. Topics include teaching ecosystem and environmental science principles, selecting and designing environmental curricula, and applying the Maine Learning Results to environmental education. Prerequisite: 12 credits of science or permission of instructor. Cr 3.

**ESP 450 Research Practicum**
Organized research experiences in ongoing faculty research projects or a mutually arranged special topic involving substantial skills development. Research will be conducted under the direct supervision of the faculty member. Permission of instructor required in semester prior to registration. May be repeated for a maximum of 6 credits. Cr 1-3.

**ESP 470 Solid Waste Planning & Policy**
An examination of traditional and innovative policy approaches involved in managing municipal solid waste. Includes identifying capacity, siting locations, transportation, and economic needs for management strategies (e.g., recycling, reuse, composting). Students will work a local solid waste planning project to identify cost-effective approaches to reducing disposal. Prerequisites: College Writing and Quantitative Reasoning. Cr 3.

**ESP 475 Topics in Environmental Science/Senior Seminar**
Topics in environmental science not regularly covered in other courses. The content will vary based on current local and regional environmental issues. The course also includes resume and cover letter writing and practice of interview skills. The course may, with permission of the Department, be taken more than once. Prerequisite: Senior Status. Cr 3.

**ESP 489 Grant Writing Seminar**
This course is for juniors and seniors in all disciplines who plan on entering professional careers requiring knowledge of grant writing to successfully submit competitive corporate and foundation proposals, and state and federal grant applications. Developing effective grant writing skills offers a competitive edge for job-seekers across many disciplines and is essential to acquiring competitive funding from government agencies and private foundations. Writing a successful grant proposal is a blend of art and science. It requires basic knowhow, content knowledge, writing proficiency, strong research skills, creativity, organizational ability, patience, and a great deal of luck. This course will provide students with the background necessary to develop a competitive funding proposal. Prerequisite: junior standing or higher. Cr 2.
EHSS Overview

Chair of the Department: Jim Schilling

Faculty in Exercise, Health, and Sport Sciences

Professor: Croteau; Associate Professors: Blum, Schilling, Scott, Toy; Lecturer: Towne

The Department of Exercise, Health, and Sport Sciences offers degrees in athletic training, exercise science (concentrating in exercise physiology or health fitness), and health sciences. The Department's athletic training program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The Department's health fitness concentration within the exercise science program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Upon completion of the curriculum, the undergraduate athletic training student will be eligible to challenge the Board of Certification (BOC) examination leading to national certification as an Athletic Trainer (ATC) and licensure as an Athletic Trainer (LAT) in most states, including Maine. Upon completion of their respective curricula, exercise science majors will be eligible to challenge an eclectic mix of national certification examinations including the American College of Sports Medicine's (ACSM) Health Fitness Specialist and Clinical Exercise Specialist® certification examinations and the National Strength and Conditioning Association's (NSCA) Certified Strength and Conditioning Specialist® (CSCS) examination. Health sciences graduates are prepared for careers in general health science fields and for admission to graduate and professional programs.

Admission Requirements

In addition to the requirements established for admission to the University, the Department of Exercise, Health, and Sport Sciences requires applicants to have successfully completed high school chemistry and biology with labs. Students cannot double major within department offerings.

Additional Information

Experiential Learning Requirements

Most department majors require supervised clinical, practicum, and/or internship experiences. Thus, the exercise, health, and sport sciences faculty reserve the right to limit enrollment in these programs.

In addition, clinical, practica, and internship experiences occur in a variety of settings in the southern Maine area. Thus, students must provide their own transportation to rural as well as urban areas. It is highly recommended that students purchase professional liability insurance.

Change of Major

Students enrolled in other USM programs of study desiring to enroll in athletic training, exercise science, or health sciences through the change of major process must have a 2.50 USM GPA to do so. Students cannot double major within department offerings.

Course Fees

Each exercise, health, and sport sciences laboratory and clinical course offering has a fee ranging from $20 to $150.

BS in Athletic Training

Description

The athletic training program (ATP) is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). Athletic training is a recognized allied health care profession by the American Medical Association. A Certified Athletic Trainer (ATC) enhances the quality of health care for athletes and those engaged in physical activity. An athletic trainer is skilled in the prevention, treatment, management, and rehabilitation of musculoskeletal and related injuries.
Program Requirements

Change of Major

Students enrolled in other USM programs of study desiring to enroll in the Athletic Training major through the change of major process must have a 2.50 USM GPA to do so.

Clinical Education Progression Requirements

Prior to SPM 210, Clinical Athletic Training Principles I, a student must:

- Complete the pre-requisite coursework as outlined in the course description of the catalog.
- Sign the published "technical standards" for the athletic training program.
- Present documentation of receiving the first two of three required Hepatitis B immunization injections. Documentation should include copies of the laboratory reports that the student received the injections. If the student chooses not to be Hepatitis B immunized, he or she must read, complete, and sign the form entitled "Hepatitis B Vaccine Declination Assumption of Risk and Release".
- Present proof of health insurance coverage equal to or better than the USM Student Health Insurance Plan (basic). Documentation should include a copy of a current health insurance card with the name of an insurance carrier, policy number, etc.
- Sign the published "communicable disease policy" for the athletic training program.

Prior to enrolling in SPM 270, Athletic Training Clinic I, a student must:

- Complete the pre-requisite coursework outlined in the course description section of the catalog.
- Present proof of current American Red Cross Cardiopulmonary Resuscitation (CPR) for the Professional Rescuer certification or Basic Life Support (BLS) for Health Care Providers through the American Heart Association.

Prior to enrolling in SPM 370, Athletic Training Clinic II, a student must:

- Complete the pre-requisite coursework as outlined in the course description section of the catalog.
- Present proof of current American Red Cross Cardiopulmonary Resuscitation (CPR) for the Professional Rescuer certification or Basic Life Support (BLS) for Health Care Providers through the American Heart Association.
- Present documentation of receiving the third injection of the Hepatitis B Immunization series.

Prior to enrolling in subsequent clinical (SPM 371, 470), and internship (SPM 495) courses, a student must:

- Complete the pre-requisite coursework for each course as outlined in the course description section of the catalog.
- Present proof of current American Red Cross Cardiopulmonary Resuscitation (CPR) for the Professional Rescuer certification or Basic Life Support (BLS) for Health Care Providers through the American Heart Association.

Didactic Education Progression Requirements

While enrolled in the ATP, students must:

- Maintain a minimum cumulative GPA of 2.50.
- Earn a minimum grade of C- in all required courses. Students receiving a grade lower than C- in a required course will not be allowed to sequence into post-requisite coursework until the prerequisite deficiency has been rectified.

Probation

Students with less than 60 accumulated credits will be placed on academic probation for failure to maintain a minimum cumulative GPA of 2.50. Students failing to rectify the GPA deficiency within a one-year probation period will be removed from their declared major and from their status as a student within the Department. Upon rectifying the GPA deficiency, students can reapply for admission into a Departmental major.

Graduation Requirements

Students will graduate with a bachelor of science degree in athletic training when the following are satisfied.

- Minimum cumulative GPA of 2.50.
- Completion of all University Core curriculum requirements.
- Completion of all exercise, health, and sport sciences core required coursework with a minimum grade of C-.
- Completion of all athletic training major coursework with a minimum grade of C-.
- Completion of 120 credits.

Degree Requirements
The bachelor of science in athletic training consists of 120 credit hours: University Core Courses, EHSS Required Core Courses, Athletic Training Major Required Courses, and Athletic Training Electives if needed to complete the 120-minimum credit requirement.

**University Core Courses**

- EYE (entry-year experience) 3
- College Writing 3 or 4
- Quantitative Reasoning (MAT 120 or PSY 105) 3 or 4
- Science Exploration (PHY 101/102 or PHY 111/114) 4 or 5
- Creative Expression 3
- Cultural Interpretation 3
- Socio-cultural Analysis 3
- Ethical Inquiry, Social Responsibility, and Citizenship 3
- Thematic Cluster 3
- Thematic Cluster 3
- Thematic Cluster 3
- Capstone (SPM 495) 3
- International 3
- Diversity 3

**EHSS Required Core Courses**

- CHY 107 Chemistry for Health Sciences 3
  - or CHY 113 Principles of Chemistry
- PHY 101/102 Introduction to Physics and Lab or PHY 111/114 (4 or 5)
  - Elements of Physics I and Lab (credits included in Core Science Exploration requirement)
- MAT 120 Intro to Statistics or PSY 105 Statistics in Psychology (3 or 4)
  - (credits included in Core Quantitative Reasoning requirement)
- BIO 111 Human Anatomy and Physiology I 3
- BIO 112 Practical Human Anatomy and Phys I 1.5
- BIO 211 Human Anatomy and Physiology II 3
- BIO 212 Practical Human Anatomy and Phys II 1.5
- CON 216 Emergency Response 3
- CON 252 Human Nutrition 3
- CON 352 Nutrition for Physical Performance 3
- SPM 100 Introduction to Exercise, Health and Sport Sciences 3
- SPM 330 Physiology of Exercise 3
- SPM 381 Kinesiology 3
- SPM 430 Exercise Testing, Assessment and Prescription 3

**Athletic Training Major Required Courses**

- SPM 302 Pharmacology for Athletic Training and Exercise Science 3
- CON 321 Health Related Research 3
  - or SPM 485 Senior Thesis I
- SPM 210 Clinical Athletic Training Principles I 2
- SPM 211 Protective Taping and Wrapping 1
- SPM 230 Psychology of Physical Activity and Sport 3
- SPM 265 Therapeutic Modalities 3
- SPM 270 Athletic Training Clinic I 2
- SPM 310 Athletic Training Principles II 3
- SPM 340 Therapeutic Exercise 3
- SPM 370 Athletic Training Clinic II 2
- SPM 371 Athletic Training Clinic III 2
- SPM 410 Athletic Training Principles III 3
- SPM 440 Manual Therapy 3
- SPM 470 Athletic Training Clinic IV 3
- SPM 480 Organization and Administration of Athletic Training 3
  - SPM 495 Clinical Internship/Co-Op (credits included in Core (3)
  - Capstone)

**Athletic Training Major Approved Electives**

Consult with your advisor to determine if athletic training electives are needed to complete the 120-credit minimum graduation requirement. Elective courses require advisor approval.
Admission Information

In addition to the requirements established for admission to the University, the Department of Exercise, Health, and Sport Sciences requires applicants to have successfully completed high school chemistry and biology with labs.

Athletic training accreditation guidelines dictate that only a limited number of students can matriculate into the athletic training program (ATP) at any one time. Please see the curriculum director of the CAATE accredited athletic training program for additional information.

Special note to transfer students: It is highly recommended that students interested in transferring into ATP meet with the ATP director.

Students enrolled in other USM programs of study desiring to enroll in athletic training through the change of major process, must have a 2.50 USM GPA to do so.

Students cannot double major within department offerings.

BS in Exercise Science

Description

The Bachelor of Science in Exercise Science offers two concentration options: exercise physiology or health fitness.

Exercise physiologists utilize science and research methodologies to study the effects of exercise on health and human performance. Exercise physiology students learn how to recognize and evaluate cardiovascular, pulmonary, and metabolic functions in diseased and healthy populations to maintain and enhance physical fitness, health, and quality of life.

Health fitness professionals plan, implement, and evaluate health fitness and health promotion programs for individuals and groups. Students concentrating in health fitness learn to integrate scientific research, education, and practical applications of exercise science to maintain and enhance physical fitness, health, and quality of life. The health fitness concentration is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Program Requirements

Change of Major

Students enrolled in other USM programs of study desiring to enroll in the Exercise Science major through the change of major process must have a 2.50 USM GPA to do so.

Retention and Progression Requirements

Students will be retained within the Exercise Science major providing the following criteria are maintained throughout their undergraduate experience:

- Sign the published "technical standards" for the exercise science major. Technical standards will be addressed and completed during SPM 260.
- Maintain a minimum cumulative GPA of 2.50.
- Earn a minimum grade of C- in required courses.
- Present proof of current American Red Cross Cardiopulmonary Resuscitation (CPR) for the Professional Rescuer Certification, or its equivalent, prior to enrolling in the following courses: SPM 385 and/or SPM 395, and SPM 495.
- Present proof of health insurance coverage equal to or better than the USM Student Health Insurance Plan (basic) prior to enrolling in the following courses: SPM 385 and/or SPM 395. Documentation should include a copy of a current health insurance card with the name of an insurance carrier, policy number, etc.

Probation

Students with less than 60 accumulated credits will be placed on academic probation for failure to maintain a minimum cumulative GPA of 2.50. Students failing to rectify the GPA deficiency within a one-year probation period will be removed from their declared major and from their status as a student within the Department. Upon rectifying the GPA deficiency, students can reapply for admission into a Departmental major.
Graduation Requirements

Students will graduate with a bachelor of science degree in exercise science when the following are satisfied:

- Minimum cumulative GPA of 2.50.
- Completion of all University Core curriculum requirements.
- Completion of all Exercise, Health, and Sport Sciences Core required coursework with a minimum grade of C-.
- Completion of all exercise physiology concentration or health fitness concentration coursework with a minimum grade of C-.
- Completion of 120 credits.

Degree Requirements

The bachelor of science in exercise science consists of 120 credit hours, which includes the University Core Courses, EHSS Required Core Courses, Exercise Physiology Concentration or Health Fitness Concentration Courses, and Approved Electives if needed to complete the 120-minimum credit requirement.

**University Core Courses**  
**Cr (43-46)**

- **EYE (entry-year experience)**-EYE 1253

Getting Down to Business is recommended for students in the health fitness concentration.

- **College Writing** 3 or 4
- **Quantitative Reasoning (MAT 120 or PSY 105)**

Science Exploration (PHY 101/102 or PHY 111/114)

- **Creative Expression-THE 170 Public Speaking** is recommended for students in the health fitness concentration.
- **Cultural Interpretation** 3
- **Socio-cultural Analysis** 3
- **Ethical Inquiry, Social Responsibility, and Citizenship** 3

**Citizenship**

- **Thematic Cluster** 3
- **Thematic Cluster** 3
- **Thematic Cluster** 3
- **Capstone (SPM 495)** 3
- **International** 3
- **Diversity** 3

**EHSS Required Core Courses**  
**Cr (42)**

- **CHY 107 Chemistry for Health Sciences** 3
- **or CHY 113 Principles of Chemistry**
- **PHY 101/102 Introduction to Physics** and(4 or 5) Lab
- **or PHY 111/114 Elements of Physics I**

and Lab (credits included in Core Science Exploration requirement)

- **MAT 120 Intro to Statistics** or **PSY 105(3 or 4)**

Statistics in Psychology (credits included in Core Quantitative Reasoning requirement)

- **BIO 111 Human Anatomy and Physiology I** 3
- **BIO 112 Practical Human Anatomy** and 1.5

**Phys I**

- **BIO 211 Human Anatomy and Physiology II** 3
- **BIO 212 Practical Human Anatomy** and 1.5

**Phys II**

- **CON 216 Emergency Response** 3
- **CON 252 Human Nutrition** 3
- **CON 352 Nutrition for Physical Performance**
- **SPM 100 Introduction to Exercise, Health and Sport Sciences**
- **SPM 260 Introduction to Personal Training** 3
- **SPM 325 Methods of Resistance Training**

and Conditioning
BS in Health Sciences

Description

The bachelor of science in health sciences curriculum reflects the different educational goals and breadth of needs of the students enrolled in the program. The bachelor of science in health sciences can also be a baccalaureate completion program for associate’s degree allied health graduates. As health care shifts to outpatient and community settings, and more health promotion and health education, these graduates with their expanded professional role capability will be able to provide more effective care to the community. The curriculum includes completion of the USM Core curriculum requirements, the health sciences core requirements, and one track of study: wellness, pre-professional, health care administration, or the occupational therapy “jumpstart” program.

Program Requirements

Change of Major

Students enrolled in other USM programs of study desiring to enroll in the Health Science major through the change of major process must have a 2.50 USM GPA to do so.

Retention and Progression Requirements

While enrolled in Health Sciences, students must:

- Maintain a minimum cumulative GPA of 2.50.
- Earn a minimum grade of C- in all required courses. Where applicable, students receiving a grade lower than C- in a required course will not be allowed to sequence into post-requisite coursework until the prerequisite deficiency has been rectified.

Probation

Students with less than 60 accumulated credits will be placed on academic probation for failure to maintain a minimum cumulative GPA of 2.50. Students failing to rectify the GPA deficiency within a one-year probation period will be removed from their declared major and from their status as a student within the Department. Upon rectifying the GPA deficiency, students can reapply for admission into a Departmental major.

Graduation Requirements

Students will graduate with a bachelor of science degree in health sciences when the following are satisfied:

- Maintain a minimum cumulative GPA of 2.50.
- Completion of all University Core curriculum requirements.
- Completion of all health sciences core required coursework with a minimum grade of C-.
- Completion of coursework within one track of study with a minimum grade of C-.
- Completion of 120 credit hours.

Degree Requirements

The bachelor of science in health sciences consists of 120 credit hours: University Core Courses, Health Sciences Required Core Courses, a Track of Study, and General Electives if needed to complete the 120-credit minimum graduation requirement.

University Core Courses

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<tr>
<th>Course</th>
<th>Cr (40-43)</th>
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</thead>
<tbody>
<tr>
<td>EYE (entry-year experience)</td>
<td>3</td>
</tr>
<tr>
<td>College Writing</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Quantitative Reasoning (MAT 120 or PSY 105)</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Science Exploration (PHY 101/102 or PHY 111/114)</td>
<td>4 or 5</td>
</tr>
<tr>
<td>Creative Expression</td>
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<tr>
<td>Cultural Interpretation</td>
<td>3</td>
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</tbody>
</table>
Socio-cultural Analysis (HRD 200) 3
Ethical Inquiry, Social Responsibility, and Citizenship 3
Thematic Cluster 3
Thematic Cluster 3
Thematic Cluster 3
Capstone (credits included in Health Sciences Required Core (3)

**Courses**
- International 3
- Diversity 3

**Health Sciences Required Core Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Cr (36)</th>
</tr>
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<tbody>
<tr>
<td>PSY 101 General Psychology I</td>
<td>3</td>
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<tr>
<td>PSY 102 General Psychology II</td>
<td>3</td>
</tr>
<tr>
<td>BIO 111 Human Anatomy and Physiology I</td>
<td>3</td>
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<tr>
<td>BIO 112 Practical Human Anatomy and Phys I</td>
<td>1.5</td>
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<tr>
<td>BIO 211 Human Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>BIO 212 Practical Human Anatomy and Phys II</td>
<td>1.5</td>
</tr>
<tr>
<td>CHY 113 Principles of Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>PHY 101, 102 Introduction to Physics and Lab</td>
<td>(4-5)</td>
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<tr>
<td>or PHY 111, 114 Elements of Physics I and Lab (credits included in Core Science Exploration requirement)</td>
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</tbody>
</table>

- MAT 120 Intro to Statistics (3 or 4)
- or PSY 105 Stats in Psychology (credits included in Core Quantitative Reasoning requirement)
- HRD 200 Multicultural Human Development (credits included in (3)

**Socio-cultural Analysis Core requirement**
- CON 321 Health Related Research or 3
- CON 252 Human Nutrition 3
- CON 356 Concepts of Community Health or MPH 400 Introduction to 3

**Public Health**
- SPM 100 Introduction to Exercise, Health and Sport Sciences 3
- SPM 230 Psychology of Physical Activity and Sport 3
- SPM 350 Health Promotion Programs 3

**Track of Study (30 credits)**

Students must complete one track of study as part of the health sciences major. Students who have a two-year Health-Related Associates Degree do not have to complete a track of study (i.e. 30 credits of the A.S. degree will be applied to the Track requirement) except for those interested in pursuing the Occupational Therapy Jumpstart track.

The wellness, pre-professional, and health care administration tracks present the option for a minor though the completion of a minor is not required.

**Wellness Track (30 Credits)**

Self-select 30 credits from the list below. Student wishing to pursue a Holistic and Integrative Health minor should consult with the School of Nursing

- CON 219 Lifetime Physical Fitness and Wellness
- CON 261 Introduction to Naturopathic Medicine
- CON 280 Holistic Health I
- CON 281 Holistic Health II
- CON 283 Healing and Spirituality
- CON 284 Botanical Therapies
- CON 285 Perspective on Animal-Assisted Therapy
- CON 270 Holistic Approach to Reproductive Health
- CON 288 Reiki: Energy Medicine
- CON 311 Psychosocial Intervention for Older Adults
- CON 490 Therapeutic Touch
- SPM 460 EKG Interpretation
- PSY 340 Behavior Modification
- PSY 366 Drugs, Mind and Behavior

USM Undergraduate Academic Catalog 2014-15 504
PSY 368 Health Psychology
PSY 390 Health Psychology Institute
RHF prefix courses (any two 1.5 credit courses)

Pre-Professional Track (30 credits)

Self-select 30 credits from the list below. Student wishing to pursue a Biology minor should consult with the Department of Biological Sciences. Students wishing to pursue a Biochemistry minor or a Chemistry minor should consult with the Chemistry Department.

BIO 105 Biological Principles I: Cellular Bio
BIO 106 Laboratory Biology
BIO 107 Biological Principles II: Evolution, Biodiversity, and Ecology
BIO 109 Biological Principles III: Functional Bio
BIO 201 Genetics
BIO 205 Comparative Vertebræ Anatomy
BIO 281 Microbiology and Human Disease
BIO 282 Microbiology and Human Disease Lab
BIO 321 Neurobiology
BIO 322 Neurobiology Lab
BIO 345 Pathophysiology
BIO 401 General Physiology
BIO 402 General Physiology Lab
BIO 403 Comparative Animal Physiology
BIO 404 Comparative Animal Physiology Lab
BIO 408 Experimental Genetics
BIO 409 Cell and Molecular Biology
BIO 410 Cell and Molecular Biology Lab
BIO 431 Principles of Immunology
CHY 114 Laboratory Techniques I
CHY 115 Principles of Chemistry II
CHY 116 Laboratory Techniques II
CHY 231 Analytical Chemistry
CHY 232 Analytical Chemistry Lab
CHY 251 Organic Chemistry I
CHY 252 Organic Chemistry Laboratory I
CHY 253 Organic Chemistry II
CHY 254 Organic Chemistry Laboratory II
CHY 371 Physical Chemistry
CHY 372 Physical Chemistry Laboratory I
CHY 373 Physical Chemistry II
CHY 421 Inorganic Chemistry
CHY 461 Biochemistry
CHY 462 Biochemistry Laboratory
CHY 463 Biochemistry II
PHY 112 Elements of Physics II
PHY 116 Introductory Physics Lab II
PHY 121 General Physics I
PHY 123 General Physics II
MAT 140 Pre Calculus Mathematics
MAT 152 Calculus A
MAT 220 Statistics for the Biological Sciences

Health Care Administration Track (30 credits)

Self-select 30 credits from the list(s) below. Student wishing to pursue a Business Administration minor should consult with the School of Business.

ACC 110 Financial Accounting Information for Decision Making
ACC 211 Managerial Accounting Information for Decision Making
BUS 101 Getting Down to Business
BUS 201 Personal Finance
BUS 200 Introduction to Business
BUS 260 Marketing
BUS 280 Legal Environment of Business
BUS 340 Managing Organizational Behavior
BUS 345 Information Technology/Management Information Systems
ECO 101 Introduction to Macroeconomics
ECO 102 Introduction to Microeconomics
RMI 320 Introduction to Risk Management and Insurance

ITS 300 Ergonomics/Time Study
ITS 320 Occupational Safety and Health
ITS 321 Workplace Design Ergonomics
ITP 210 Technical Writing
ITP 230 Project Management
ITP 350 Team Building and Facilitation
ITP 381 Human Resource Development in Industry
ITP 490 Cost Analysis and Control
MPH 400 Introduction to Public Health

Occupational Therapy "Jumpstart" Track (30 credits)

This track is for students interested in pursuing USM's Masters in Occupational Therapy (MOT) degree. Entrance into this program is competitive and includes the completion of a formal application process. For more information about USM's MOT please contact the Coordinator of Graduate programs at USM's Lewiston-Auburn College.

Note: courses listed below represent the student's last year of study in Health Sciences major and first year of study in the MOT, and can only be taken by students who have been formally accepted into USM's MOT program.

OTH 501 OT Foundations
OTH 502 Introduction to OT
OTH 503 Reflective Practitioner
OTH 513 Applied Concepts of Movement
OTH 514 Human Anatomy
OTH 504 Applied Research
OTH 505 Impact of Mental Health on Occupational Performance
OTH 507 Ethics and Social Justice
OTH 509 MH Level I Fieldwork
OTH 517 Occupational Well-Being

General Electives

Consult with your advisor to determine if general electives are needed to complete the 120-credit minimum graduation requirement.

Admission Information

In addition to the requirements established for admission to the University, the Department of Exercise, Health, and Sport Sciences requires applicants to have successfully completed high school chemistry and biology with labs.

Students enrolled in other USM programs of study desiring to enroll in health sciences through the change of major process, must have a 2.50 USM GPA to do so.

Students cannot double major within department offerings.

Course Descriptions

SPM 100 Introduction to Exercise, Health, and Sport Sciences
This course orients the student to the expectations of a baccalaureate education in athletic training, exercise science (concentrating in exercise physiology or health fitness), or health sciences. Allied health historical perspectives, education, careers, certification, and professional associations are explored. Educating the students about the structure and progression of the three degrees will be discussed. Outside field experiences will be required. Prerequisite: ALT, EXS, or HLS major or permission of the Department Chair. Cr. 3.
SPM 200 History of Athletic Training
This course will chronicle the profession of athletic training from its early roots in the late 1800's, through the subsequent formation of the National Athletic Trainers' Association in 1950, and evolution into its present day form as an AMA recognized allied health care profession since 1990. An examination of the educational progression from an apprenticeship, to an internship model, and subsequent educational reform will also be highlighted. Cr. 3.

SPM 210 Clinical Athletic Training Principles I
An introduction to the principles of prevention, examination, treatment, and reconditioning of physical activity injuries. Lecture information prepares students for supervised clinical experiences. Completion of a minimum of 40, and a maximum of 50 clinical observation hours required. Prerequisites: ALT major; 24 University credit hours completed; minimum cumulative GPA of 2.50; CON 216 or concurrent; SPM 100 or concurrent; BIO 111, 112 or SCI 170, 171 or concurrent; Co-requisite: SPM 211. Cr. 2.

SPM 211 Protective Taping and Wrapping
An introduction to the principles of taping and wrapping as they pertain to preventative, protective, and post injury situations. In addition, basic skills in stretching will be taught. Laboratory course in which the completion of competencies prepare students for supervised clinical experience. Prerequisites: ALT major; CON 216 or concurrent; SPM 100 or concurrent; Co-requisite: SPM 210. Cr. 1.

SPM 230 Psychology of Physical Activity and Sport
Course presents an overview of concepts, theories, principles, and research related to exercise and sport behaviors. Practical application of psychological principles and techniques that help facilitate behavior change during exercise and sport activities will be covered. Prerequisites: ALT, EXS, or HLS major; SPM 100. Cr. 3.

SPM 235 Lab Techniques in Nutrition and Exercise
An introduction to those laboratory techniques that are found in the nutritional and exercise sciences. Students will be introduced to the concepts of energy exchange in the human body and the measurement of those exchanges. Emphasis also will be placed on the impact nutritional practices have on human performance and disease. Prerequisites: ALT or EXS major. Cr. 3.

SPM 260 Introduction to Personal Training
An overview of the knowledge, skills, and abilities needed by fitness instructors to plan, implement, and evaluate safe and effective exercise programs. Emphasis is on exercise programs for individuals. Prerequisites: EXS major; SPM 100 or concurrent. Cr. 3.

SPM 265 Therapeutic Modalities
An exploration of the physical principles, physiological effects, indications, contraindications, safety precautions, and operating procedures of therapeutic modalities. Includes application of modalities in the laboratory setting. Prerequisites: ALT major; SPM 100, 210, 211; CON 216; PHY 101, 102 or PHY 111, 114 or concurrent. 2 credits lecture, 1 credit lab. Cr. 3.

SPM 270 Athletic Training Clinic I
Completion of a minimum of 150, and a maximum of 175 clinical hours applying proficiency knowledge and skills in an athletic training clinical setting. The first clinical course for students enrolled in the athletic training major. Prerequisites: ALT major; SPM 100, 210, 211; CON 216. Cr. 2.

SPM 302 Pharmacology for Athletic Training and Exercise Science
This course is an introduction to the general concepts and principles of pharmacology as it relates to the profession of athletic training and disciplines within the exercise sciences. An explanation of pharmacokinetic and pharmacodynamic principles will be presented. The course will cover the indications, contraindications, precautions, dose information, allergies, and adverse side effects of prescription and non-prescription drugs as they relate to injuries or illnesses commonly acquired by the physically active person. The potential problematic interaction of medications will also be addressed. The governing regulations relevant to treating and caring for injuries and illnesses, including storing, transporting, dispensing, and recording of medication will be revealed. Performance-enhancing substances and an introduction to the process of drug testing in sports will also be expressed. Prerequisites: ALT or EXS major; BIO 211 or SCI 172; CHY 107 or 113. Cr. 3.

SPM 310 Athletic Training Principles II
This is an intermediate study of principles for the prevention, examination, treatment and reconditioning of physical activity injuries. Lecture and laboratory competencies prepare students for supervised clinical experiences. Prerequisites: ALT major; SPM 100, 210, 211; CON 216. 2 credits lecture, 1 credit lab. Cr. 3.

SPM 315 Group Exercise Instruction
This course provides knowledge, skills, and practical experience needed to plan, lead, and evaluate a variety of group exercise sessions effectively. Developing and leading various components of group exercise sessions constitute a major part of this course. Prerequisites: EXS major; SPM 260. Cr. 3.

SPM 325 Methods of Resistance Training and Conditioning
Theoretical and practical study of practices and methods involved in developing and implementing resistance training and conditioning programs for physically active populations. Prerequisites: ALT, EXS, HEF major; BIO 111, 112 or SCI 170, 171; BIO 211, 212 or SCI 172, 173 or
SPM 330 Physiology of Exercise
An investigation of the acute and chronic effects exercise incurs on the body. Muscle physiology, respiration, cardiac function, circulation, energy metabolism and application to training will be emphasized and applied in laboratory activities. Prerequisites: ALT or EXS major; CHY 107 or CHY 113 or concurrent; BIO 111, 112 or SCI 170, 171; BIO 211, 212 or SCI 172, 173. 2 credits lecture, 1 credit lab. Cr. 3.

SPM 340 Therapeutic Exercise
A study of the basic components of a comprehensive therapeutic exercise program including functional anatomy, joint mobilizations, and rehabilitation programs will be discussed for the appendicular and axial skeletons. In addition, the physiological effects, safety precautions, indications, contraindications, modes of resistance, and specific rehabilitation protocols will be discussed. Prerequisites: ALT major; SPM 370, 410; 2 credits lecture, 1 credit lab. Cr. 3.

SPM 350 Health Promotion Programs
This course examines the assessment, planning, implementation, and evaluation of health promotion programs in a variety of settings. Students will develop and lead a health promotion workshop. Prerequisites: EXS or HLS major; SPM 230. Cr. 3.

SPM 370 Athletic Training Clinic II
Completion of a minimum of 150, and a maximum of 175 clinical hours applying proficiency knowledge and skills in an athletic training clinical setting. The second clinical course for students enrolled in the athletic training major. Prerequisites: ALT major; SPM 265, 270, 310; PHY 101, 102 or PHY 111, 114; BIO 111, 112 or SCI 170, 171; BIO 211, 212 or SCI 172,173. Cr. 2.

SPM 371 Athletic Training Clinic III
Completion of a minimum of 150, and a maximum of 175 clinical hours applying proficiency knowledge and skills in an athletic training clinical setting. The third clinical course for students enrolled in the athletic training major. Prerequisites: ALT major; SPM 370; 410. Cr. 2.

SPM 381 Kinesiology
Structural and functional anatomical analysis of human movement. Course will also incorporate principles of mechanics as they apply to the analysis of human movement. Prerequisites: ALT or EXS major; BIO 111, 112 or SCI 170, 171; BIO 211, 212 or SCI 172,173 or concurrent; PHY 101, 102 or PHY 111, PHY 114 or concurrent. Cr. 3.

SPM 385 Practicum I
This introductory field experience provides opportunity for practical application of knowledge gained through prior coursework in exercise science. The student will assist in the leadership of a wide variety of university-based and off-campus programs, with special emphasis on either personal training experiences or group exercise instruction. Prerequisites: junior level EXS major; SPM 260; SPM 325 or concurrent. Cr. 3.

SPM 395 Practicum II
Building upon experiences gained from Practicum I, the student continues assisting in the leadership of university-based and off-campus programs, with emphasis on personal training experiences or group exercise instruction. Prerequisites: junior level EXS major; SPM 260; SPM 325. Cr. 3.

SPM 398 Independent Study
This course is intended to provide majors in the Department of Exercise, Health, and Sport Sciences with an opportunity to pursue a project independently. Students should select a faculty advisor and develop a course proposal with that person. A final written paper is required. Prerequisites: ALT, EXS, or HLS major; junior or senior standing; Instructor permission required. Cr. 1-3.

SPM 410 Athletic Training Principles III
This is an advanced study of principles for the prevention, examination, treatment and reconditioning of physical activity injuries. Lecture and laboratory competencies prepare students for supervised clinical experiences. Prerequisites: ALT major; SPM 265, 270, 310; PHY 101, 102 or PHY 111, 114; BIO 111, 112 or SCI 170, 171; BIO 211, 212 or SCI 172,173. 2 credits lecture, 1 credit lab. Cr. 3.

SPM 430 Exercise Testing, Assessment, and Prescription
Course focuses on knowledge and skills necessary for assessing health-related components of physical fitness. Course will also focus on prescription and design of programs to develop health-related fitness which will be applied in the laboratory setting. Prerequisites: ALT or EXS major; CHY 107 or CHY 113; SPM 330. Cr. 3.

SPM 431 Advanced Exercise Physiology
An advanced study of the whole-body and cellular responses and adaptations to exercise related to human performance limitations, training effects, and health related benefits. Emphasis is on human bioenergetics, metabolism, cardiovascular structure and function and cardiopulmonary responses to exercise. Prerequisites: ALT or EXS major; CHY 107 or CHY 113, SPM 330. Cr. 3.

SPM 440 Manual Therapy
This course will take a detailed approach into the principles, theories, and evidence concerning the use of manual therapy for the treatment of
musculoskeletal injuries. Students will be taught and asked to demonstrate specific skills and techniques that enhance efficient and effective treatment of a wide range of clinical presentations pertaining to the spine and extremities using multiple manual therapy strategies. Prerequisites: ALT major; SPM 230, 302, 340, 371; SPM 381 or concurrent. Cr. 3.

**SPM 450 Exercise for Special Populations**  
Course focuses on exercise programming guidelines and recommendations for a variety of special populations. Prerequisites: ALT or EXS major; SPM 430 or concurrent. Cr. 3.

**SPM 460 EKG Interpretation**  
A clinical, practical study of the physiological and biochemical mechanisms involved in the body's response to certain diseases and pathological situations. Emphasis in both lecture and laboratory activities will be placed on cardiac electrophysiology and the pathophysiology of coronary arteriosclerosis, hypertension, and COPD. Prerequisites: ALT or EXS major; BIO 111, 112 or SCI 170, 171; BIO 211, 212 or SCI 172,173. Cr. 3.

**SPM 470 Athletic Training Clinic IV**  
Completion of a minimum of 225, and a maximum of 275 clinical hours applying proficiency, knowledge, and skills in traditional athletic training and general medical (15 clinical hours) settings. A minimum of 50, and a maximum of 75 traditional setting hours will be completed during the month of August within an athletic pre-season venue. The fourth clinical course for students enrolled in the athletic training major. Prerequisite: ALT major; SPM 230, 302, 340, 371; SPM 330 or concurrent; SPM 381 or concurrent. Cr. 3.

**SPM 480 Organization and Administration of Athletic Training**  
Administrative components of an athletic training program. Facility design; supply ordering, budget and inventory; insurance, personnel and athletic training educational considerations. Prerequisites: ALT major, SPM 230, 302, 340; SPM 371. Cr. 3.

**SPM 481 Fitness Facility Management**  
An introduction to the management and operation of health fitness facilities. Knowledge and skills needed to plan, lead, manage and evaluate various health fitness programs will be discussed. Prerequisites: senior level EXS major; BUS 200 or BUS 260, or EYE 125; SPM 350. Cr. 3.

**SPM 485 Senior Thesis I**  
Introduction to health-related research with an emphasis on understanding the research process and becoming a consumer of research. Critique of health-related research findings to exercise and health professions and their application to professional practice is a major component of this course. Prerequisites: ALT or EXS major; MAT 120 or PSY 105; SPM 330. Cr. 3.

**SPM 486 Senior Thesis II**  
A continuation of SPM 485. Students will be introduced to various research-related issues such as design, methodology, statistics and writing scientific manuscripts involved in conducting research in exercise science. Students will be required to conduct a research experiment using learned techniques. Prerequisites: ALT or EXS major; SPM 485. Cr. 3.

**SPM 495 Clinical Internship/Co-op**  
This culminating experience for athletic training, exercise physiology, health fitness and health sciences majors provides the opportunity for students to apply knowledge and skills gained through didactic, practicum, clinical, and laboratory experiences in a work setting. Prerequisites: ALT or EXS major; completion of all major requirements, or concurrent. Instructor permission required. Cr. 3-12.

**SPM 499 Athletic Training International Service Learning**  
This culminating experience for athletic training majors provides the opportunity to apply knowledge and skills gained didactic and clinical experiences in remote villages in the mountains of the Dominican Republic. Prerequisites: SPM 410; Instructor permission required. Cr. 3.

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**Department of Geosciences**

**Geosciences Overview**

Chair of the Department: Stephen Pollock, Bailey Hall, Gorham

Professors: Fitts, Novak, Pollock, Swanson; Laboratory Associate: Vose

Geoscientists focus on planet earth. We study processes that have molded earth for unfathomable spans of billions of years, as well as processes...
that operate over the more familiar time frames we experience as humans. Students in our programs build a solid scientific understanding of earth's processes using the latest tools and technologies. Our graduates have gone on to funded graduate research and into entry-level jobs in the field. Many of these jobs are in New England with environmental and geotechnical consulting firms and government regulatory agencies working on contamination cleanup, construction projects, and water resource exploration. Others go into energy resource exploration, mineral exploration, and K-12 science teaching.

Geosciences crosses traditional discipline boundaries, incorporating concepts from physics, chemistry, biology, and mathematics in the study of specific areas such as earth structure, history of life, plate tectonics, mountain building, earthquakes, ground water resources, climate, and energy resources. Our degree programs offer students the flexibility to tailor their sequence of courses to their interests. We offer a strong field- and laboratory-based sequence of courses. We conduct field trips to explore, map, and measure geologic processes throughout Maine and New England. Dedicated laboratories in Bailey Hall include the Petrology Microscope Lab, Sediment Analysis Lab, Rock Preparation Lab, and X-ray Diffraction Lab for mineral identification. The latest digital mapping technologies are available with global positioning system (GPS) and total station surveying equipment that is used in conjunction with the Gorham Geographic Information System (GIS) computer laboratory in Bailey Hall. The Gorham GIS Lab offers the latest software for modern spatial analysis and remote sensing of the earth's surface. Geoscience courses integrate our available equipment and technology resulting in a strong field-based, digitally supported degree program.

We also stress and value undergraduate student research and independent study. Faculty expertise offers student research opportunities in many areas including digital outcrop surface mapping, remote sensing using multiple data sources, groundwater resource mapping and modeling, and geoarcheology. Student work is presented at a number of venues including the USM Thinking Matters conference, Geological Society of Maine meetings, and Geological Society of America meetings.

**BA in Geosciences**

**Description**

The B.A. in Geosciences requires a minimum of 53 credits in courses required for the major. Forty-one (41) of these credits are in Geosciences courses and the remainder in Chemistry, Physics and Mathematics. The B.S. degree is similar, but requires more courses in Chemistry, Physics and Mathematics.

**Program Requirements**

A minimum of 53 credits are required for the B.A. degree and a minimum of 67 credits are required for the B.S. degree (in addition to the University's Core curriculum requirements). The B.A. and B.S. degrees differ only in the chemistry, physics, and mathematics requirements as listed below. Majors planning on obtaining an advanced degree normally, but not necessarily, choose the B.S. Majors must achieve a 2.0 grade point average and grades of C- or better in all geosciences courses.

Geosciences Course Requirements for both B.A. and B.S. degrees:

All majors must complete at least one introductory lecture and lab, to be selected from among the following courses. Note that an additional introductory lecture course may be applied to the major as three elective credits.

**Introductory lecture courses**
- GEY 100 Volcanoes, Earthquakes, and Moving Plates
- GEY 103 Floods, Glaciers, and Changing Climate
- GEY 105 Ocean Planet

**Introductory lab courses**
- GEY 101 Laboratory Experiences in Geology
- GEY 105 Ocean Planet Laboratory

All majors must complete four foundation courses as follows
- GEY 202 Landscape Evolution and Analysis
- GEY 203 Mineralogy
- GEY 204 Crustal Deformation
- GEY 205 Water Resources: Science and Issues OR
- GEY 207 Atmosphere: Science, Climate, and Change
In addition to the above, 20 credits of geosciences (GEY prefix) elective courses are required. Three credits of these may be at the 100 level, and the rest must be at the 200 level or higher. Students are encouraged to also explore relevant courses in other departments, depending on their interest. In particular, GIS courses are recommended for those interested in mapping or consulting, and some chemistry and environmental science courses are relevant to environmental consulting and regulation.

Original research is regarded as a significant component of liberal education. The Department encourages Undergraduate Research in Geology (GEY 498) as part of the degree program.

Suggested Geosciences elective courses for students interested in earth materials and resources
- GEY 201 Paleogeography and Global Change
- GEY 240 X-ray Powder Diffraction Laboratory
- GEY 302 Sedimentation and Stratigraphy
- GEY 303 Igneous and Metamorphic Rock Origins

Suggested Geosciences elective courses for students interested in environmental geology
- GEY 205 Water Resources: Science and Issues
- GEY 207 Atmosphere: Science, Climate, and Change
- GEY 208 Environmental Geology
- GEY 310 Glacial and Pleistocene Geology

Suggested Geosciences elective courses for students interested in mapping technologies
- GEY 340 Digital Mapping
- GEY 360 Field Mapping in the Island Environment: Data Collection to GIS

Non-Geosciences course requirements for the B.A. degree
- CHY 113 Principles of Chemistry I
- CHY 114 Laboratory Techniques I
- PHY 111 Elements of Physics Laboratory I
- PHY 114 Introductory Physics Laboratory I
- MAT 140 Pre-Calculus Mathematics
  or MAT 152D Calculus A

Non-Geosciences course requirements for the B.S. degree
- CHY 113 Principles of Chemistry I
- CHY 114 Laboratory Techniques I
- CHY 115 Principles of Chemistry II
- CHY 116 Laboratory Techniques II
- PHY 121 General Physics I
- PHY 114 Introductory Physics Laboratory I
- PHY 123 General Physics II
- PHY 116 Introductory Physics Laboratory II
- MAT 152 Calculus A
- MAT 153 Calculus B

**Recommended Course Sequence**

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<thead>
<tr>
<th>Course</th>
<th>1st yr.</th>
<th>2nd yr.</th>
<th>3rd yr.</th>
<th>4th yr.</th>
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<tr>
<td>GEY Intro Lecture</td>
<td>(100 or x 103 or 105)</td>
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<td></td>
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</tr>
<tr>
<td>GEY Intro Lab (101 or x 106)</td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>Math (140 or 152)</td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>Physics (111, 114)</td>
<td>x</td>
<td></td>
<td>x</td>
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<tr>
<td>Chemistry (113, 114)</td>
<td>x</td>
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<td>x</td>
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<tr>
<td>GEY 202, 203, 204, and x 205x</td>
<td>x</td>
<td></td>
<td>x</td>
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<tr>
<td>or 207</td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>GEY electives (20+ cr., x 17 cr. are at 200+ level)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

(Does not include the University's core curriculum requirements although some courses above do satisfy some of those requirements)
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CHY 114 Laboratory Techniques I
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PHY 114 Introductory Physics Laboratory I
MAT 140 Pre-Calculus Mathematics
or MAT 152D Calculus A

Non-Geosciences course requirements for the B.S. degree
CHY 113 Principles of Chemistry I
CHY 114 Laboratory Techniques I
CHY 115 Principles of Chemistry II
CHY 116 Laboratory Techniques II
PHY 121 General Physics I
PHY 114 Introductory Physics Laboratory I
PHY 123 General Physics II
PHY 116 Introductory Physics Laboratory II
MAT 152 Calculus A
MAT 153 Calculus B

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<table>
<thead>
<tr>
<th>Course</th>
<th>1st yr.</th>
<th>2nd yr.</th>
<th>3rd yr.</th>
<th>4th yr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEY Intro Lecture</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math (152, 153)</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics (121, 114, 123, 116)</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Chemistry (113, 114, 115, 116)</td>
<td>x</td>
<td>x</td>
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<tr>
<td>GEY 202, 203, 204, and 205</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
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<tr>
<td>or 207</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>GEY Electives (20+ cr., 17 cr. are at 200+ level)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

(Does not include the University's core curriculum requirements although some courses above do satisfy some of those requirements)

Concentration in Secondary Education Earth Sciences

Description

This concentration is for students who want to become certified to teach 7-12 earth sciences in Maine. Interested students should talk with their advisors upon acceptance to USM, matriculation, upon choosing a geosciences major, or as early in their time at USM as possible. The curriculum for this concentration is designed to provide prospective 7-12 teachers a strong academic foundation in earth sciences along with a continuous focus on both the theory and practice of teaching through a sequence of pre-internship education courses and field experiences. It has four components: USM Core curriculum, Geosciences major, professional education courses, and electives totaling 120 credit hours for the degree.

Program Requirements

USM Core Curriculum (including pre-internship education courses):

- EYE 108 Culture, Identity, and Education (recommended), (3 cr.)
- EDU 100 Exploring Teaching (recommended), (3 cr.)
- College Writing- ENG 100 College Writing (3 cr.)
- Cultural Interpretation (3 cr.)
• Quantitative- (covered by Geosciences degree req.), (3 or 4 cr.)
• Creative Expression (3 cr.)
• Socio-Cultural Analysis- HRD 200 Multicultural Human Growth & Development (3 cr.)
• Science Exploration (covered by Geosciences degree req.), (4 cr.)
• Ethical Inquiry, Social Responsibility, and Citizenship- EDU 310 Purpose of Schooling in a Democracy (this course also fulfills the core International requirement) (3 cr.)
• Cluster- EDU 305 Foundations of Cultural and Linguistic Diversity (this course also fulfills the core Diversity requirement), SED 335 Students with Exceptionalities in General Education, and SED 420 Multi-Tiered Systems of Educational Support (9 cr.)

Special Major Requirements:

Geosciences B.A. or B.S. major (see major degree requirements)

Professional Education Internship Year Requirements:

• EDU 501 Secondary Science Methods (3 cr.)
• STEM Seminar in Teaching and Learning I (3 cr.)
• STEM Seminar in Teaching and Learning II (3 cr.)
• Internship in Secondary Education (9 cr.)

Electives:

Students must complete elective credit to complete the 120 credit hour degree. For those students interested in teaching at the middle level (grades 7 or 8), it is recommended that they complete coursework in a second content area (e.g. English, social studies, math, life or physical science) to become highly qualified to teach an additional content area. Those students interested in teaching high school may want to use their elective credits to bolster their content knowledge by taking additional courses in their major discipline and related fields. Finally, students should consider taking education courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

Tk20 Subscription:

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: http://usm.maine.edu/educatorpreparation

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed within the context of the Unit’s data management system (i.e., Tk20).

Other Requirements:

Students must maintain a high level of academic achievement. Minimum academic requirements are as follows:

A grade of C or better in all University Core and major coursework.

A grade of B or better in all professional education coursework.

An overall GPA of 3.00 or better.

Prior to admission to the professional internship year, students must pass the Praxis II exam and demonstrate satisfactory progress toward the State of Maine Core Teaching Standards.

As required by partner school districts and prior to the professional internship, students must be fingerprinted through the State of Maine Department of Education.
Minor in Geosciences

Description
The minor in Geosciences can be a logical and relevant addition for those majoring in Environmental Science, Physics, Chemistry, Biology, or Engineering. We encourage any student with a strong interest in Geoscience to consider the minor.

Program Requirements
A minimum of 17 credits of GEY courses are required, including an introductory lecture, an introductory lab, and 13 additional credits of GEY electives, 10 of which must be numbered 200 or higher. The minor is normally taken by individuals majoring in related sciences who desire a more complete understanding of their science as it relates to earth processes. Appropriate subdisciplines in geosciences are archaeological geology, geobiology, geochemistry, environmental science, geophysics, medical geology and public policy issues as they relate to earth sciences and natural hazards.

Course Descriptions

GEY 100 Volcanoes, Earthquakes, and Moving Plates
An introduction to minerals, rocks, and the processes that have continually shaped the earth over hundreds of millions of years of geologic history. The course also explores how the movements of crustal plates generates earthquakes, volcanoes, continental rifting, sea floor spreading, subduction, and continental-scale mountain ranges. For core science course credit, registration in one of the following: GEY 101 or GEY 106 is required; concurrent registration is recommended. Cr. 3.

GEY 101 Laboratory Experiences in Geology
Weekly lab sessions will focus on the basic skills of mineral identification, rock classification, and interpretation of topographic and geologic maps. Field trips to local geologic sites of interest will help illustrate rock types and geologic processes that shape our world. Traditional map, compass, and modern GPS techniques will be utilized. For core science course credit, registration in one of the following: GEY 100 or GEY 103 or GEY 105 is required; concurrent registration is recommended Cr 1.

GEY 103 Floods, Glaciers, and Changing Climate
This course focuses on the external processes that shape earth's surface, including rivers, groundwater, glaciers, oceans, climate, and landslides. The course will also examine issues such as flood control, water resources, and climate change, where these external processes have large impacts on society. For core science course credit, registration in one of the following GEY 101 or GEY 106 is required; concurrent registration is recommended. Cr. 3

GEY 105 Ocean Planet
An interdisciplinary look at the science of the ocean, emphasizing connections between land, sea, and atmosphere. Basic concepts in chemistry, geology, physics, and biology are taught as they apply to marine phenomena such as salinity, ocean floor formation, currents, waves, sea floor sediments and rocks, and marine life. Students must have fulfilled the University's minimum proficiency requirements in mathematics. For core science course credit, registration in one of the following: GEY 100 or GEY 103 or GEY 105 is required; concurrent registration is recommended. Cr 3.

GEY 106 Ocean Planet Laboratory
Major concepts from GEY 105K are illustrated using hands-on activities. Students perform a variety of tasks designed to promote understanding of scientific methods and data analysis. Classes held in the lab include a range of chemical, physical, and geological exercises. Field trips may involve observing a variety of coastal phenomena including waves, beach formation, rocky shoreline geology, or intertidal zonation. Students must have fulfilled the University's minimum proficiency requirements in mathematics. For core science course credit, registration in one of the following: GEY 100 or GEY 103 or GEY 105 is required; concurrent registration is recommended. Cr 1.

GEY 201 Paleogeography and Global Change
This course examines the diversity of the global rock record to emphasize continental, oceanic, and atmospheric origins and changes. Geochronology, geologic time scale, plate tectonics, and magneto- and bio-stratigraphy will be significant topics. Laboratories will emphasize invertebrate fossil groups from the late Precambrian to the Pleistocene. Three hours lecture, three hours lab. The course may require one three-day field trip. Prerequisite: completion of a 100-level geoscience lecture and lab. Cr 4.5

GEY 202 Landscape Evolution and Analysis
Students will consider landscapes and the processes that are responsible for their formation. Emphasis will be on the constructive processes of mountain-building and volcanism and the erosional processes of rivers, glaciers, the sea, and wind. There will be one or two weekend field trips.
GEY 203 Mineralogy
The course concentrates on the silicate family of minerals, but also examines non-silicate mineral families. Subject areas covered include crystallography, crystal chemistry, and environments of mineral formation. In one lab each week, students will examine crystals and minerals in hand specimens. In a second lab each week, the rudiments of optical crystallography are introduced and students will examine minerals microscopically. Three hours lecture, two labs each two hours in length. Prerequisite: completion of a 100-level geoscience lecture and lab; CHY 113 and CHY 114 are recommended. Cr 4.

GEY 204 Crustal Deformation
The crustal rocks exposed in coastal Maine are examined. Students learn to recognize, describe, and interpret a wide variety of outcrop-scale structures. In weekly field-based labs, students will use Brunton compasses, manual and digital stereonets, outcrop mapping techniques, GPS and clay deformation devices to analyze the local geologic structure and tectonic history. Three hours lecture and four hours lab. Prerequisite: completion of a 100-level geoscience lecture and lab. Cr 5.

GEY 205 Water Resources: Science & Issues
An introduction to watershed hydrology, including precipitation, evaporation, transpiration, flow in open channels, floods, and subsurface flow. Readings of current domestic and international case studies involving water resource issues are incorporated where appropriate. Prerequisites: PHY 111 or PHY 121. Cr. 3.

GEY 207 Atmosphere: Science, Climate, and Change
Students will be introduced to the physical and chemical processes active in the earth's atmosphere. Specific topics include atmospheric circulation, atmospheric chemistry, climate patterns, storms, natural atmospheric change in recent geologic time, human-induced atmospheric change, and atmospheric pollution. Prerequisite: CHY 113 and CHY 114. Cr 3.

GEY 208 Environmental Geology
Examines the effect of geological processes and products on human civilization. Specific topics will include earthquakes, volcanoes, landslides, floods, sinkholes, human impact and erosion at the coastal zone, waste disposal, groundwater use and contamination, climate change, energy resources, and mineral resources. Laboratory experiences complement the lecture and will include several field trips to local sites. Three hours lecture, two hours lab. Cr 4.

GEY 240 X-Ray Powder Diffraction Laboratory
This is an applications laboratory designed for junior or senior level majors in geosciences, or any discipline that requires the characterization and identification of crystalline solids. Students will develop a working knowledge of elementary crystallography, sample preparation and identification using x-ray diffraction. Projects will utilize a series of increasingly complex materials and mixtures, culminating with a narrowly defined research project. Prerequisite: GEY 203 or concurrent or CHY 113 and CHY 114 or concurrent, or permission of instructor. Cr 1.

GEY 302 Sedimentation and Stratigraphy
Students focus on the processes that produce sediments and the mechanisms by which they are eroded, transported, and deposited. By carefully examining the motifs, models, and characteristics found in the sediment composition, texture, and features in modern-day sedimentary environments, clues can be found to understanding the historical sedimentary record. Three hours lecture, two hours lab. Prerequisite: GEY 202 or permission of instructor. Cr 4.

GEY 303 Igneous and Metamorphic Rock Origins
An introduction to the diversity and global distribution of igneous and metamorphic rocks. Students will examine the physical conditions and environments where igneous and metamorphic rocks form. Such environments include mid-ocean ridges, island arcs, convergent margins, and intraplate settings. Topics include: styles of volcanic eruptions, intrusive igneous rocks, regional metamorphism, and metamorphic belts. Labs will cover rock identification, computer exercises, and petrographic microscopy. Three hours lecture, three hours lab. The lab and lecture will occasionally be combined into half or full day field trips. Additionally, one weekend field trip will be offered. Prerequisite: GEY 203. Cr 4.5.

GEY 310 Glacial and Pleistocene Geology
Glacial processes, deposits, and the stratigraphy of the Pleistocene epoch. Emphasis on the erosional and depositional features of glacial events in Maine. One, possibly two, weekend field trips. Three hours lecture, two hours lab. Prerequisite: GEY 202 or permission of instructor. Cr 4.

GEY 340 / GEO 340 Digital Mapping
Students are exposed to the latest digital survey gear and integrated techniques with applications in geosciences, geography, and environmental science. Instrumentation includes both static and real time kinematic GPS (global positioning system) and autolock servo-driven electronic total station. Detailed precision survey data are combined with geo-referenced maps and imagery in GIS software. Six hours lecture/lab. Prerequisites: introductory course in GEY, GEO, or ESP and additional 200-level course in any of the above areas. Cr 4.5.

GEY 360 Field Mapping in the Island Environment: Data Collection to GIS
The coast of Maine provides a unique laboratory for teaching geologic and environmental mapping, data compilation and data management. In this course students are trained and equipped to use kayaks as the platform from which to conduct survey work for the preparation of small-scale
high-resolution analytical maps of natural, historical, and archaeological phenomena. Field techniques used include topographic surveying, global positioning system (GPS) operation, and field mapping of geological and geographical features. Minimum impact methods are used throughout. Laboratory techniques used include air-photo interpretation, traditional cartography and geographic information system (GIS) operation. The course culminates in the completion of a portfolio of maps and a GIS database covering the area surveyed. Offered during Summer Session only. Prerequisite: junior/senior standing or permission of instructor. May be repeated for credit. Cr 6.

GEY 400 Cooperative Education in Geosciences
Students have opportunities to relate academic knowledge and practical job experience. Arrangements can be made with various agencies, businesses, and industries to employ qualified students. The student's work should be in a field related to geoscience. Approval is on an individual basis, depending on the nature of the job and specific work assignments. Evaluation is typically done through a written report that summarizes the work experience, with input from the employer and a faculty advisor. Prerequisite: junior/senior standing or permission of instructor. May be repeated for a maximum of 6 credits. Cr 1-6.

GEY 498 Undergraduate Research in Geology
Students have the opportunity to work independently or as research assistants to Geoscience faculty conducting original geologic research. Research may involve analysis of geologic samples or data, field mapping, or literature review. The topic is chosen in consultation with a faculty advisor in the semester prior to registration. May be repeated for a total of 6 credits. Prerequisite: permission of the instructor. Cr 1-3.
Linguistics Overview

Chair: Wayne Cowart, 65 Exeter Street, Portland

Professors: Cowart, McDaniel, Shepard-Kegl; Lecturer: Schertz

Language plays a crucial role in almost every aspect of human life; it is fundamental to commerce, government, education, science, technology, the arts, and the mass media. The field of linguistics is devoted to the study of language, its nature, its uses, and its limitations. Because of its wide relevance, undergraduate study in linguistics can be a springboard to careers in many areas, from education to computer science.

The linguistics major consists of linguistics courses designed to foster a deep understanding of human natural language, including an appreciation of the structure and organization of natural languages, the variety of natural languages, the commonalities that underlie the vast apparent differences among languages, the processes of language acquisition in children, the psychological and neurological bases of language use, and the form and significance of social variation in language.

Beyond this intellectual foundation, students have three options. They can major in general linguistics or they can choose one of two concentrations: ASL/English Interpreting or Speech and Language Science. These options are designed to meet the needs of three specific categories of student. The ASL/English Interpreting Concentration is intended for students who wish to eventually become nationally certified ASL/English interpreters. The general linguistics major serves students who have an interest in language as an aspect of human nature or who wish to pursue graduate education in linguistics or language-related areas. The Speech and Language Science Concentration is designed for students who wish to pursue a career in speech-language pathology, audiology, or related disciplines.

The goals of the linguistics major are 1) to help each student develop an understanding of the nature of natural language, 2) to help each student develop a foundation of more specialized expertise relevant to the student's career goals, and 3) to help each student compile a record of achievement that will facilitate the student's search for employment or further education.

BA in Linguistics - ASL/English Interpreting Concentration

Description

The ASL/English Interpreting Concentration is intended for students who wish to become nationally certified ASL/English interpreters.

For more information, click here.

For ASL and ASL/English Interpreting resource links, click here.

For the USM ASL Club's Maine Deaf Film Festival, visit: www.mainedeaffilmfest.com

Program Requirements

Required Coursework

LIN 105 Contrastive Analysis: ASL and English
LIN 185 Language, Mind, and Society: An Introduction to Linguistics
LIN 310 Signs of Language in the Brain
LIN 313 Syntax
LIN 422 A Cognitive Perspective on Syntax
LIN 331 ASL/English Interpreting
LIN 332 Consecutive Interpreting and Deaf/Hearing Interpreter Teams
LIN 333 Interpreting: Source Language ASL
LIN 334 Interpreting: Source Language English
LIN 410 Ethical Decision Making in ASL/English Interpreting
ASL 401 Advanced American Sign Language I
ASL 402 Advanced American Sign Language II
ASL 415 ASL Literature in ASL, or ASL 416 ASL Linguistics in ASL, or
ASL 417 Deaf Art, Film, and Theater in ASL
One of LIN 405 Sight Translation, 413 Supervised Mentoring, or 498
Thesis; or six credits of LIN 425 Special Topics in ASL/English Interpreting
LIN 435 (six credits) Advanced Interpreting and Practicum I

Total number of credits: 50 or 53 (depending on choice of 405/413/498
or six credits of LIN 425)

Language Component

Students pursuing the English ASL/Interpreting Concentration must have taken four semesters of ASL (101-202) or have attained a level of proficiency equivalent to four semesters. These courses (or the equivalent) do not count as credits toward the major, but are prerequisites to the interpreting courses and upper-level ASL courses.

Honors for ASL/English Interpreting Concentration:

Linguistics majors who do outstanding work in the major can graduate with honors in linguistics. The requirements for Honors for students in the ASL/English Interpreting Concentration are the following:

- Achieve a G.P.A. of at least 3.7 in LIN and ASL courses.
- Complete the following additional LIN courses with a grade of ‘B’ or higher: LIN 311, 312, 314, 315, and 490

Notes on General Education Requirements

In addition to completing a major, students must satisfy USM's General Education (Core Curriculum) requirements and receive a total of at least 120 credits to graduate. Here we make notes on General Education requirements that overlap with the major in Linguistics with a Concentration in ASL/English Interpreting or General Education courses that we recommend for students majoring in Linguistics with this concentration.

Quantitative Reasoning: One of the requirements for Honors in Linguistics is LIN 490. This course has a statistics course (MAT 120 or PSY 105) as a prerequisite. Therefore, you should take a statistics course to meet the Quantitative Reasoning requirement, if you are considering pursuing Honors in Linguistics. If not, you can take any course in the Quantitative Reasoning category.

Cultural Interpretation: Each of ASL 102, 201, and 202 fulfills this General Education requirement.

Socio-Cultural Analysis: LIN 185 meets this requirement.

Diversity: LIN 185 also meets this requirement (and can be used to fulfill both requirements).

Capstone: LIN 435 is a capstone course.

Minor or Thematic Cluster: Students can meet this requirement with the Deaf Studies minor. However, in order for a minor to satisfy the General Education requirement, there must be no more than 1/3 overlap with the major. This means that four courses that count toward the minor must not also count toward the major. ASL 201 and 202 are prerequisites for the major, but not part of it. LIN 203 (Introduction to the Deaf World) is recommended, but also not part of the major. These three courses count toward the minor without overlapping with the major. In order for the minor to meet the General Education requirement, students need one additional course that meets the minor and doesn't overlap with the major. (A good option is one of ASL 415/416/417; the major requires only one of these, so a second one can be taken toward the minor.)

Recommended Course Sequence

Suggested four-year plan for Linguistics Majors, ASL/English Interpreting Concentration:

There are many possible paths through the major. The listings below are suggestions that may or may not be appropriate for individual students. Courses do not have to be taken in the order shown here so long as the prerequisites for each course are met before it is taken.

See the course list for course prerequisites. Note especially that students must earn at least a ‘B’ in LIN 185 before enrolling in LIN 313 (or LIN 311, 312, 314, 315).

Note that many of the suggested semester schedules listed here do not make up a full course load. These semesters would need to be filled out with general education courses, electives, a minor, or possibly a second major.
(course in italics is required for Deaf Studies Minor)

- Fall 1: LIN 105, ASL 101
- Spring 1: ASL 102, *LIN 203*, LIN 185
- Fall 2: LIN 310, LIN 313, ASL 201
- Spring 2: LIN 422, ASL 202
- Fall 3: ASL 401
- Spring 3: ASL 402, LIN 331
- Fall 4: LIN 332, LIN 333, LIN 334
- Spring 4: LIN 435 (six credits)

ASL 415/416/417 and LIN 425 can be fit in to various places. Note that LIN 331 can be taken in the same semester as ASL 202. This option is good for transfer students and students who declared the major after the first year, because it allows for the interpreting courses to be taken a year earlier than indicated above.

**Long-term scheduling**

To help students plan their academic careers, we try to offer courses on a regular cycle. This is difficult and we cannot always offer courses when we, or our students, would most like them to appear. This listing should not be mistaken for a promise to offer any particular course in any given semester. Nevertheless, to the extent we can, we try to keep to the plan laid out below.

Offered every fall:

- ASL 101
- ASL 201
- ASL 401
- LIN 105
- LIN 185
- LIN 310
- LIN 313
- LIN 332
- LIN 333
- LIN 334

Offered every spring:

- ASL 101
- ASL 102
- ASL 202
- ASL 402
- LIN 112
- LIN 185
- LIN 203
- LIN 331
- LIN 410
- LIN 422
- LIN 435

Offered once a year, semester varies, sometimes summer:

- ASL 415 or 416 or 417

Offered once every two years in fall:

- LIN 211
- LIN 213
- LIN 311
- LIN 314

Offered once every two years in spring:

- LIN 212
- LIN 312
- LIN 315
Offered every semester as independent learning options:

- LIN 336
- LIN 394
- LIN 395
- LIN 398
- LIN 498

Offered irregularly, depending on demand:

- LIN 405
- LIN 425
- LIN 426

**BA in Linguistics - Speech and Language Science Concentration**

**Description**

The Speech and Language Science Concentration is designed for students who wish to pursue a career in speech-language pathology, audiology, or related disciplines.

For more information, click here.

For links to helpful Speech and Language Science resource links, click here.

**Program Requirements**

**Required Coursework**

LIN 185 Language, Mind, and Society: An Introduction to Linguistics  
LIN 201 Language Acquisition  
LIN 211 Anatomy and Physiology of the Speech and Hearing Mechanism  
LIN 212 Speech Science  
LIN 213 Introduction to Audiology  
LIN 310 Signs of Language in the Brain  
LIN 311 Phonetics  
LIN 312 Phonology and Morphology  
LIN 313 Syntax  
LIN 314 Semantics  
LIN 315 Field Methods  
LIN 490 Introduction to Language Research

One three-credit 400-level LIN courses (excluding courses focused on interpreting and excluding LIN 498)

Four semesters of language study (number of credits varies depending on courses)

Total number of credits: 51 credits minimum (the number varies depending on the choice of language courses)

**Note on Language Component**

Students pursuing the Speech and Language Science Concentration must complete four semesters of a language or languages other than their native language. Students may choose to take four semesters of the same language or to divide the four courses among two or more different languages. The language courses may be waived on a case-by-case basis for students who demonstrate the equivalent degree of competency in a language or languages. In such cases, students replace the language course credits with other linguistics courses (or possibly with linguistics-related courses in other areas). The substitutions are made in consultation with the student's advisor.
Linguistics majors who do outstanding work in the major can graduate with honors in linguistics. The requirements for Honors for students in the Speech and Language Science Concentration are the following:

- Achieve a G.P.A. of at least 3.7 in LIN courses.
- Earn a grade of ‘B’ or higher in all language courses that count toward the major.
- Submit a portfolio of linguistic activities approved by the Department. (The portfolio documents linguistic activities outside of required coursework. Examples of such activities include independent study and research internship courses, tutoring, and attendance at linguistics conferences. Students who plan to submit a portfolio should discuss the details with their advisor.
- Complete a senior thesis (LIN 498) and earn a grade of ‘A’.

Notes on General Education Requirements

In addition to completing a major, students must satisfy USM's General Education (Core Curriculum) requirements and receive a total of at least 120 credits to graduate. Here we make notes on General Education requirements that overlap with the major in Linguistics with a Concentration in Speech and Language Science or General Education courses that we recommend for students majoring in Linguistics with this concentration.

Quantitative Reasoning: You should fulfill this requirement by taking a statistics course (MAT 120 or PSY 105). One of the LIN requirements, LIN 490, has a statistics course as a prerequisite.

Cultural Interpretation: Second level (and higher) language courses fulfill this requirement, so the language requirement for the major (as long as it includes a course beyond the first level) will also fulfill this General Education requirement.

Science Exploration: We recommend that you fulfill this requirement with a biology course, since biology is a prerequisite for many graduate programs in speech/language pathology and audiology.

Socio-Cultural Analysis: LIN 185 meets this requirement.

Diversity: LIN 185 also meets this requirement (and can be used to fulfill both requirements).

Capstone: LIN 490 is a capstone course.

Notes on Requirements for Graduate Programs

Graduate programs in speech/language pathology and audiology have undergraduate prerequisites. Not having the prerequisites does not prevent a student from being admitted to a program (nor does having the prerequisites ensure admittance). Generally, a student starting a graduate program without the prerequisites needs to do undergraduate course work at the beginning of the graduate program. Due to the extra expense and time this takes, it is best to incorporate as many prerequisites as possible into the undergraduate curriculum. Each graduate program has its own set of prerequisites. We recommend that you investigate these for graduate programs you are interested in. Here we list some courses that are common prerequisites.

Our Speech and Language Science Concentration includes the following requirements that are often prerequisites for graduate programs: LIN 201, 211, 212, 213, 310, 311

Many graduate programs require a biology course, as noted above. Some also require physics. We recommend that you take both biology and physics. The Science Exploration course for General Education needs to include a lab, but the graduate programs do not require a lab. You could therefore take one of the science courses with a lab and the other without it.

Many graduate programs require a statistics course (which is also a prerequisite for LIN 490 and meets the Quantitative Reasoning General Education requirement -- see above).

Many graduate programs require a psychology course.

Many graduate programs require 25 hours of observation in a clinic (observing an SLP). You can do these hours on your own or as part of a one- to three-credit independent study (LIN 398).

Recommended Course Sequence

Suggested four-year plan for Linguistics Majors, Speech and Language Science Concentration:

There are many possible paths through the major. The listings below are suggestions that may or may not be appropriate for individual students. Courses do not have to be taken in the order shown here so long as the prerequisites for each course are met before it is taken.
See the course list for course prerequisites. Note especially that students must earn at least a 'B' in LIN 185 before enrolling in LIN 311, 312, 313, 314, or 315. Also, LIN 490 has a statistics prerequisite (PSY 105, MAT 120, or equivalent course).

Note that many of the suggested semester schedules listed here do not make up a full course load. These semesters would need to be filled out with general education courses, electives, a minor, or possibly a second major.

(Courses in italics are required by many grad schools, but not for the major)

- Fall 1: Language 1
- Spring 1: LIN 185, PSY 101, MAT 120 (or PSY 105), Language 2
- Fall 2: LIN 201, LIN 211, LIN 311, LIN 313, Language 3
- Spring 2: LIN 312, LIN 315, Language 4, Biology
- Fall 3: LIN 213, LIN 310, LIN 313, LIN 314
- Spring 3: LIN 4xx (usually LIN 421 or 422)
- Fall 4: Physics
- Spring 4: LIN 490, LIN 498 thesis (if doing Honors)

**Long-term scheduling**

To help students plan their academic careers, we try to offer courses on a regular cycle. This is difficult and we cannot always offer courses when we, or our students, would most like them to appear. This listing should not be mistaken for a promise to offer any particular course in any given semester. Nevertheless, to the extent we can, we try to keep to the plan laid out below.

**Offered every fall:**

- ASL 101
- ASL 201
- ASL 401
- LIN 105
- LIN 185
- LIN 310
- LIN 313
- LIN 332
- LIN 333
- LIN 334

**Offered every spring:**

- ASL 101
- ASL 102
- ASL 202
- ASL 402
- LIN 112
- LIN 185
- LIN 203
- LIN 331
- LIN 410
- LIN 422
- LIN 435

**Offered once a year, semester varies, sometimes summer:**

- ASL 415 or 416 or 417

**Offered once every two years in fall:**

- LIN 211
- LIN 213
- LIN 311
- LIN 314

**Offered once every two years in spring:**

- LIN 212
BA in Linguistics

Description

The general linguistics major serves students who have an interest in language as an aspect of human nature or who wish to pursue graduate education in language-related areas.

For more information, click here.

Program Requirements

Required Coursework

- LIN 185 Language, Mind, and Society: An Introduction to Linguistics
- LIN 311 Phonetics
- LIN 312 Phonology and Morphology
- LIN 313 Syntax
- LIN 314 Semantics
- LIN 315 Field Methods
- LIN 490 Introduction to Language Research

One three-credit LIN course (excluding courses focused on interpreting and excluding LIN 498) or one of the language-based courses offered by the English Department (ENG 230, 330, 331, 332, 336, 337, 338, 431)

One 300- or 400-level three-credit LIN course (excluding courses focused on interpreting and excluding LIN 498) or ASL 416

Two three-credit 400-level LIN courses (excluding courses focused on interpreting and excluding LIN 498)

Four semesters of language study (number of credits varies depending on courses)

Total number of credits: 45 credits minimum (the number varies depending on the choice of language courses)

Note on Language Component

Students pursuing the general linguistics major must complete four semesters of a language or languages other than their native language. Students may choose to take four semesters of the same language or to divide the four courses among two or more different languages. The language courses may be waived on a case-by-case basis for students who demonstrate the equivalent degree of competency in a language or languages. In such cases, students replace the language course credits with other linguistics courses (or possibly with linguistics-related courses in other areas). The substitutions are made in consultation with the student's advisor.
Honors in Linguistics

Linguistics majors who do outstanding work in the major can graduate with honors in linguistics. The requirements for Honors for students majoring in general linguistics are the following:

- Achieve a G.P.A. of at least 3.7 in LIN courses.
- Earn a grade of 'B' or higher in all language courses that count toward the major.
- Submit a portfolio of linguistic activities approved by the Department. (The portfolio documents linguistic activities outside of required coursework. Examples of such activities include independent study and research internship courses, tutoring, and attendance at linguistics conferences. Students who plan to submit a portfolio should discuss the details with their advisor.
- Complete a senior thesis (LIN 498) and earn a grade of 'A'.

Notes on General Education Requirements

In addition to completing a major, students must satisfy USM's General Education (Core Curriculum) requirements and receive a total of at least 120 credits to graduate. Here we make notes on General Education requirements that overlap with the major in general Linguistics or General Education courses that we recommend for students majoring in general Linguistics.

Quantitative Reasoning: You should fulfill this requirement by taking a statistics course (MAT 120 or PSY 105). One of the LIN requirements, LIN 490, has a statistics course as a prerequisite.

Cultural Interpretation: Second level (and higher) language courses fulfill this requirement, so the language requirement for the major (as long as it includes a course beyond the first level) will also fulfill this General Education requirement.

Socio-Cultural Analysis: LIN 185 meets this requirement.

Diversity: LIN 185 also meets this requirement (and can be used to fulfill both requirements).

Capstone: LIN 490 is a capstone course.

Recommended Course Sequence

Suggested four-year plan for general Linguistics Majors:

There are many possible paths through the major. The listings below are suggestions that may or may not be appropriate for individual students. Courses do not have to be taken in the order shown here so long as the prerequisites for each course are met before it is taken.

See the course list for course prerequisites. Note especially that students must earn at least a 'B' in LIN 185 before enrolling in LIN 311, 312, 313, 314, or 315. Also, LIN 490 has a statistics prerequisite (PSY 105, MAT 120, or equivalent course).

Note that many of the suggested semester schedules listed here do not make up a full course load. These semesters would need to be filled out with general education courses, electives, a minor, or possibly a second major.

- Fall 1: Language 1
- Spring 1: LIN 185, MAT 120 (or PSY 105), Language 2
- Fall 2: LIN 313, LIN 314, Language 3
- Spring 2: LIN 312, LIN 315, Language 4
- Fall 3: LIN 1xx/2xx/3xx/4xx, LIN 311
- Spring 3: LIN 490, LIN 4xx
- Fall 4: LIN 3xx/4xx, LIN 498 thesis (if doing honors)
- Spring 4: LIN 4xx

Long-term scheduling

To help students plan their academic careers, we try to offer courses on a regular cycle. This is difficult and we cannot always offer courses when we, or our students, would most like them to appear. This listing should not be mistaken for a promise to offer any particular course in any given semester. Nevertheless, to the extent we can, we try to keep to the plan laid out below.

Offered every fall:

- ASL 101
- ASL 201
- ASL 401
- LIN 105
• LIN 185
• LIN 310
• LIN 313
• LIN 332
• LIN 333
• LIN 334

Offered every spring:

• ASL 101
• ASL 102
• ASL 202
• ASL 402
• LIN 112
• LIN 185
• LIN 203
• LIN 331
• LIN 410
• LIN 422
• LIN 435

Offered once a year, semester varies, sometimes summer:

• ASL 415 or 416 or 417

Offered once every two years in fall:

• LIN 211
• LIN 213
• LIN 311
• LIN 314

Offered once every two years in spring:

• LIN 212
• LIN 312
• LIN 315
• LIN 421
• LIN 490

Offered every semester as independent learning options:

• LIN 336
• LIN 394
• LIN 395
• LIN 398
• LIN 498

Offered irregularly, depending on demand:

• LIN 405
• LIN 425
• LIN 426

Minor in Deaf Studies
Description

The Deaf Studies minor offers training in American Sign Language and knowledge of the American Deaf Community. These skills can enhance your undergraduate education and may be applied to various settings such as education, human services, social work, health care, counseling, and many others. The Deaf Studies minor will also provide specific ASL skills necessary to apply to graduate programs such as Deaf Education, ASL linguistics, rehabilitation counseling, and more.

Program Requirements

Required Coursework

Note: Some of these courses have prerequisites -- see course list.

ASL 201 Intermediate American Sign Language I
ASL 202 Intermediate American Sign Language II
ASL 401 Advanced American Sign Language I
ASL 402 Advanced American Sign Language II
LIN 203 Introduction to the Deaf World

One of the following courses:
ASL 415 ASL Literature in ASL
ASL 416 ASL Linguistics in ASL
ASL 417 Deaf Art, Film, and Theater in ASL
LIN 105 Contrastive Analysis: ASL and English
LIN 310 Signs of Language in the Brain
LIN 315 Field Methods
LIN 395 Research Internship

Total number of credits: 22

Note about General Education requirements for students majoring in Linguistics, ASL/English Interpreting

Students majoring in Linguistics, ASL/Interpreting Concentration, can meet the requirements for the Deaf Studies minor by taking ASL 201 and 202 and LIN 203. (The other requirements overlap with the major.) However, in order for the Deaf Studies minor to count toward the minor/thematic cluster requirement for General Education, the major and minor must have less overlap. In this case, students should take one additional course from the above list that doesn't overlap with the courses that fulfill the requirements for their major.

Minor in Linguistics

Description

Language plays a crucial role in almost every aspect of human life; it is fundamental to commerce, government, education, science, technology, the arts, and the mass media. The field of linguistics is devoted to the study of language, its nature, its uses, and its limitations. Because of its wide relevance, undergraduate study in linguistics can be a springboard to careers in many areas, from education to computer science.

Program Requirements

Required Coursework

Note: Some of these courses have prerequisites -- see course list.

LIN 185 Language, Mind, and Society: An Introduction to Linguistics

Three of the following courses:
LIN 310 Signs of Language in the Brain
LIN 311 Phonetics
LIN 312 Phonology and Morphology
Course Descriptions

LIN 105 Contrastive Analysis: ASL and English
This course examines the major linguistic features of ASL and English. Students will gain an understanding of the basic similarities and differences in morphology, phonology, syntax, semantics and pragmatics, as well as the values, beliefs, and norms of the Deaf and non-Deaf communities. Some knowledge of ASL is recommended, but not required. Cr 3.

LIN 112 The Birth of a Language
The goal of this course is to explore the many factors that impact the use, development, and emergence of language by focusing on one unique case of language emergence in Nicaragua and the social and political context in which it arose. The emergence of Nicaraguan Sign Language is the first case in which any language, spoken or signed, has been documented in the process of its emergence. Students will engage in critical thinking and exploration of controversial debates concerning the nature of language as a human trait, the evolution/emergence of language in the human species, and the historical factors that converge to set the stage for the emergence of a language. The course is highly interdisciplinary, relating the linguistic concepts to history, psychology, political science, philosophy (particularly ethics), neuroscience, Latin American Studies, and Spanish. No prior knowledge of a signed language is required. Cr 3.

LIN 185 Language, Mind, and Society: An Introduction to Linguistics
This course approaches language as a biological and psychological phenomenon central to an adequate understanding of human nature. It deals with linguistic questions concerning the grammars of natural languages and how these may vary across cultures and across time, but also with questions about how the human mind and brain both provide for and constrain linguistic ability. The course also addresses questions about how language develops in the child, how it deteriorates under the influence of disease and injury, how it evolved in the history of the species, and what functions it plays in human life. The course does not assume any background in linguistics or foreign languages. Cr 3.

LIN 201 Language Acquisition
An introductory overview of the phenomena of language and communication development. The course covers the acquisition of phonology, morphology, syntax, and the lexicon, as well as the development of communicative competence. Each of these areas will be discussed with respect to production, comprehension, and knowledge. Prerequisite: LIN 185. Cr 3.

LIN 203 Introduction to the Deaf World
A Deaf instructor presents the culture and history of Deaf communities from a national and international perspective. Deaf communities are examined as cultural and linguistic minorities, with all the tensions and conflicts that arise within such minority groups and with the stresses that arise when outsiders interact with such minority groups. Some exposure to ASL is recommended, but not required. Cr 3.

LIN 211 Anatomy and Physiology of the Speech and Hearing Mechanism
The basic principles of the structure and function of the neuromuscular mechanism necessary for spoken language will be presented. These include six major topics: respiration, phonation, articulation, resonance, the nervous system, and the auditory system. Mastering these fundamentals will enable students to better understand normal and pathological processes involved in the production and reception of speech. Cr 3.

LIN 212 Speech Science
This course covers the acoustical, articulatory, perceptual, and physiological aspects of speech. It considers the acoustic contributions of the movements and postures of various articulators. It will also examine the neurophysiology of speech, including timing, control, and interactions among articulators. Cr 3.

LIN 213 Introduction to Audiology
This course introduces the anatomy, physiology, and function of the auditory system, focusing on those central auditory nervous system functions, including cognitive functions, that are most relevant to audiologists and speech/language pathologists. This course provides a foundation for understanding aural rehabilitation and diagnosis of auditory pathology, as well as a practical introduction to the measurement and assessment of auditory function. Cr 3.
LIN 232 Introduction to Educational Interpreting
This course is designed for interpreting students and working interpreters, and focuses upon skills training in K-12 settings, with some attention to university-level interpreting. We address appropriate classroom configurations, teacher/interpreter interaction, role/responsibilities of the educational interpreter, and the code of ethics. Working educational interpreters are offered the option of a diagnostic session where their skills in the classroom are directly observed and evaluated with specific and individualized constructive feedback. Prerequisite: grade of at least B in ASL 202 or equivalent. Cr 3.

LIN 236 Not Yet Ready for Prime Time Interpreter
This course is designed to provide a safe and systematic way for students in the ASL/English Interpreting Concentration to gain experience in the actual practice of interpreting. Students will practice interpreting at community events as members of a team that will include trained consumers acting in a mentorship role. This course is a one-credit pass/fail offering and may be repeated for credit. Prerequisites: LIN 331 and instructor permission. Cr 1.

LIN 301 Signs of Language in the Brain
This course looks at language as a capacity of the human brain. Models of language breakdown for spoken languages are reviewed, and the remainder of the course focuses upon signed language aphasia, the effects of Parkinson's disease on articulation and motor planning, and how spatial and attentional deficits caused by right hemisphere damage affect the processing and production of signing. Prerequisite: LIN 185. Cr 3.

LIN 311 Phonetics
An introduction to speech sounds, covering the basic elements of articulatory and acoustic phonetics and of speech perception. The course also reviews the process by which infants come to be competent at perceiving and producing the sounds of their native language. Topics discussed will also include the contributions of selected brain regions to the use of sounds and the cross-linguistic variation in sounds. Prerequisite: grade of at least B in LIN 185. Cr 3.

LIN 312 Phonology and Morphology
An introduction to the derivation of words in natural language. The course covers the sound system, the processes by which words are dynamically derived from other words, and the processes by which words are inflected to mark the roles they assume in sentences. Particular attention is also given to the great variety of word-building systems that occur in the world's languages and to the means by which children acquire the phonological and morphological processes of their native language. Prerequisite: grade of at least B in LIN 185. Cr 3.

LIN 313 Syntax
This is an introduction to the role of sentences and sentence structure in natural language. The course addresses the questions: What makes a particular string of words usable as a sentence? Why are some strings acceptable while others are not? What is the nature of the knowledge humans bring to the process of forming and interpreting sentences? How is this knowledge acquired? Why is the ability to produce and understand well-formed sentences disrupted by injury to specific brain regions? How and why do the sentence patterns that are typical of a language community change over time? Prerequisite: grade of at least B in LIN 185. Cr 3.

LIN 314 Semantics
An introduction to the study of meaning in natural language. The course explores questions about the nature of meanings and how they are related to minds. Another concern is the relation between words and sentences, on one hand, and the objects, events and relations we experience in the world, on the other. How are words linked to things in the world? How do words refer or describe? What is it for a sentence to be true? Prerequisite: grade of at least B in LIN 185. Cr 3.

LIN 315 Field Methods
Students learn to use a variety of elicitation and field methods techniques to explore the linguistic structure of a language that is foreign to them. They work with a native signer or speaker and apply their knowledge of linguistics to a specific aspect of the grammar of the language. Prerequisite: LIN 312 or 313. Cr 3.

LIN 331 ASL/English Interpreting
This course offers the beginning interpreting student an introduction to the field of interpreting, its code of ethics, and several models and approaches to the interpreting process. Students will become familiar with the complex processing required to provide a nuanced interpretation through learning a form of text analysis called discourse mapping. Prerequisites: grade of at least B in ASL 202 or equivalent; or grade of at least B in ASL 201 or equivalent and ASL 202 concurrently; or permission. Cr 3.

LIN 332 Consecutive Interpreting and Deaf/Hearing Interpreter Teams
This course covers the mechanics and psycho-linguistics of the consecutive interpreting process, as well as hands-on training in the consecutive method for both Deaf and hearing interpreters. Consecutive interpreting will be taught in the context of a variety of typical interpreting situations as well as situations involving special populations. May be repeated once for credit with permission of instructor. Prerequisite: LIN 331 and rating of 2 or better on the ASLA or ASLPI. May be repeated one time for credit. Cr 3.

LIN 333 Interpreting: Source Language ASL
Students focus on interpreting from ASL into English with emphasis on word choice, register, and affect. The interpreting process is dissected, examined, and practiced. May be repeated once for credit with permission of instructor. Prerequisite: LIN 331 and rating of 2 or better on the
LIN 334 Interpreting: Source Language English  
Interpreting students study interpretation from English into ASL. Emphasis is placed upon appropriate sign choice, register, and affect. The interpreting process is dissected, examined, and practiced. Course may be repeated once for credit with permission of instructor. Prerequisite: LIN 331 and rating of 2 or better on the ASLA or ASLPI. May be repeated one time for credit. Cr 3.

LIN 336 Observational Internship  
Interpreting students will be supervised in a 60-hour internship where they observe working interpreters or specialized settings (legal, medical, educational, etc.) and journal their observations. They will analyze these observations using Demand-Control Schema and will present at least one formal case presentation during the semester. May be taken more than once for a maximum of 6 credits. Prerequisite: LIN 331. Cr 3.

LIN 394 Teaching Internship  
Students will work closely with a faculty member on a course. They will be involved in all aspects of the course that don't involve grading, including class preparation and tutoring. Students should contact the Department chair for details. May be taken more than once for a maximum of six credits. Grade: Pass/fail. Prerequisite: permission of instructor. Cr 3.

LIN 395 Research Internship  
Students will work closely with a faculty member on a research project. They will be involved in experimental design, data collection, data entry, and data analysis, and will attend regularly scheduled lab meetings. Enrollment in LIN 395 will depend on needs determined by current research projects. Selection is made by the faculty. Students should contact the Department chair for details. May be taken more than once for a maximum of six credits. Prerequisite: permission of instructor. Cr 3.

LIN 398 Independent Study  
In preparation for this course, the student selects a topic in linguistics that is substantially different from that of any regular course and finds an instructor to serve as faculty mentor. May be repeated for credit. Prerequisite: permission of instructor. Cr var.

LIN 405 Sight Translation  
This is a course in translation from written English to dynamic ASL. Students will examine a variety of textual materials, including business letters, government and business forms, and selected other short texts, with the goal of comprehending, abstracting, and translating these materials. Work will focus on the intent and force of the texts, as well as linguistic and cultural assumptions underlying them. Prerequisite: LIN 331. Cr 3.

LIN 410 Ethical Decision Making in ASL/English Interpreting  
This course explores critical thinking skills regarding ethical decision making using a number of approaches within the set of models that explore “right versus right” dilemmas. Students learn to identify ethical issues, gather information, identify principles that may inform decisions, generate lists of possible decisions and examine them in terms of consequences, determine best alternatives based upon reflection and reason, make choices that direct action, and evaluate the outcomes of the actions they take. Working as a community of inquiry and practice, members of the class engage in dialogue with others examining ethical dilemmas, learning to appreciate the viewpoints of others, and broadening their perspectives. Among a variety of principles that influence ethical decision making, students examine the RID-NAD Code of Professional Conduct. They compare it with similar documents within the field of interpreting as well as codes from other fields. Prerequisites: LIN 332, 333, or 334; or with permission for non-majors. Cr 3.

LIN 413 Supervised Mentoring  
Interpreting students apprentice with a program-approved mentor and submit a weekly journal entry, attend a series of skills improvement workshops and/or engage in laboratory-based research to complete 90 contact hours of interpreting-related skills improvement activities. Students attend a biweekly meeting with interpreters to address current issues and difficult situations encountered. Special arrangements will be made for mentoring partnerships at remote sites. Prerequisites: LIN 333 and 334. Cr 3.

LIN 421 First Language Acquisition: Syntax  
A detailed examination of the process of acquiring language in young children that concentrates on sentence structure. The course considers how children extract from the speech they hear the information that is critical to their developing ability to form sentences. It reviews questions about the nature of grammar and how grammars might be structured to facilitate language acquisition, and how various kinds of early experience do and do not contribute to acquisition. Prerequisites: LIN 313. Cr 3.

LIN 422 A Cognitive Perspective on Syntax  
An introduction to the brain and mind processes by which language users produce and understand sentences, as well as to the mental representations these processes exploit. The course considers how syntactic structure interacts with processes of production and comprehension, as well as how users interpret from one language to another. Prerequisite: LIN 313. Cr 3.

LIN 425 Special Topics in ASL/English Interpreting  
This seminar centers around a single topic, for example, legal interpreting, interpreting for special populations (deaf-blind, oral, cued-speech, minimal language skills assessment and interpreting), ethical issues, medical and mental health interpreting, interpreter assessment, and
interpreting the 12 steps. The course will be offered in response to student interest in a given topic and may be repeated as topics vary. Prerequisite: permission of instructor. Cr var.

**LIN 426 Special Topics in Theoretical Linguistics**
This seminar focuses on one area of theoretical linguistics, e.g. phonology, morphology, syntax, or semantics. It will offer a more in-depth and advanced discussion than is presented in the 300-level courses on these topics. The course will be offered in response to student interest in a given topic. May be repeated for credit as topics vary. Prerequisite: permission. Cr 3.

**LIN 434 Advanced Interpreting and Research**
This course requires participation in the capstone course LIN 435 but instead of practicum, the student will complete an advanced research project related to interpreting. Prerequisites: LIN 332, 333, 334, and rating of 2 or better on the ASLA or ASLPI or permission of instructor. Cr 6.

**LIN 435 Advanced Interpreting and Practicum I**
This capstone course requires completion of the student's professional interpreting portfolio and a 120-hour supervised practicum. Students will demonstrate competence interpreting a range of dialects and registers of ASL and English produced by both children and adults and will journal their assignments with a focus upon Demand-Control Schema, analysis of the interpreting process, and ethical considerations. Students may take this course for up to 12 credits. Each credit beyond six adds 15 hours of practicum. Prerequisites: LIN 332, 333, 334, 410 (completed or concurrent), and rating of 3 or better on the ASLA or ASLPI and permission of instructor. Cr 6-12.

**LIN 436 Practicum II**
This course is a second 120-hour supervised practicum at a more advanced level. Students in Practicum II more likely to be placed in agency environments and as apprentices in specialized settings. Over the course of the practicum, students are expected to demonstrate increasing evidence of work-readiness. While they may eventually accept assignments for pay as deemed appropriate by their supervisors, they may not count paid hours toward practicum. All assignments will be journaled with a focus upon Demand-Control Schema, analysis of the interpreting process, and ethical considerations. Students may take this course for up to 12 credits. Each credit beyond six adds 15 hours of practicum. Prerequisites: LIN 435. Cr 6-12.

**LIN 490 Introduction to Language Research**
An introduction to basic aspects of the experimental study of human linguistic abilities. This will include coverage of the identification of viable research questions, literature reviews, special considerations for materials preparation for language experiments, research design, sampling, control of artifacts, data handling, analysis, some special statistical considerations, and reporting conventions. Students will also be introduced to various computer resources relevant to these matters. Prerequisites: LIN 311, 312, 313, 314, and 315 (one of which may be taken concurrently); PSY 105, MAT 120, or an equivalent course. Cr 3.

**LIN 498 Thesis**
The topic for this thesis must be selected in consultation with the student's advisor and approved by the linguistics faculty. Students will meet regularly with their advisor as they work on the project. The finished thesis must be approved by the linguistics faculty, and should ideally be completed by the end of the fall semester of the student's senior year. Prerequisites: LIN 310 or 311, LIN 312-314, and LIN 315 or 490, as well as approval of project proposal. Cr 3.

**American Sign Language**

**ASL 101 Beginning American Sign Language I**
This is a beginning course in American Sign Language (ASL). It will include extensive study of receptive and expressive use of ASL, as well as an introductory discussion of Deaf culture. Course content covers basic principles in the use of sign, sign vocabulary, and aspects of the grammar of ASL. In addition to class sessions, students will use written and videotape materials out of class. Cr 4.

**ASL 102 Beginning American Sign Language II**
This is the second beginning course in American Sign Language (ASL). Prerequisite: ASL 101 or departmental permission. Cr 4.

**ASL 201 Intermediate American Sign Language I**
This is the third in a four-course sequence in American Sign Language (ASL). The course includes extensive work on receptive and expressive use of ASL. It emphasizes the grammatical structure of ASL, particularly its morphology, syntax, and semantics. In addition to class sessions, students will use written and videotape materials out of class. Prerequisite: ASL 201 or departmental permission. Cr 4.

**ASL 202 Intermediate American Sign Language II**
Continuation of ASL 201. Prerequisite: ASL 201 or departmental permission. Cr 4.

**ASL 401 Advanced American Sign Language I**
This is the fifth in a sequence of courses in American Sign Language. This course focuses on advanced expressive skills, including explaining, rephrasing, demonstrating, and persuading. Grammatical principles and functions will be emphasized. Aspects of grammar that will be expanded include classifiers, conditional sentences, rhetorical questions, and relative clauses. Appropriate cultural behaviors and conversational regulators in ASL will continue to be an important part of class. Prerequisite: grade of at least B in ASL 202 or equivalent, and rating of 2 or better on the
ASLA or ASLPI. Cr 4.

ASL 402 Advanced American Sign Language II
Continuation of ASL 401. Prerequisite: ASL 401, and rating of 2 or better on the ASLA or ASLPI, or departmental permission. Cr 4.

ASL 415 ASL Literature in ASL
This course, conducted in ASL, introduces Deaf and hearing students to American Sign Language literature, including introductions and face-to-face narratives, as well as literary genres such as the ASL epic poem, stream of consciousness poetry, allegory, and historical fiction. Structural characteristics of the ASL platform narrative and the written English essay are compared and contrasted. Emphasis is on the production and comprehension of academic ASL. Prerequisites: ASL 401 or permission, rating of 2 or better on the ASLA or ASLPI, and LIN 203 (or concurrent). Cr 3.

ASL 416 ASL Linguistics in ASL
This course focuses on advanced aspects of ASL grammar including complex co-reference, the scope of non-manual grammatical markers, quantification, complex classifier choice, verbs of motion and location, and complex aspectual marking and agreement. Students receive diagnostic feedback throughout the course and are given specific remedial studies to pursue independently. Emphasis is on the production and comprehension of academic ASL. Prerequisites: ASL 401 or permission, rating of 2 or better on the ASLA or ASLPI, LIN 105, and LIN 185. Cr 3.

ASL 417 Deaf Art, Film, and Theatre in ASL
This course will examine Deaf culture as expressed in art, film, and theatre. Selections of Deaf art, film, and theatre from the 1900s to the present based on the Deaf experience will be discussed in the context of social and cultural history. The course will be taught in ASL. Emphasis is on the production and comprehension of academic ASL. Prerequisites: ASL 401 or permission, rating of 2 or better on the ASLA or ASLPI, and LIN 203 (or concurrent). Cr 3.
Mathematics and Statistics Overview

Chair of the Department: Laurie Woodman

Department location: 302 Payson Smith, Portland

Professors: El-Taha, Gupta; Associate Professors: Aboueissa, McCormick, Peng, Valdés; Lecturers: Brunette, Moore, Woodman

The Department of Mathematics and Statistics offers a four-year program leading to a B.A. in mathematics. In addition to meeting Departmental requirements for a major, all students must also meet the requirements of the school or college involved, and the University Core curriculum requirements.

4+1 in Master of Science in Statistics

Description

The Department offers a 4 + 1 master's program in statistics, where interested and qualified undergraduate students enrolled in various programs at USM can earn both an undergraduate degree and the M.S. degree in statistics in five years by carefully selecting their courses. The program offers several areas of concentration, such as applied statistics, applied mathematics, operations research, and biostatistics.

Program Requirements

For acceptance into the 4 + 1 program, students must have at least junior standing and must have completed MAT 153, MAT 281, and MAT 282, or their equivalents, with a cumulative GPA of at least 2.75. Students who enroll in the program after the junior year may not be able to complete both degrees in five years. For further information, refer to the MS in Statistics website or contact the Department of Mathematics and Statistics at (207) 780-4246 or math@usm.maine.edu.

BA in Mathematics - Applied Mathematics/Operations Research Concentration

Description

Those majors intending to enter industry or other applied fields should seriously consider this concentration. Majors who plan to prepare for the actuarial profession should be certain to include in their programs Numerical Analysis and the appropriate courses in the School of Business. Majors intending to pursue graduate work in applied mathematics are urged to take Real Analysis and Abstract Algebra.

Program Requirements

In addition to the requirements listed in the BA, the following items are required for the Applied Mathematics/Operations Research Concentration. (15 credit hours)

a. Successful completion of three of the courses listed below:
   MAT 364 Numerical Analysis
   MAT 366 Deterministic Models in Operations Research
   MAT 383 System Modeling and Simulation
   MAT 460 Mathematical Modeling
   MAT 461 Stochastic Models in Operations Research
BA in Mathematics - Pure Mathematics Concentration

Description

Mathematics majors intending to pursue graduate work in mathematics should consider this concentration, and they are urged to take Real Analysis, Abstract Algebra, Topology, and one year of French or German. Those intending to teach at the secondary level should choose this concentration.

Program Requirements

In addition to the requirements listed in the BA, the following items are required for the Pure Mathematics Concentration. (15 credit hours)

a. Successful completion of three of the courses listed below:
   MAT 352 Real Analysis
   MAT 355 Complex Analysis
   MAT 392 Theory of Numbers
   MAT 395 Abstract Algebra
   MAT 490 Topology
   MAT 370, 371 Non-Euclidean or College Geometry

b. Successful completion of at least two additional mathematics courses numbered 260 or above, excluding MAT 380.

BA in Mathematics - Statistics Concentration

Description

This concentration is aimed at preparing the undergraduate to pursue a career as a statistician in government jobs or industrial jobs or to pursue a higher degree in statistics or allied fields. Majors intending to pursue graduate work in statistics are urged to take Real Analysis and Abstract Algebra.

Program Requirements

In addition to the requirements listed in the BA, the following items are required for the Statistics Concentration. (15 credit hours)

a. Successful completion of three of the courses listed below:
   MAT 383 System Modeling and Simulation
   MAT 386 Sampling Techniques
   MAT 387 Introduction to Applied/Biostatistical Methods
   MAT 388 Statistical Quality Control
   MAT 484 Design and Analysis of Experiments
   MAT 485 Introduction to Applied Regression
   MAT 487 Introduction to Categorical Data Analysis

b. Successful completion of at least two additional mathematics courses numbered 260 or above, excluding MAT 380.
BA in Mathematics

Description

The Department of Mathematics and Statistics offers a Bachelor of Arts Degree in Mathematics. The program is designed to provide students with a broad background in mathematics and statistics.

Students will select one of three concentrations: pure mathematics, applied mathematics/operations research, or statistics.

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for a bachelor of arts in mathematics is 49 (34 in foundations and 15 in one of the three concentrations listed below).

A. Foundations

As a mathematics major, a student will select one of the three concentrations described below in section B. For each concentration all majors are required to complete successfully the foundations sequence as described in this section. Each student must have a cumulative grade point average of at least 2.0 in major courses before being considered for a baccalaureate degree in mathematics.

Foundations Sequence (Required of all majors in mathematics) (34 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 152 Calculus A</td>
<td>4 cr</td>
</tr>
<tr>
<td>MAT 153 Calculus B</td>
<td>4 cr</td>
</tr>
<tr>
<td>MAT 252 Calculus C</td>
<td>4 cr</td>
</tr>
<tr>
<td>MAT 281 Introduction to Probability</td>
<td>3 cr</td>
</tr>
<tr>
<td>MAT 282 Statistical Inference</td>
<td>3 cr</td>
</tr>
<tr>
<td>MAT 290 Foundations of Mathematics</td>
<td>4 cr</td>
</tr>
<tr>
<td>MAT 295 Linear Algebra</td>
<td>4 cr</td>
</tr>
<tr>
<td>MAT 350 Differential Equations</td>
<td>4 cr</td>
</tr>
<tr>
<td>COS 160 Structured Problem Solving: Java</td>
<td>3 cr</td>
</tr>
<tr>
<td>COS 170 Structured Programming Laboratory</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

B. Concentrations

Each mathematics major should choose one of the following concentrations. (15 credit hours)

1. Pure Mathematics Concentration

Mathematics majors intending to pursue graduate work in mathematics should consider this concentration, and they are urged to take Real Analysis, Abstract Algebra, Topology, and one year of French or German. Those intending to teach at the secondary level should choose this concentration.

a. Successful completion of three of the courses listed below:
   - MAT 352 Real Analysis
   - MAT 355 Complex Analysis
   - MAT 392 Theory of Numbers
   - MAT 395 Abstract Algebra
   - MAT 490 Topology
   - MAT 370, 371 Non-Euclidean or College Geometry

b. Successful completion of at least two additional mathematics courses numbered 260 or above, excluding MAT 380.

2. Applied Mathematics/Operations Research Concentration

Those majors intending to enter industry or other applied fields should seriously consider this concentration. Majors who plan to prepare for the actuarial profession should be certain to include in their programs Numerical Analysis and the appropriate courses in the School of Business. Majors intending to pursue graduate work in applied mathematics are urged to take Real Analysis and Abstract Algebra.

a. Successful completion of three of the courses listed below:
   - MAT 364 Numerical Analysis
MAT 366 Deterministic Models in Operations Research
MAT 383 System Modeling and Simulation
MAT 460 Mathematical Modeling
MAT 461 Stochastic Models in Operations Research
MAT 492 Graph Theory and Combinatorics

b. Successful completion of at least two additional mathematics courses numbered 260 or above, excluding MAT 380.

3. Statistics Concentration

This concentration is aimed at preparing the undergraduate to pursue a career as a statistician in government jobs or industrial jobs or to pursue a higher degree in statistics or allied fields. Majors intending to pursue graduate work in statistics are urged to take Real Analysis and Abstract Algebra.

a. Successful completion of three of the courses listed below:
   - MAT 383 System Modeling and Simulation
   - MAT 386 Sampling Techniques
   - MAT 387 Introduction to Applied/Biostatical Methods
   - MAT 388 Statistical Quality Control
   - MAT 484 Design and Analysis of Experiments
   - MAT 485 Introduction to Applied Regression
   - MAT 487 Introduction to Categorical Data Analysis

b. Successful completion of at least two additional mathematics courses numbered 260 or above, excluding MAT 380.

BA in Mathematics with a Concentration in Secondary Education

Description

Concentration Secondary Education, Mathematics major
This concentration is for students who want to become certified to teach 7-12 mathematics in Maine. Interested students should see the secondary mathematics coordinator upon acceptance at USM, matriculation, upon choosing a math major, or as early in their time at USM as possible. The curriculum for this program is designed to provide prospective 7-12 teachers a strong academic foundation in mathematics along with a continuous focus on both the theory and practice of teaching through a sequence of pre-internship education courses and field experiences. It has four components: USM Core curriculum, a mathematics major, professional education courses, and electives totaling 120 credit hours for the degree.

Program Requirements

USM Core Curriculum (including pre-internship education courses):

- EYE 108 Culture, Identity, and Education (recommended) (3 cr.)
- EDU 100 Exploring Teaching (recommended) (3 cr.)
- College Writing - ENG 100 College Writing (3 cr.)
- Cultural Interpretation (3 cr.)
- Quantitative - MAT 152 Calculus A (4 cr.)
- Creative Expression - EDU 230 Teaching through the Arts (recommended) (3 cr.)
- Socio-Cultural Analysis- HRD 200 Multicultural Human Growth & Development (3 cr.)
- Science Exploration (4 cr.)
- Ethical Inquiry, Social Responsibility, and Citizenship - EDU 310 Purpose of Schooling in a Democracy (This course also fulfills the core International requirement.) (3 cr.)
- Cluster- EDU 305 Foundations of Cultural and Linguistic Diversity (This course also fulfills the core Diversity requirement.), SED 335 Students with Exceptionalities in General Education, and SED 420 Multi-Tiered Systems of Educational Support (9 cr.)

Special Major Requirements:

Mathematics major (see major degree requirements) specializing in the pure math concentration, including the following required courses:
• MAT 352 Real Analysis
• MAT 371 College Geometry
• MAT 395 Abstract Algebra
• A mathematics modeling course (this course will count as one of the two required upper-level mathematics electives)

**Professional Education Internship Year Requirements:**

- MME 434 Secondary Mathematics Methods (3 cr.)
- MME 435 Professional Internship (9 cr. taken over 2 or more semesters)
- MME 436 Seminar (6 cr. taken over 2 semesters)

**Electives:**

Students must complete elective credit to complete the 120 credit hour degree. For those students interested in teaching at the middle level (grades 7 or 8), it is recommended that they complete coursework in a second content area (e.g., life or physical science) to become highly qualified to teach an additional content area. Those students interested in teaching high school may want to use their elective credits to bolster their content knowledge by taking additional courses in mathematics and related fields. Finally, students should consider taking education courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

**Tk20 Subscription:**

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: [http://usm.maine.edu/educatorpreparation](http://usm.maine.edu/educatorpreparation)

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed within the context of the Unit’s data management system (i.e., Tk20).

**Other Requirements:**

Students must maintain a high level of academic achievement. Minimum academic requirements are as follows:

A grade of C or better in all University Core and major coursework.

A grade of B or better in all professional education coursework.

An overall GPA of 3.00 or better.

Prior to admission to the professional internship year, students must pass the Praxis II exam and demonstrate satisfactory progress toward the State of Maine Core Teaching Standards.

As required by partner school districts and prior to the professional internship, students must be fingerprinted through the State of Maine Department of Education.

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**Certificate in Applied Statistics**

**Description**

The Department of Mathematics and Statistics offers a certificate program in applied statistics, designed for people in area businesses, industry,
government, and education, as well as offering to the Department's own majors an opportunity for further recognition of their skills. It is helpful for students who want to pursue a master's program in statistics but who need first to fill in some advanced undergraduate work.

**Program Requirements**

The requirements for the certificate are successful completion of:

1. MAT 281 and MAT 282 or the equivalent

2. Four of the following courses:
   - MAT 383 System Modeling & Simulation
   - MAT 386 Sampling Design & Analysis
   - MAT 387 Introduction to Applied Biostatistical Methods
   - MAT 388 Statistical Quality Control
   - MAT 461 Stochastic Models in Operations Research
   - MAT 484 Design and Analysis of Experiments
   - MAT 485 Introduction to Applied Regression
   - MAT 487 Introduction to Categorical Data Analysis

Students must contact the Department Chair about application to the program. The courses are offered during the late afternoon to make them more accessible to working people.

**Minor in Applied Mathematics**

**Description**

The minimum number of credits required for the minor in applied mathematics: 22

**Program Requirements**

Students must satisfy the following requirements with a cumulative GPA of at least 2.0:

- MAT 152; MAT 153; MAT 281 or MAT 380; and MAT 295
- Three additional courses from among MAT 350, MAT 364, MAT 366, MAT 383, MAT 460, MAT 461, and MAT 492.

**Minor in Mathematics**

**Description**

The minimum number of credits required for a minor in mathematics: 22.

**Program Requirements**

Students must satisfy the following requirements with a cumulative GPA of at least 2.0:

- MAT 152; MAT 153; MAT 252; MAT 295
- Two additional courses from among MAT 290, MAT 350, MAT 352, MAT 355, MAT 371, MAT 392, MAT 395, MAT 490, and MAT 492.
Minor in Statistics

Description

The minimum number of credits required for a minor in statistics: 22.

Program Requirements

Students must satisfy the following requirements with a cumulative GPA of at least 2.0:

- MAT 152, MAT 153, MAT 264, MAT 281 or MAT 380, and MAT 282
- Two additional courses from among MAT 386, MAT 387, MAT 388, MAT 461, MAT 484, MAT 485, and MAT 487.

Course Descriptions

- Undergraduate
- Graduate

Undergraduate

It is expected that students will possess and be able to operate a basic scientific calculator if they enroll in mathematics courses.

MAT 101 College Readiness Mathematics
This course reviews and reinforces the basic arithmetic and algebra skills and concepts needed for entry into the University's general education pathways. The course is based on student learning outcomes and uses mastery learning pedagogy. A grade of C- or better is needed to meet the University's mathematics readiness requirement. Prerequisites: MAT 009 or appropriate University placement test score. Cr 4.

MAT 105 Mathematics for Quantitative Decision Making
This is an introductory course in quantitative literacy that, through lecture and lab, emphasizes critical thinking, mathematical reasoning, and technological tools. Topics are selected to develop an awareness of the utility of mathematics in life and to instill an appreciation of the scope and nature of its decision making potential. Prerequisite: successful completion of the University's college readiness requirement in mathematics. Cr 4.

MAT 108 College Algebra
A more in-depth study of the topics introduced in MAT 101. The emphasis will be on the study of functions (polynomial, rational, logarithmic, exponential) and their graphs. Additional topics may include matrices, sequences, counting techniques, and probability. Through the activity-based lab component, applications and modeling will be stressed. Prerequisite: Successful completion of the University's college readiness requirement in mathematics. Cr 4.

MAT 120 Introduction to Statistics
An introduction to probability and statistics through lecture and lab. Particular topics include random variables and their distributions, methods of descriptive statistics, estimation and hypothesis testing, regression, and correlation. Prerequisite: successful completion of the University's college readiness requirement in mathematics. Cr 4.

MAT 131 Number Systems for Elementary Teachers
This is the first course in a three-course sequence in mathematics recommended by the Committee on the Undergraduate Mathematics Program of the Mathematical Association of America for prospective primary and elementary teachers. Major emphasis is placed on an intuitive approach to the real number system and its subsystems. Prerequisite: successful completion of the University's college readiness requirement in mathematics. Cr 3.

MAT 140 Pre-Calculus Mathematics
A brief review of elementary algebra followed by a study of the algebraic, exponential, logarithmic, and trigonometric functions. Prerequisites: successful completion of the University's college readiness requirement in mathematics and two years of high school algebra or MAT 108. Cr 3.

MAT 145 Discrete Mathematics I
This course is an introduction to discrete mathematics necessary for a study of computer science. Topics will include a study of functions, sets, basic logic systems, and combinatorics. Prerequisite: MAT 108, MAT 140, MAT 152, or permission of instructor. Cr 3.
MAT 148 Applied Calculus
An introduction to limits and differential and integral calculus of algebraic and transcendental functions of one variable. Applications of derivatives and definite integrals with an emphasis on problems from the fields of technology will be introduced. Graphing calculators and computer technology will be used when appropriate. Prerequisite: MAT 140. Cr 3.

MAT 152 Calculus A
The first course in a three-semester sequence covering basic calculus of real variables, Calculus A introduces the concept of limit and applies it to the definition of derivative and integral of a function of one variable. The rules of differentiation and properties of the integral are emphasized, as well as applications of the derivative and integral. This course will usually include an introduction to the transcendental functions and some use of a computer algebra system. Prerequisite: successful completion of the University's college readiness requirement in mathematics and two years of high school algebra plus geometry and trigonometry or MAT 140. Cr 4.

MAT 153 Calculus B
The second course in a three-semester sequence covering basic calculus of real variables, Calculus B usually includes techniques of integration, indeterminate forms and L'Hopital's Rule, improper integrals, infinite series, conic sections, parametric equations, and polar coordinates. Prerequisite: MAT 152. Cr 4.

MAT 180/EGN 180 Programming with Mathematica
This course offers an introduction to programming with Mathematica. This course is designed to introduce students to Mathematica's traditional and unique programming features to help them solve typical computational problems encountered in sciences and engineering effectively and efficiently. This course includes many practical examples and hands-on exercises. Prerequisite: None. Cr 1.

MAT 181/EGN 181 Computing with Mathematica
This course offers an introduction to computing with Mathematica. This course is designed to introduce mathematics, science, and engineering students to the basic features of Mathematica, to help them solve typical computational problems encountered in their disciplines effectively and efficiently. This course includes many practical examples and hands-on exercises. Prerequisite: None. Cr 1.

MAT 201 Teaching Seminar
A seminar intended to expose students to teaching introductory college mathematics courses. Students will be expected to participate in discussions concerning issues of pedagogy and classroom management. Some classes will be student-led. Cr 1.

MAT 210 Business Statistics
This course investigates graphical and numerical methods of descriptive statistics; basic probability; discrete and continuous random variables and their distributions (binomial, hypergeometric, Poisson, uniform, exponential, and normal); sampling distributions; estimation; tests of hypotheses; and other selected topics. Applications will be chosen primarily from business. Prerequisite: MAT 108 (may be taken concurrently). Cr 4.

MAT 220 Statistics for the Biological Sciences
This course treats basic statistical methods as applied to the biological sciences. The topics emphasized are descriptive statistics, discrete and continuous distributions, statistical estimation, hypothesis testing procedures, chi-square methods (goodness of fit and two-way tables), analysis of variance, and simple and multiple regression. Students will use at least one computer-based statistical package. Prerequisite: MAT 152. Cr 4.

MAT 231 Algebra for Elementary Teachers
The second course in a three-course sequence in mathematics recommended by the Committee on the Undergraduate Mathematics Program of the Mathematical Association of America for prospective primary and elementary teachers. Emphasis is upon the properties of operations in several different algebraic systems. Equations are studied in finite systems as well as in conventional algebra. Prerequisite: MAT 131. Cr 3.

MAT 232 Geometry for Elementary Teachers
The third course in a three-course sequence in mathematics recommended by the Committee on the Undergraduate Mathematics Program of the Mathematical Association of America for prospective primary and elementary teachers. Emphasis is upon constructions, congruence, parallelism, and similarity. Direct and indirect methods of proof are studied, but the main approach is intuitive. Prerequisite: MAT 131. Cr 3.

MAT 242 Applied Problem Solving
This course is designed to examine mathematical concepts and apply them to solving modeling problems in various contexts. The focus will be on the Common Core State Standards mathematical concepts and practices, in particular, mathematical modeling. Students will formulate essential questions, gather and organize data, discover patterns, and interpret and communicate information verbally and in writing. Prerequisite: MAT 108. Cr 3.

MAT 252 Calculus C
The third course in a three-semester sequence covering basic calculus of real variables, Calculus C includes vectors, curves and surfaces in space, multivariate calculus, and vector analysis. Prerequisite: MAT 153. Cr 4.

MAT 260 Technological Tools for the Mathematical Sciences
MAT 260 is designed for students in mathematics and disciplines which utilize mathematics. Specific topics will include the computer algebra system Mathematica and the technical word-processing system TEX. Prerequisite: MAT 152. Cr 2.

MAT 264 Statistical Software Packages
This course will use statistical packages such as SAS and MINITAB to introduce commonly used statistical methods in a non-theoretical manner. Particular topics might include summary measures, calculation of probabilities associated with various discrete and continuous distributions, confidence intervals and hypothesis testing, analysis of variance, regression, and various non-parametric methods. Some of these methods will be used to analyze real data collected during previous faculty consulting projects. Prerequisite: MAT 212 or consent of Department chair. Cr 2.

MAT 281 Introduction to Probability
This course will cover basic concepts of probability, including discrete and continuous random variables and their distributions, moment generating functions, and bivariate random variables and their distributions. Some basic sampling distributions will also be discussed. Prerequisite: MAT 153. Cr 3.

MAT 282 Statistical Inference
This course will examine various statistical methods and applications such as point and interval estimation; methods of estimation including methods of moments, maximum likelihood and least squares method; hypothesis testing; simple and multiple linear regression; and one-factor and two-factor ANOVA. Some statistical packages such as SAS or MINITAB will be used extensively throughout the course. Prerequisite: MAT 281 or permission of instructor. Cr 3.

MAT 283 Introduction to Probability
This course will cover basic concepts of probability, including discrete and continuous random variables and their distributions, moment generating functions, and bivariate random variables and their distributions. Some basic sampling distributions will also be discussed. Prerequisite: MAT 153. Cr 3.

MAT 290 Foundations of Mathematics
Selected topics in set theory, symbolic logic, and methods of proofs needed in more advanced mathematics courses. Prerequisite: MAT 153 or permission of the instructor. Cr 4.

MAT 295 Linear Algebra
An introduction to the theory of vector spaces and linear transformations. Particular topics will include the study of systems of linear equations, matrices, determinants, Euclidean vector spaces, inner product spaces, and theory of diagonalization. Students will use a computer algebra system for projects. Prerequisite: MAT 153 or permission of the instructor. Cr 4.

MAT 350 Differential Equations

MAT 352 Real Analysis
Limits, continuity, differentiation and integration of functions of one or more real variables, infinite series, uniform convergence, and other selected topics. Prerequisites: MAT 252 and MAT 290 or permission of the instructor. Cr 3.

MAT 355 Complex Analysis
A study of the complex number system and its applications: differentiation and integration of complex valued functions, the Cauchy integral theorem and formula, Taylor and Laurent series, singularities and residues, conformal mappings. Prerequisite: MAT 252 and MAT 290 or permission of the instructor. Cr 3.

MAT 364 Numerical Analysis
A study of the theory and application of computational algorithms for interpolation, equation solving, matrix methods, integration; error analysis. Prerequisites: MAT 252, MAT 295, and COS 160; or permission of instructor. Cr 3.

MAT 366 Deterministic Models in Operations Research

MAT 370 Non-Euclidean Geometry
A development of one or more of the non-Euclidean geometries. Prerequisite: MAT 290 or permission of the instructor. Cr 3.

MAT 371 College Geometry
Selected topics from Euclidean geometry. Prerequisite: MAT 290 or permission of the instructor. Cr 3.

MAT 380 Probability and Statistics
This course explores concepts and techniques of collecting and analyzing statistical data, examines some discrete and continuous probability models, and introduces statistical inference, specifically, hypothesis testing and confidence interval construction. Not for mathematics major credit. Prerequisite: MAT 153. Cr 3.
MAT 383 System Modeling and Simulation
This course is designed to introduce the fundamental elements of successful system modeling using simulation. Applications to computer, communications, and inventory systems, as well as to traditional engineering problems, will be discussed. Topics include model validation and verification, input/output analysis, and the generation of various types of random data. Students are required to conduct a simulation project in their area of interest using a simulation language. Prerequisite: MAT 281 or MAT 380. Cr 3.

MAT 386 Sampling Techniques
Sample random sampling, stratified random sampling, sampling for proportions, estimation of sample size, systematic sampling, multistage sampling, regression and ratio estimates, non-sampling error. Prerequisite: MAT 282 or MAT 380. Cr 3.

MAT 387 Introduction to Applied / Biostatical Methods
This is an introductory statistical methodology course with emphases on applications in biological and health sciences. Topics include distributional theory, estimation and testing hypotheses, rank-based and related distribution free tests, large sample chi-squared tests, analysis of rates and proportions, paired sample methods, permutation and re-sampling methods. Writing formal statistical reports of projects based on real life data is a key component of the course. Prerequisite: permission of instructor. Cr 3.

MAT 388 Statistical Quality Control
Some aspects of quality specifications and tolerances, control charts for attributes and variables, certain inspection plans, plans by attributes and by variables, simple, double, and sequential sampling plans. Prerequisite: MAT 282 or MAT 380. Cr 3.

MAT 392 Theory of Numbers
Basic course in number theory, including such topics as divisibility properties of integers, prime numbers, congruences, multiplicative number theoretic functions, and continued fractions. Prerequisite: MAT 290 or permission of the instructor. Cr 3.

MAT 395 Abstract Algebra
Algebraic structures, such as groups, rings, integral domains, and fields. Prerequisite: MAT 290 or permission of the instructor. Cr 3.

MAT 460 Mathematical Modeling
An introduction to the process of formulating problems in mathematical terms, solving the resulting mathematical model and interpreting the results and evaluating the solutions. Examples will be chosen from the behavioral, biological, and physical sciences. Prerequisites: junior or senior standing, some elementary calculus including differentiation and integration, elementary probability, and some computer programming experience. Cr 3.

MAT 461 Stochastic Models in Operations Research
This course applies probabilistic analysis to such nondeterministic models as queueing models, inventory control models, and reliability models. Additional topics include simulation, elements of dynamic programming, and Markov decision analysis. Prerequisite: MAT 281 or MAT 380, or permission of instructor. Cr 3.

MAT 484 Design and Analysis of Experiments
This course is intended to acquaint students with such standard designs as one-way, two-way, and higher-way layouts, Latin-square and orthogonal Latin-square designs, BIB designs, Youdeen square designs, random effects and mixed effect models, nested designs, and split-plot designs. Prerequisites: MAT 295 and either MAT 282 or MAT 380, or permission of instructor. Cr 3.

MAT 485 Introduction to Applied Regression
This is an introduction to linear regression and time series analysis. Topics include model building, model diagnostics using residual analysis, choice of models, model interpretation, linear time series models, stationary processes, moving average models, autoregressive models, and related models. Technical writing for project reports is required for this course. Prerequisite: MAT 282. Cr 3.

MAT 487 Introduction to Categorical Data Analysis
This is an introductory course in analyzing categorical data arising from a variety of fields such as biological, biomedical and health sciences, social science, engineering, etc. The topics include contingency table analysis, logistic regression and Poisson regression modeling and model diagnostics. Writing formal statistical reports of projects based on real life data is a key component of the course. Prerequisite: permission of instructor. Cr 3.

MAT 490 Topology
An introduction to fundamental concepts in topology, including topological spaces, mappings, convergence, separation and countability, compactness, connectedness, metrization, and other selected topics. Prerequisites: MAT 252 and MAT 290 or permission of the instructor. Cr 3.

MAT 492 Graph Theory and Combinatorics
This course is designed to acquaint students with some fundamental concepts and results of graph theory and combinatorial mathematics. Applications will be made to the behavioral, managerial, computer and social sciences. Prerequisite: MAT 290 or permission of the instructor. Cr 3.
MAT 497 Independent Study in Mathematics
An opportunity for juniors and seniors who have demonstrated critical and analytical capability to pursue a project independently, charting a
course and exploring an area of interest within their major field. Prerequisites: junior or senior standing, permission of the instructor, and
permission of the Department chair. Cr 1-3.

MAT 498 Topics
Selected topics in advanced mathematics. Prerequisite: permission of instructor. Cr 3.

Mathematics Education

MME 400 Elementary Mathematics Methods
This course is designed for those preparing to be elementary and middle school mathematics teachers and provides experiences to develop and
apply mathematical content and pedagogical knowledge and skills. The primary focus of this course is on how to create positive learning
communities that support all students in developing a deep understanding of mathematical concepts and procedures. Major areas of focus include:
creating problem-based learning experiences; creating effective, supportive learning environments; the appropriate and effective use of models
and tools for promoting understanding of mathematical ideas, including the use of technology and manipulatives; understanding learning
progressions of important mathematical ideas; promoting the National Council of Teachers’ Process Standards; supporting students’
understanding of the Common Core Standards and Practices; assessing and building on students’ mathematical understandings; creating adaptive
learning materials to differentiate instruction for individuals and groups of learners. Cr 3.

MME 434 Secondary Mathematics Methods
This course focuses on research-based, best practices in teaching mathematics in grades 7-12. It is designed for those preparing to be middle
school and secondary mathematics teachers and provides experiences to develop and apply mathematical content and pedagogical knowledge and
skills. A primary focus of this course is on how to create positive learning communities that support all students in developing a deep
understanding of mathematical concepts and procedures. Major areas of emphasis include: creating problem-based learning experiences;
implementing high-level mathematical tasks; creating effective, supportive learning environments; the appropriate and effective use of models
and tools for promoting understanding of mathematical ideas, including the use of technology; promoting the National Council of Teachers’
Process Standards; supporting students’ understanding of the Common Core Standards and Practices; assessing and building on students’
mathematical understandings. Prerequisite: permission of instructor. Cr 3.

MME 445 Teaching Mathematics in Maine: Curriculum and Capstone Course
Critical study of programs and strategies for teaching middle school level mathematics for all learners, with a particular focus on technology.
Prerequisites: HRD 200 and 12 mathematics credit hours, or permission of the instructor. Cr 3.

MME 435 Professional Internship

This course is a supervised internship in applying knowledge and skills to the practice of teaching mathematics. This course must be taken
concurrently with MME 436. Offered only as a pass/fail course. Prerequisite: permission of instructor. Cr 3 - 6.

MME 436 Seminar
This course provides teaching interns opportunity for reflection, sharing learning experiences, discussing pedagogical and best-practice issues, as
well as the chance to learn techniques for classroom management. This course must be taken concurrently with MME 435. Prerequisite:
permission of instructor. Cr 3.

Graduate (Back to top)

STA 501 Ethical Issues in Biostatistics
This course examines a variety of ethical controversies in biotechnology, medicine, and the environment. It also examines the major ethical
principles in conducting biomedical research including ethical aspects related to the production and use of biomedical statistical analyses. Cr 2.

OPR/STA 561 Deterministic Models in Operations Research
Formulation and analysis of deterministic models in operations research, linear programming, integer programming, project management,
network flows, dynamic programming, non-linear programming, game theory, and group projects on practical problems from business and
industry. Prerequisite: MAT 152 or MAT 295 or permission of instructor. Cr 3.

OPR/STA 562 Stochastic Modeling in Operations Research
Formulation and analysis of stochastic models in operations research, Markov chains, birth-death models, Markov decision models, reliability
models, inventory models, applications to real world problems, and group projects on practical problems from business and industry. Prerequisite:
MAT 281 or MAT 380 or permission of instructor. Cr 3.

OPR/STA 563 System Modeling and Simulation
Basic simulation methodology, general principles of model building, model validation and verification, random number generation, input and
output analysis, simulation languages, applications to computer and communication networks, manufacturing, business, and engineering will be
considered, and group projects on practical problems from business and industry. Prerequisite: MAT 281 or MAT 380 or permission of instructor. Cr 3.

OPR/STA 564 Queuing Networks
Queuing and stochastic service systems, birth-death processes, Markovian queues, open and closed Jackson networks, priority queues, imbedded Markov chain models, optimal control and design, stochastic scheduling, applications to computer and communication networks, manufacturing, business, and engineering will be considered, and projects on practical problems from business and industry. Prerequisite: MAT 281 or MAT 380 or permission of instructor. Cr 3.

STA 574 Statistical Programming
This course focuses on statistical programming using software SAS and/or STATA. Topics include, but are not limited to, data management, database programming, statistical graphics, generating statistical reports, Basic statistical procedures (routine), modifying and creating MACROs (Routines) for non-standard statistical methods, etc. Prerequisite: MAT 212 or MAT 282 or permission of instructor. Cr 3.

STA/OPR 575 Graduate Internship and Writing
The course is intended to give students work experience with statistical data analysis through paid or unpaid internship opportunities. The student is expected to spend a minimum of ten weeks working with area businesses on statistical problems approved by the graduate committee. The student will submit to the graduate committee a formal written report on the internship experience. The report format should adhere to all the elements of a formal project/thesis. At least one oral presentation to the public is expected before the student receives a pass/fail grade. Students within the Biostatistics track are required to take three credits; two for the internship experience and one for the writing component. Cr var.

STA 580 Applied Statistical/Biostatistical Methods
Basics in distribution theory (focus on CLT and Sampling distributions); standard one-, two-sample problems (both parametric and nonparametric); one-, two-way ANOVA; estimation and testing theory (focus on normal theory and the principles of likelihood), various chi-square tests (Wald, Likelihood ratio, and Score tests); and analysis of contingency tables. Prerequisites: MAT 153 and MAT 282. Cr 3.

STA 581 Statistical Quality Control
Methods and philosophy of statistical process control, control charts for variables, control charts for attributes, CUSUM and EWMA control charts, some other statistical process control techniques, process capability analysis, and certain process design and improvements with experimental design. Prerequisite: MAT 282. Cr 3.

STA 582 Introduction to Longitudinal Data Analysis
This is an introductory course on how to use statistical techniques to analyze longitudinal (repeated measures) data and interpret the results from such analysis. The course will focus primarily on application of the various statistical models covered, with direct application illustrated using standard statistical software. Topics include random or mixed-effects models (also called HLM or multilevel models), covariance pattern models, generalized estimating equations (GEE) models, and missing data in longitudinal studies. Cr 3.

STA 583 Sample Survey Design and Analysis
In this course, students will develop an understanding of alternative probability sample designs and the statistical and practical factors that impact design choices. Develop the ability to select an estimator for a population parameter and an estimator of its variance, given a sample design and auxiliary information (covariates). Introduce statistical principles and methods used to study disease and its prevention or treatment in human populations in clinical trials, including phase I to IV clinical trials. Ways of treatment allocation that will ensure valid inference on treatment comparison will be discussed. Other topics include sample size calculation, early stopping of a clinical trial, and noncompliance. Prerequisite: MAT 282. Cr 3.

STA 584 Advanced Design and Analysis of Experiments
Topics covered include: one-way and two-way layouts, factorial experiments, fractional replications in factorial experiments, BIB and PBIB designs, and repeated measure design. Prerequisite: MAT 282. Cr 3.

STA 585 Linear Models and Forecasting
This is an introductory regression and forecasting modeling course. Topics include basic concepts of linear models and forecasting, simple and multiple linear regression, model building and diagnostics, time series regression and smoothing, and forecasting time series with ARIMA (Autoregressive Integrated Moving Average) and Box-Jenkins models. Prerequisite: MAT 282. Cr 3.

STA 587 Categorical Data Analysis
Topics to be examined include: two-way tables, generalized linear models, logistic and conditional logistic models, loglinear models, fitting strategies, model selection, and residual analysis. Prerequisite: MAT 282. Cr 3.

STA 589 Survival Analysis
Survival and reliability concepts, mathematics of survival models, parametric and non-parametric estimates from complete and censored data, Kaplan-Meier estimators, regression models including Poisson regression and Cox's proportional hazards model, time-dependent covariates, and analysis of rates. Prerequisite: MAT 282. Cr 3.
STA/OPR 590 Master's Project/Thesis
The project must be approved by the graduate program committee in advance. Offered only as a pass/fail course. Prerequisites: full graduate standing and faculty approval. Cr 6.

STA 591 Topics in Biostatistics
Course will be offered on demand. Based on students' interests, the course may cover one or more of the following topics: clinical trials, computer intensive statistical methods, statistical methods in bioinformatics, environmental statistics, or a combination of these topics. Prerequisites: full graduate standing and faculty approval. Cr 3.

STA/OPR 599 Independent Study
An opportunity for graduate students to pursue areas not currently offered in the graduate curriculum. Cr 3.
Nursing Overview

Director of Nursing: Krista Meinersmann

Coordinator of Graduate Nursing Program: Cheryl Sarton

Coordinator of Undergraduate Nursing Programs: Elizabeth Elliott

Faculty in Nursing:

Professors: Harris, Hart, Spross; Associate Professors: Farmer, Meinersmann, Moody, Samia, Sepples; Assistant Professors: Baugh, Fackler, Gottlieb, Lawlor, Randall (Carla), Sarton; Instructors: Caton-Lemos, Dvorak, Elliott, Martin, Randall (Cynthia); Lecturers: Goldenberg, Larsen, Thompson-Leavitt; Adjunct: Moore-Littlefield; Professor Emerita: Childs; Associate Professors Emeritae: Burson, Fournier, Healy, Johnson Keith, MacPherson, Normandeau, Peake-Godin, Rodgers, Tiffany, Tukey, Vines, Woods Smith; Assistant Professor Emerita: Nealand

The School of Nursing (SON) offers programs leading to a bachelor of science with a major in nursing, a master of science with a major in nursing and a doctor of nursing practice. In addition, it offers a minor in holistic and integrative health and certificates in nursing education and holistic health. Special study options are available for registered nurses seeking to attain a baccalaureate or master's degree in nursing and for students who hold a baccalaureate degree in another field who are interested in a baccalaureate or master's degree in nursing. The nursing programs are approved by the Maine State Board of Nursing. The baccalaureate and master's programs at USM are accredited by the Commission on Collegiate Nursing Education, One Dupont Circle, NW, Suite 530, Washington, DC 20036 (202) 887-6791.

Philosophy of the School of Nursing

The philosophy of the School of Nursing (SON) is consistent with the mission of the University of Southern Maine. The philosophy of the School of Nursing is built on the concept of community. This community of scholarship creates an environment for reflective learning, faculty and student interactions, and partnering with persons of diverse backgrounds. The faculty are committed to facilitating progress toward current national health care goals and initiatives. The faculty believe in fostering the health of individuals, families, and communities across the lifespan. The faculty believe that nursing practice should occur within a holistic, nurturing, and health promotion framework. The faculty believe in providing education through a model that emphasizes critical thinking, articulate communication, and understanding interdisciplinary care strategies within changing economic and health care systems. The faculty support professional value development and value-based practice that include caring, ethics, social justice, and personal and community empowerment. Our philosophy supports multiple ways of knowing, emphasizes reflective evidence-based nursing practice, and promotes lifelong learning.

The programs of the School of Nursing are subject to change at any time without notice in advance. For more information on the SON visit the Web site at http://usm.maine.edu/nursing.

BS in Nursing

Description

This program prepares individuals to begin their nursing practice in a variety of health care settings and in specialty areas. Graduates possess the foundation needed to assume beginning leadership and management positions and to begin graduate studies. The traditional B.S. in nursing and the R.N. studies option are available in both Portland and Lewiston-Auburn. The accelerated B.S. degree program is available only in Portland.

Program Requirements

The baccalaureate nursing program requires the completion of a minimum of 120 credits of study and culminates in a baccalaureate degree (B.S.). Graduates of the traditional and accelerated B.S. programs are eligible to sit for the National Council Licensure Examination for Registered Nurses (NCLEX-RN).

The University policy exempting immunization requirements for students born prior to 1956 does not apply to nursing students. Because health
care workers are at a higher risk for certain illnesses, all students must meet the health requirements of the School of Nursing. These requirements are listed in the student handbook, and on the School's website. All health requirements must be met and the documentation must be completed prior to entry into clinical courses, beginning with NUR 306/307. Students are required to provide verification of compliance with health requirements throughout their program. Failure to comply with maintenance of health requirements will result in removal from all courses. Students must be certified in professional rescuer cardiopulmonary resuscitation (CPR). CPR certification is accepted only from the American Heart Association. Students must have health insurance, equal to or better than the USM Student Health Insurance Plan prior to entry into NUR 306/307.

Students must pay for and complete a comprehensive background check prior to starting NUR 306/307. Students must sign a disclosure agreement allowing the School to provide access to this background information to our clinical affiliates. Affiliates have the right to deny clinical placement based on criminal background. Denial of clinical placement will stop progression in the nursing program.

Students may be asked by some clinical agencies to meet other specific clinical requirements. For example, some agencies require drug screens prior to attending clinical at their agency. Students assigned to these agencies will be required to complete all items required by that specific agency.

The costs incurred by a USM SON student for health requirements and background check may provide for additional loan eligibility and/or can be built into the financial aid costs of attendance/education. Students are required to request consideration by the Financial Aid Office, including providing documentation of the actual costs incurred.

Nursing courses carry additional fees to cover laboratory and clinical costs. A fee is assessed each semester to cover the cost of standardized tests. This fee includes the cost of a review course at the end of the program. Nursing majors must purchase uniforms and lab coats. Because clinical experiences occur in a variety of settings in the southern/central Maine area, students must provide their own transportation to rural as well as urban areas. Professional liability insurance is highly recommended for students in the nursing major and is required by some of our clinical agencies.

Retention Policies

The School of Nursing requires its part-time and full time students to maintain class standing according to hours completed. The following requirements are exceptions or additions to University policies:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>For Good Standing</th>
<th>For Probationary Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td>46-120</td>
<td>2.75</td>
<td>2.5-2.74</td>
</tr>
<tr>
<td>25-45</td>
<td>2.75</td>
<td>2.5-2.74</td>
</tr>
<tr>
<td>0-24</td>
<td>2.5</td>
<td>2.0-2.49</td>
</tr>
</tbody>
</table>

By maintaining a 2.75 GPA or above during the upper-division years, the student maintains a standard appropriate to professional practice. The student must accomplish, as a minimum, a GPA for good standing according to the number of credits earned.

A student who is unable to maintain a grade point average of 2.75 but whose average remains above 2.5 is on probation within the School of Nursing. If placed on probation, a student has a maximum of two semesters to achieve a satisfactory cumulative GPA or the student will be suspended or dismissed. A student on probation may take support courses to restore their GPA to a level of 2.75 or above, at which point progress in nursing lecture and clinical courses may resume. While on probation, the minimum semester GPA accomplished must be the GPA for good standing according to the number of credits earned (see above) or the student will be suspended. A student is suspended for one semester; the student will be dismissed at the end of the next enrolled semester if the GPA requirement is not met. A student who is unable to maintain a grade point average of 2.5 will not be allowed to maintain matriculation in the School of Nursing and will be required to either change majors, be suspended, or be dismissed from the University according to its policies.

Progression Policies

The lowest acceptable grade in required prerequisite courses is a grade of C. The lowest acceptable grade in required CON and NUR courses is a grade of C+.

Students must have a USM GPA of 2.75 in order to enroll in NUR 300/301 and 306/307. There must be no more than one year between completion of NUR 300/301, NUR 306/307, and CON 302 and starting NUR 323/325 or the course/courses will have to be repeated. There must be no more than one year between taking didactic/clinical course combinations. Three or more semesters without taking didactic/clinical nursing courses require the student to repeat all didactic/clinical courses. Once a student begins NUR 323/325, the student must complete all degree requirements within four years.

In addition to having a 2.75 USM GPA, requisite to beginning junior-level clinical coursework, a student must achieve a natural science GPA of 2.67. The natural sciences consist of the following courses: anatomy and physiology I and II with labs, chemistry, microbiology with lab, human
nutrition, and pathophysiology. Students who do not achieve a natural science GPA of 2.67 after completing all prerequisite courses may not begin junior-level clinical courses. Students then have a maximum of one year between completing NUR 300/301, 306/307 and raising their natural science GPA to 2.67 in order to begin clinical coursework. Science courses may be repeated only once.

Nursing lecture and clinical course combinations must be taken concurrently the first time a student is enrolled in each course. A grade of C or below in a nursing lecture course or an F in a nursing clinical course (see low pass policy) will stop the student from registering for any other NUR clinical, NUR lecture or partnership course. In addition, students who receive a failing grade in a required lecture or clinical course which finishes partway through the semester (or students who withdraw from a required lecture or clinical course partway through the semester) will be withdrawn from all other concurrent lecture or clinical courses (required or elective). The student must achieve a grade of C+ or better, or a passing clinical grade in the course which is repeated before entering the next nursing lecture/clinical course combination or partnership. A course may be repeated only once.

A student may repeat a maximum of two CON or NUR required courses, clinical or didactic, in which the student receives a grade of C or below. An unsatisfactory grade in a third CON or NUR required course will result in dismissal from the nursing program. If a student receives an F in an elective NUR clinical course, they may not register to repeat that clinical elective or enroll in any other NUR clinical elective without permission of the Director of the School of Nursing.

The Undergraduate Admissions and Advancement Committee will review the academic record of any student who receives unsatisfactory grades in a given semester as follows:

1. Multiple unsatisfactory grades in prerequisite, nursing, and/or support courses;
2. A C-, D, F or L in one or more prerequisite or support courses when repeating the course due to an unsatisfactory grade;
3. A C, D, F or L in required NUR or CON courses when repeating the course due to an unsatisfactory grade;
4. An F in a nursing clinical or partnership course.

Academic actions may include probation, suspension or dismissal from nursing and/or the University. Matters of personal concern to the student will be considered. The Committee will recommend to the Director a decision regarding progression or dismissal. Appeals may be made to the Undergraduate Admissions and Advancement Committee. A request for exception to the policy must be initiated by the student.

The School of Nursing reserves the right to accept and retain only those students who satisfy the requirements of scholarship and health necessary for nursing. A student who admits to or is found guilty of a violation of the American Nurses' Association guidelines for ethical practice (see School of Nursing Student Handbook) is subject to suspension or dismissal from the University. The Maine State Board of Nursing may refuse to grant a license on the basis of violation of academic or professional integrity or on the basis of criminal history record information relating to convictions denominated in Title 5, Chapter 341, Subsection 5301 of the Maine Revised Statutes Annotated.

Low Pass Grades

Low pass (LP) grades are used in clinical and partnership courses to inform students whose performance is near failing. Students are held accountable to address the weaknesses identified in their performance appraisal with subsequent clinical and partnership faculty. A second low pass grade constitutes an F and stops progression in clinical, didactic and partnership coursework (see above progression policies).

Incomplete Grades

A grade of Incomplete may be assigned by a faculty member when a student, because of extraordinary circumstances, has failed to complete course requirements in a required NUR or CON course. Incomplete grades must be resolved satisfactorily to progress.

Graduation Requirements

For graduation, no general education requirements or prerequisites may be taken pass-fail and no more than three credits of non-nursing elective may be taken pass-fail. Only one C- or D grade from the arts or humanities will be accepted. Otherwise, a minimum grade of C or above in these courses must be achieved. Grades of C- or below are not acceptable in any prerequisite course.

Traditional nursing students graduate in December or May. Summer graduation is limited to students in the Accelerated BS program. To be eligible for graduation with a bachelor of science degree with a major in nursing, the student must have successfully completed all requirements, and a minimum of 120 credit hours with a minimum grade point average of 2.75.

Commitment to Civility

The concepts of community and social justice are central to the mission and philosophy of the University of Southern Maine School of Nursing. Faculty, students, and staff are committed to promoting a healthy and just environment that supports transformative learning, academic integrity, open communication, and personal and professional growth among the diverse members of our academic community. We believe that these
commitments are grounded in intellectual openness, in personal and professional accountability, and in the democratic values of inclusivity and mutual respect which are guided by rational discourse and by a relational ethic of care.

We are grateful for the opportunities to learn and work with peoples of diverse ethnic, racial, religious, cultural, political, social and economic backgrounds as well as with people who are disabled and people of different gender, sexual orientation, and age. Acknowledging the ethics and values that underlie the health professions, it is our belief that these ethics and values should be recognized, practiced, and cultivated in our learning and work environments. Our goal is to increase the awareness of students, staff, and faculty to the importance of civility, its implications, and the behaviors that are acceptable and not acceptable in our learning community.

Civility is the art of treating others, as well as ourselves, with respect, dignity, and care. Civility is apparent when we are sensitive to the impact that our communications, practices, and behaviors have on others, and when we acknowledge each person's self-worth and unique contributions to the community as a whole.

As members of the School, we are committed to learning and practicing in ways that support a caring and socially just community. The following are examples of how we create and sustain civility.

- Support the autonomy and just treatment of self and others by facilitating an open, respectful, and caring environment.
- Accept responsibility and accountability for one's own behavior when interacting with students, faculty, and staff.
- Respect and protect the rights and property of others.
- Speak or behave in a manner that does not disrupt or interfere with the learning or work of others.
- Practice personal and academic integrity and expect it from others.
- Demonstrate respect for others by actively discouraging discriminatory conduct, bigotry, violence, coercion or intimidation against any member of the academic community.
- Demonstrate a willingness to listen and be open to hearing the perspectives of others. This includes actively seeking to hear from and making a safe space for voices of dissent.
- Explore controversial issues through open dialogue and respectful deliberation.
- Respect freedom of expression while recognizing that such tolerance does not require agreement with expressed ideas.
- Engage institutional resources and persons to resolve conflict when necessary.

We will not tolerate harassing or discriminatory conduct of any form. Everyone has the responsibility to foster a safe and supportive learning and work environment. This commitment can include any individual asking others to stop disrespectful or abusive speech and/or disruptive behavior. Collectively, faculty, staff, and students in the School of Nursing are responsible for ensuring a safe and supportive learning and work environment.

**Recommended Course Sequence**

Please see the "Learn More" tab for specific program plans.

Students must fulfill the USM general education requirements by completing any one of the following pathways: the USM Core curriculum, the Russell Scholars Program or the University Honors Program. USM general education requirements include coursework fundamental to a baccalaureate education including English composition, quantitative decision making, ethical inquiry, natural and behavioral sciences, arts, and humanities.

**In Addition to General Education Requirements, Freshman Year**

**Courses for Nursing Include:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition*</td>
<td>3</td>
</tr>
<tr>
<td>Anatomy &amp; Physiology I &amp; II with Labs*</td>
<td>8-9</td>
</tr>
<tr>
<td>Chemistry for the Health Sciences*</td>
<td>3</td>
</tr>
<tr>
<td>Statistics (prerequisite to CON 321 - Health Related Research)</td>
<td>3-4</td>
</tr>
<tr>
<td>Introduction to Psychology*</td>
<td>3</td>
</tr>
<tr>
<td>Multicultural Human Development*</td>
<td>3</td>
</tr>
<tr>
<td>NUR 100 Introduction to Nursing*</td>
<td>3</td>
</tr>
</tbody>
</table>

*In addition to having completed 24 credits and holding a minimum cumulative GPA of 2.75, these courses must be taken before or concurrent with entry into 1st semester junior year courses.

**In Addition to General Education Requirements, Sophomore Year**

**Courses for Nursing Include:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Sociology*</td>
<td>3</td>
</tr>
<tr>
<td>Microbiology and lab**</td>
<td>4-5</td>
</tr>
<tr>
<td>Pathophysiology**</td>
<td>3</td>
</tr>
<tr>
<td>Human Nutrition**</td>
<td>3</td>
</tr>
<tr>
<td>CON 356 Concepts in Community Health</td>
<td>3</td>
</tr>
</tbody>
</table>

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Junior and Senior Year Nursing Courses

Nursing content at the upper division is organized to facilitate the integration of nursing knowledge and skills and to draw on a foundation of learning from other disciplines. The nursing curriculum provides opportunities for students to develop skills in partnering with various community stakeholders to identify community strengths, resources, and needs. Courses focus on the promotion, maintenance, and restoration of health. Students have experiences which involve assessment, planning, implementation, and evaluation of care for individuals of all ages, in families, groups of clients, and communities across the health continuum. Inpatient and outpatient settings, community health agencies, public health settings, long-term care facilities, schools, and industries are used for clinical experiences.

Students are assigned to a cohort that follows a specific sequence of courses. Junior level clinical courses begin in either the fall or the spring semester in Portland and in the spring semester in Lewiston.

Students progress through lecture and clinical course combinations in the following sequence: Adult/Older Adult Health (NUR 323/325) and Mental Health (NUR 330/331); Reproductive and Sexual Health (NUR 421/422) and Child Health (NUR 427/428); and Management of Critically Ill Adults/Older Adults (NUR 423/413/425). NUR 423/425/413 are taken together as immersion courses in the first seven weeks of the final semester. Practicum (NUR 480) is a seven-week capstone clinical course in the second seven weeks of the final semester. Students must complete the lecture/clinical course combination assigned for practicum placement prior to beginning this capstone experience.

Clinical nursing courses require 28 contact hours per credit except NUR 480 Practicum/Care Management, the final seven-week capstone clinical course. This course requires 168 contact hours, or 56 contact hours per credit. Students must take all required CON and NUR courses at USM.

In Addition to General Education Requirements, First Semester
Junior Year Courses for Nursing Include:
CON 302 Pharmacology** 3
NUR 300 Health Assessment** 3
NUR 301 Health Assessment Lab** 2
NUR 306 Nursing Arts and Science** 3
NUR 307 Fundamentals in Nursing Lab** 2
**In addition to having a minimum GPA of 2.75 and a science GPA of 2.67, these courses must be taken before entry into clinical nursing courses (NUR 323/325).

In Addition to General Education Requirements, Second Semester
Junior Year Courses for Nursing Include:
NUR 323 Adult/Older Adult Health Nursing 3
NUR 325 Adult/Older Adult Health Nursing Lab 4
NUR 330 Mental Health Nursing 3
NUR 331 Mental Health Nursing Lab 2
NUR 339 Community Nursing Partnerships I 2
CON 321 Health Related Research (prerequisite: statistics) 3

In Addition to General Education Requirements, First Semester
Senior Year Courses for Nursing Include:
NUR 332 Nursing Care of the Older Adult in the Community 3
NUR 341 Community Nursing Partnerships II 2
NUR 421 Reproductive and Sexual Health Nursing 3
NUR 422 Reproductive and Sexual Health Nursing Lab 2
NUR 424 Clinically-Applied Genetics 3
NUR 427 Child Health Nursing 3
NUR 428 Child Health Nursing Lab 2

Second Semester Senior Year Courses Include:
NUR 423 Management of Critically Ill Adult/Older Adult 3
NUR 425 Management of Critically Ill Adult/Older Adult Lab 2
NUR 413 Advanced Nursing Skills Lab 1
NUR 470 Leadership, Management, and Ethics 3
NUR 480 Practicum/Care Management 3

Admission Information

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Since the baccalaureate nursing program includes supervised clinical experiences, the nursing faculty reserves the right to limit enrollments. Admission to the program is highly selective.

In addition to the requirements established for admission to the University, high school students applying to the School of Nursing must complete high school chemistry and biology with labs. SAT or ACT scores for first year applicants, academic record, and a required essay are considered in the application review process. See the admission section of the USM undergraduate catalog for further requirements.

First-year applicants internal to USM with 32 or fewer credits, a GPA of 3.0 and specific prerequisite requirements (completed English and math readiness, English composition or equivalent, anatomy and physiology I or chemistry, and two of the following three social sciences: introductory sociology, human growth and development, or introductory psychology) may apply for a change of major to nursing in consultation with the nursing advisor.

Transfer admission into the nursing major is available according to the number of open seats in a cohort-based system. Applications for the admission of transfer students will be processed once a year. The application deadline is January 15. Applicants will be notified of decisions by mid April. Internal and external applicants may apply for transfer with a minimum of 30 credits, a minimum GPA of 3.0 in all prior college work, a minimum GPA of 2.67 in the natural science courses which have been completed (anatomy & physiology I & II with labs, chemistry, microbiology with lab, pathophysiology and human nutrition) and English and math readiness as determined by the University.

BS in Nursing - Accelerated Program

Description

The faculty of the School of Nursing recognizes the desire of people with baccalaureate degrees in disciplines other than nursing to become nurses and has designed an accelerated program that leads to a B.S. in nursing in 15 months of full-time study. Students enrolled in this program build their undergraduate nursing courses upon previous academic and life experiences. Graduates of this program are eligible to sit for the National Council Licensure Examination for Registered Nurses (NCLEX-RN).

Program Requirements

The University policy exempting immunization requirements for students born prior to 1956 does not apply to nursing students. Since health care workers are at a higher risk for certain illnesses, all students must meet the health requirements of the School of Nursing. These requirements are listed in the student handbook, and on the School’s Web site.

All health requirements must be met and the documentation must be on file in the School of Nursing (SON) prior to entry into clinical courses, beginning with NUR 323/325. Students are required to provide verification of compliance with health requirements throughout their program. Failure to comply with maintenance of health requirements will result in removal from all courses. Students must be certified in professional rescuer cardiopulmonary resuscitation (CPR). CPR certification is accepted only from the American Heart Association. Students must have health insurance, equal to or better than the USM Student Health Insurance Plan prior to entry into NUR 323/325.

Students must pay for and complete a comprehensive background check prior to starting NUR 323/325. Students must sign a disclosure agreement allowing the School to provide access to this background information to our clinical affiliates. Affiliates have the right to deny clinical placement based on criminal background. Denial of clinical placement will stop progression in the nursing program.

Students may be asked by some clinical agencies to meet other specific clinical requirements. For example, some agencies require drug screens prior to attending clinical in their agency. Students assigned to these agencies will be required to complete all items required by that particular agency.

The costs incurred by a USM SON student for health requirements and background check may provide for additional loan eligibility and/or can be built into the financial aid costs of attendance/education. Students are required to request consideration by the Financial Aid Office, including providing documentation of the actual costs incurred.

Nursing courses carry additional fees to cover laboratory and clinical costs. A fee is assessed each semester to cover the cost of standardized tests. This fee includes the cost of a review course at the end of the program. Nursing majors must purchase uniforms and lab coats. Because clinical experiences occur in a variety of settings in southern and central Maine, students must provide their own transportation to rural as well as urban areas. Professional liability insurance is highly recommended for students in the nursing major and is required by some of our clinical agencies.
Retention Policies

All policies applicable to students in the baccalaureate program (refer to Retention and Progression policies for the baccalaureate program) also apply to students in the Accelerated BS program unless otherwise noted.

Students in the Accelerated BS program are required to maintain GPA of 2.75. A student who is unable to maintain a grade point average of 2.75 but whose average remains above 2.5 is on probation within the School of Nursing. The status of such a student will be reviewed by the Undergraduate Admissions and Advancement Committee. A student who is unable to maintain a grade point average of 2.5 will not be allowed to maintain matriculation in the School of Nursing and will be required to either change majors, be suspended, or be dismissed from the University according to its policies.

Progression Policies

The lowest acceptable grade in required prerequisite courses is a grade of C. The lowest acceptable grade in required CON and NUR courses is a grade of C+.

Nursing lecture and clinical course combinations must be taken concurrently the first time a student is enrolled in each course. A grade of C or below in a nursing lecture course or an F in a nursing clinical course (see low pass policy) will stop the student from registering for any other NUR clinical, NUR lecture or partnership course. In addition, students who receive a failing grade in a required lecture or clinical course which finishes partway through the semester (or students who withdraw from a required lecture or clinical course partway through the semester) will be withdrawn from all other concurrent lecture or clinical courses (required or elective). The student must achieve a grade of C+ or better, or a passing clinical grade in the course which is repeated before entering the next nursing lecture/clinical course combination or partnership. A course may be repeated only once.

A student may repeat a maximum of two CON or NUR required courses, clinical or didactic, in which the student receives a grade of C or less. An unsatisfactory grade in a third CON or NUR required course will result in dismissal from the nursing program. If a student receives an F in an elective NUR clinical course, they may not register to repeat that clinical elective or enroll in any other NUR clinical elective without permission of the Director of the School of Nursing.

The Undergraduate Admissions and Advancement Committee will review the academic record of any student who receives unsatisfactory grades in a given semester as follows:

1. An unsatisfactory grade in a prerequisite, nursing, and/or support course;
2. A C-, D, F or L in one or more prerequisite or support courses when repeating the course due to an unsatisfactory grade;
3. A C, D, F or L in required NUR or CON courses when repeating the course due to an unsatisfactory grade;
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Academic actions may include probation, suspension or dismissal from nursing and/or the University. Matters of personal concern to the student will be considered. The Committee will recommend to the Director a decision regarding progression or dismissal. Appeals may be made to the Undergraduate Admissions and Advancement Committee. A request for exception to the policy must be initiated by the student.

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Low Pass Grades

Low pass (LP) grades are used in clinical and partnership courses to inform students whose performance is near failing. Students are held accountable to address the weaknesses identified in their performance appraisal with subsequent clinical and partnership faculty. A second low pass grade constitutes an F and stops progression in clinical, didactic and partnership coursework (see above progression policies).

Incomplete Grades

A grade of Incomplete may be assigned by a faculty member when a student, because of extraordinary circumstances, has failed to complete course requirements in a required NUR or CON course. Incomplete grades must be resolved satisfactorily to progress.

Graduation Requirements

To be eligible for graduation with a bachelor of science degree with a major in nursing, the student must have successfully completed all requirements, and a minimum of 120 credit hours with a minimum grade point average of 2.75.
Commitment to Civility

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- Practice personal and academic integrity and expect it from others.
- Demonstrate respect for others by actively discouraging discriminatory conduct, bigotry, violence, coercion or intimidation against any member of the academic community.
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Recommended Course Sequence

Please see the "Learn More" tab for the specific program plan.

Required Courses:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIO 345 Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>CON 252 Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CON 302 Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>CON 321 Health Related Research</td>
<td>3</td>
</tr>
<tr>
<td>CON 356 Concepts in Community Health</td>
<td>3</td>
</tr>
<tr>
<td>NUR 211 Nursing Role</td>
<td>1</td>
</tr>
<tr>
<td>NUR 300 Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td>NUR 301 Health Assessment Lab</td>
<td>2</td>
</tr>
<tr>
<td>NUR 306 Nursing Arts and Science</td>
<td>3</td>
</tr>
<tr>
<td>NUR 305 Fundamentals of Nursing Lab</td>
<td>2</td>
</tr>
<tr>
<td>NUR 323 Adult/Older Adult Health Nursing</td>
<td>3</td>
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<tr>
<td>NUR 325 Adult/Older Adult Health Nursing Lab</td>
<td>4</td>
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<td>NUR 330 Mental Health Nursing</td>
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<td>NUR 332 Nursing Care of the Older Adult in the Community</td>
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<td>NUR 413 Advanced Nursing Skills Lab</td>
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<tr>
<td>NUR 421 Reproductive and Sexual Health Nursing</td>
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Admission Information

This program admits students, through a competitive admissions process, who have attained a minimum GPA of 3.3 on a 4.0 scale in their prior degree. Students must complete statistics and anatomy and physiology prior to beginning the program. Please see the Learn More tab for more information.

BS in Nursing - RN to Bachelor of Science Degree

Description

The School of Nursing faculty recognizes the need and desirability for registered nurses to attain baccalaureate and masters degrees within Maine. The nursing faculty has designed two options for RNs - the first leading to a Bachelor of Science degree (B.S.) and the second (described in USM's Graduate Catalog) leading to a Master of Science degree. RNs returning to school face many challenges; every effort is made to remain attentive and flexible in adjusting the plan of study and accommodating individual needs. Advice regarding prerequisites, course planning, and course sequencing for RNs may be obtained by contacting Brenda Webster at (207) 780-4802.

Program Requirements

Unless otherwise stated, all policies applicable to students in the baccalaureate program (refer to Progression and Retention Policies below) also apply to students in the RN to BS program.

All RNs must fulfill the University's 30 credit residency requirement (6 credits earned at another UMS campus may be applied toward residency).

The SON recognizes a maximum of 30 nursing credits (RN credit options) transferred from an associate's degree nursing (ADN) program as basic nursing credits required in the baccalaureate program. These credits are applied toward fulfillment of the baccalaureate requirements for RN students who have successfully completed NUR 308, Professional Communication and Technology Utilization in Nursing. Nursing credits earned in the ADN program beyond the basic 30 credits above may be used as elective credit. RNs graduating from a diploma program will be awarded the basic nursing credits (30) for a fee, upon successful completion of NUR 308, Professional Communication and Technology Utilization in Nursing. Additional information may be obtained through the Office of Prior Learning Assessment.

Once a student is matriculated the student is required to notify the Coordinator of the Undergraduate Nursing Programs of any change in status of their RN license.

The University policy exempting immunization requirements for students born prior to 1956 does not apply to nursing students. Because health care workers are at a higher risk for certain illnesses, all students must meet the health requirements of the School of Nursing. These requirements are listed in the student handbook, and on the School's Web site. All health requirements, including CPR certification and health insurance, must be met and the documentation must be on file in the School of Nursing (SON) prior to entry into NUR 419, Community Nursing Partnerships for RNs. Students must be certified in professional rescuer cardiopulmonary resuscitation (CPR). CPR certification is accepted only from the American Heart Association. Students must have health insurance equal to or better than the USM Student Health Insurance Plan.

Students must pay for and complete a comprehensive background check prior to starting NUR 419. Students must sign a disclosure agreement allowing the School to provide access to this background information to our clinical affiliates. Affiliates have the right to deny clinical placement based on criminal background. Denial of clinical placement will stop progression in the nursing program.

Students may be asked by some clinical agencies to meet other specific clinical requirements. For example, some agencies require drug screens
prior to attending clinical in their agency. Students assigned to these agencies will be required to complete all items required by that particular agency.

The costs incurred by a USM SON student for health requirements and background check may provide for additional loan eligibility and/or can be built into the financial aid costs of attendance/education. Students are required to request consideration by the Financial Aid Office, including providing documentation of the actual costs incurred.

Nursing courses carry additional fees to cover laboratory and clinical costs. Because clinical experiences occur in a variety of settings in the southern Maine area, students must provide their own transportation to rural as well as urban areas. Professional liability insurance is highly recommended for students in the nursing major and is required by some of our clinical agencies.

Retention Policies

The following are exceptions or additions to University progression policies.

Both part-time and full-time students in the RN to BS program must maintain a 2.5 GPA in order to be in good standing. The academic record of a student in this program who is unable to maintain a GPA of 2.5 may be reviewed by the Undergraduate Admissions and Advancement Committee which may recommend probation, suspension, or dismissal. If placed on probation, a student has a maximum of two semesters to achieve a satisfactory cumulative GPA or the student may be suspended or dismissed. While on probation, the minimum semester GPA accomplished must be at least a 2.5 or the student may be suspended. A student is suspended for one semester; the student may be dismissed at the end of the next enrolled semester if the GPA requirement is not met.

Progression Policies

The lowest acceptable grade in required NUR/CON courses and their prerequisite courses is a grade of C. Science courses may be repeated only once.

The Undergraduate Admissions and Advancement Committee will review the academic record of any student who receives unsatisfactory grades in a given semester as follows:

1. Multiple unsatisfactory grades in prerequisite, nursing, and/or support courses;
2. A C-, D, F or L in one or more prerequisite, nursing and/or support course(s) when repeating the course due to an unsatisfactory grade;
3. An F in a nursing clinical or partnership course.

Academic actions may include probation, suspension or dismissal from nursing and/or the University. Matters of personal concern to the student will be considered. The Undergraduate Admissions and Advancement Committee (UGAAC) will recommend to the Director a decision regarding progression or dismissal. Appeals may be made to the UGAAC. A request for exception to the policy must be initiated by the student.

The School of Nursing reserves the right to accept and retain only those students who satisfy the requirements of scholarship and health necessary for nursing. A student who admits to or is found guilty of a violation of the American Nurses' Association guidelines for ethical practice (see School of Nursing Student Handbook) is subject to suspension or dismissal from the University.

Low Pass Grades

Low pass (LP) grades are used in clinical and partnership courses to inform students whose performance is near failing. Students are held accountable to address the weaknesses identified in their performance appraisal with subsequent clinical and partnership faculty. A second low pass grade constitutes an F and stops progression in clinical, didactic and partnership coursework (see above progression policies).

Incomplete Grades

A grade of Incomplete may be assigned by a faculty member when a student, because of extraordinary circumstances, has failed to complete course requirements in a required NUR or CON course. Incomplete grades must be resolved satisfactorily to progress.

Graduation Requirements

To be eligible for graduation with a bachelor of science degree with a major in nursing, the student must have successfully completed all requirements, and a minimum of 120 credit hours with a minimum grade point average of 2.50.

Commitment to Civility

The concepts of community and social justice are central to the mission and philosophy of the University of Southern Maine School of Nursing. Faculty, students, and staff are committed to promoting a healthy and just environment that supports transformative learning, academic integrity, open communication, and personal and professional growth among the diverse members of our academic community. We believe that these
commitments are grounded in intellectual openness, in personal and professional accountability, and in the democratic values of inclusivity and mutual respect which are guided by rational discourse and by a relational ethic of care.

We are grateful for the opportunities to learn and work with peoples of diverse ethnic, racial, religious, cultural, political, social and economic backgrounds as well as with people who are disabled and people of different gender, sexual orientation, and age. Acknowledging the ethics and values that underlie the health professions, it is our belief that these ethics and values should be recognized, practiced, and cultivated in our learning and work environments. Our goal is to increase the awareness of students, staff, and faculty to the importance of civility, its implications, and the behaviors that are acceptable and not acceptable in our learning community.

Civility is the art of treating others, as well as ourselves, with respect, dignity, and care. Civility is apparent when we are sensitive to the impact that our communications, practices, and behaviors have on others, and when we acknowledge each person’s self-worth and unique contributions to the community as a whole.

As members of the School, we are committed to learning and practicing in ways that support a caring and socially just community. The following are examples of how we create and sustain civility.

- Support the autonomy and just treatment of self and others by facilitating an open, respectful, and caring environment.
- Accept responsibility and accountability for one’s own behavior when interacting with students, faculty, and staff.
- Respect and protect the rights and property of others.
- Speak or behave in a manner that does not disrupt or interfere with the learning or work of others.
- Practice personal and academic integrity and expect it from others.
- Demonstrate respect for others by actively discouraging discriminatory conduct, bigotry, violence, coercion or intimidation against any member of the academic community.
- Demonstrate a willingness to listen and be open to hearing the perspectives of others. This includes actively seeking to hear from and making a safe space for voices of dissent.
- Explore controversial issues through open dialogue and respectful deliberation.
- Respect freedom of expression while recognizing that such tolerance does not require agreement with expressed ideas.
- Engage institutional resources and persons to resolve conflict when necessary.

We will not tolerate harassing or discriminatory conduct of any form. Everyone has the responsibility to foster a safe and supportive learning and work environment. This commitment can include any individual asking others to stop disrespectful or abusive speech and/or disruptive behavior. Collectively, faculty, staff, and students in the School of Nursing are responsible for ensuring a safe and supportive learning and work environment.

**Recommended Course Sequence**

The following courses must be completed, or may be available for credit by examination, prior to entry into the upper division nursing courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>English Composition</td>
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<tr>
<td>General Psychology</td>
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<td>General Sociology</td>
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<tr>
<td>Ethical Inquiry</td>
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<td>Statistics (prior to CON 321)</td>
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<tr>
<td>Anatomy and Physiology I and II**</td>
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<td>Growth and Development</td>
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<td>Pathophysiology</td>
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<td>Microbiology</td>
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<tr>
<td>Chemistry**</td>
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**Chemistry and anatomy and physiology requirements are waived with the successful completion (minimum grade of C) of pathophysiology.

University requirements in general education or the Core curriculum must meet the progression standards of those curricula.

Students must take all required CON and NUR courses at USM.

Upper division nursing courses, in required sequence for RNs, include:

A. NUR 309/310 Health Assessment and Health Assessment Lab 4
   NUR 308 Professional Communication and Technology Utilization in Nursing 3

B. NUR 314 RN Credit Options 30
   CON 321 Health-Related Research 3
   CON 356 Concepts in Community Health 3
   NUR 370 Theory for Clinical Practice 3

C. NUR 419 Community Nursing Partnerships 2

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Matriculation in the USM School of Nursing is required prior to enrollment in upper-level nursing courses. The only courses RN students may take prior to matriculation are CON 356, CON 321, NUR 308, NUR 309, and NUR 310. Clinical courses may not be taken unless RN credit options have been completed and posted. USM and the University of Maine (UM) have a collaborative RN/BS option that is available through the University College System. Students may take required and equivalent courses from the other campus for residency credit.

**Admission Information**

**Admission Requirements for the RN to BS Program**

The RN applicant must (a) meet the general admission requirements of the University, (b) provide evidence of current licensure as a registered nurse in Maine, and (c) must have a GPA of 2.5 or better. Applications of those candidates with a GPA below 2.5 will receive consideration by the Undergraduate Admissions and Advancement Committee. Please refer to the "Learn More" tab for more information about admission to this program.

**Certificate in Foundations of Holistic Health**

**Description**

The Foundations of Holistic Health certificate program is designed for students interested in exploring the realm of complementary healing. All courses are available through distance technologies, including on-line or live video. Required courses may be taken over a maximum of three years.

Holistic health offers an integrated approach to health and well being. The School of Nursing Foundations of Holistic Health certificate program introduces students to the importance of addressing the intellectual, emotional, physical, and spiritual dimensions of health. The courses will examine foundational principles of holism; the basic philosophies, diagnostic techniques, and healing methods offered by many complementary healing modalities; benefits and challenges of alternative therapies; and the activities, attitudes, and choices that lead to whole and integrated health over a lifetime.

Note: Matriculation in the University of Maine system is not required, although students may choose to matriculate and transfer credits from the certificate program once completed.

**Program Requirements**

Prerequisites: No prerequisites.

Requirements: Students must take four 3-credit courses for completion of the Certificate program, including two required courses and two electives from the list below.

Grade Point Average: A grade of C or better is required for all courses taken toward completion of the certificate program.

Application must be completed and submitted to the School of Nursing prior to enrollment in the program. Word doc or PDF

For more information about this certificate program, please contact:

**Corinne Martin**

(207) 780-4801

**Recommended Course Sequence**

Courses: (Required)
Holistic Health 1 (CON 280) – This course explores the realm of holistic health, emphasizing the integration of body, mind, and spirit. Specific techniques and therapies will be introduced, including but not limited to nutrition, stress management, meditation, therapeutic movement and massage, music, and others. Primary goal is to bring greater self-confidence, increased knowledge, and self-responsibility about health into each student’s life. (Credits: 3)

Lifetime Fitness and Wellness (CON 219) – The primary emphasis of this course is to teach students how to take control of their personal health and lifestyle habits. Major areas will include nutrition/weight management, fitness training techniques, flexibility, coronary risk factor management, muscular strength/endurance, stress management and other wellness related topics. (Credits: 3)

Elective Courses (Choose 2)

Mindfulness Based Stress Reduction (NUR 203)– Mindfulness is about paying attention without judgment to what is being presented to us in our lives. The core of this course will be the practices of the Mindfulness-based Stress Reduction Program developed at the Center for Mindfulness at the University of Massachusetts Medical School. Students will study the results of research which show benefits of practicing Mindfulness. After learning these practices, students will explore ways to integrate Mindfulness into work, family, health, and relationships, particularly into teaching, nursing, social work, and counseling health professions. Cr 3.

Introduction to Naturopathic Medicine (CON 261) – This course offers a comparative study of conventional and Naturopathic medical models, as part of the Minor in Holistic and Integration Health. Naturopathic medicine integrates current medical science with traditional natural therapies, to promote health and to prevent disease. Students will gain an understanding of Naturopathic principles, philosophy and treatment modalities including nutrition, homeopathy, herbal medicine, mind-body techniques and environmental medicine. Cr 3.

Healing and Spirituality (CON 283) – Explores the links between spiritual understandings and physical and mental health. Focusing on global spiritual and religious traditions, the course will examine the determinants of health and the healing techniques utilized in each faith. Ways in which religious values and expectations become internalized and affect interpretation of wellness and illness will be explored. Students will have an opportunity to explore spirituality as it relates to healing, both personally and institutionally. (Credits: 3)

Reproductive Holistic Health (CON 270) - This course will enable the student to look critically at reproductive health options through the lifespan and to weigh evidence related to alternative, complimentary, and natural approaches to managing reproductive health issues. This course will take a life span, growth and development approach, focusing on sexual development briefly while exploring natural family planning methods, discuss contraception and pregnancy from a holistic view, encourage the development of birth support skills, and discuss care of the newborn after birth. In addition, adult reproductive issues will be explored including menopause, erectile dysfunction, sexuality in aging and some common conditions in adulthood related to reproductive health. (Credits: 3)

Course uses Blackboard: http://www.courses.maine.edu

Therapeutic Touch (CON 490) - This course will introduce the theory and practice of the Krieger-Kunz method of Therapeutic Touch (TT). Concentration will be on the practice of Therapeutic Touch as an intentionally directed process of energy exchange, using the hands to facilitate the movement of energy, and restoring balance to the energy system of the human body. The course will focus on the understanding of the basic principles of the human energy field; intuition; intentionality; benefits; theory, principles, process, and experiential learning of the Therapeutic Touch technique. Through readings, lecture, demonstrations, and practice, students will integrate the TT process with considerations of creating a healing environment, the ethics of practice, and integrating holistic health and self-care. No prior experience is necessary. (Credits: 3)

Holistic Health 2 (CON 281) - Seeking a more fulfilling life or working in the field of holistic health requires us to look at our own lifestyle, exploring the realm of holistic health in greater depth to begin a journey of self-discoveries and self-awareness in better understanding our own lifestyle patterns. This course will provide students with integrative philosophies relevant to recognizing what creates balance, good health, success, and joy in one’s life. A strong component will focus on approaches to healing, including such topics as nutrition, meditation, forgiveness, body movement, energy fields and vibration, living joyously and effortlessly, and thought communication. The primary goal is to become conversant with holistic approaches that are widely used in promoting and supporting self-healing and transformation in both self and others. (Credits: 3)

Minor in Holistic and Integrative Health

Description

The holistic and integrative health minor is designed to provide the foundations and philosophies of a holistic and integrative approach to health care and to examine the fundamental world view, diagnostic methods, and healing techniques utilized in the practice of various complementary healing modalities. A primary focus of the minor is the exploration of the issues that arise in moving toward an integrative approach to the needs of body, mind and spirit. This minor is open to all USM students, and may be of particular interest to nursing and health profession majors, to
students preparing for work in a complementary health care field, to students in psychology, social work, and anthropology, or to any student interested in addressing personal health in a holistic manner.

**Program Requirements**

The minimum number of credits required to complete the minor is 18. Students may transfer up to six credits toward the completion of the minor from other universities.

**Foundational Courses (6 credits, required)**
- CON 280 Holistic Health I
- CON 281 Holistic Health II

**Healing modalities (complete 6 credits from the following)**
- CON 261 Introduction to Naturopathic Medicine
- CON 283 Healing and Spirituality
- CON 284 Botanical Therapies
- CON 285 Perspectives on Animal-Assisted Therapy
- CON 288 Reiki: Energy Medicine
- CON 311 Psychosocial Interventions for Older Adults
- CON 490 Therapeutic Touch

**Wellness Knowledge and Development (complete 6 credits from the following)**
- CON 219 Lifetime Physical Fitness and Wellness
- CON 252 Human Nutrition
- CON 270 Holistic Approach to Reproductive Health
- NUR 203 Mindfulness Based Stress Reduction
- REC 110 Foundations of Recreation and Leisure

or

Two 1.5 credit RHF courses may be substituted for 3 credits under this category. Examples include:
- RHF 102 Karate
- RHF 109 Beginning Weight Training
- RHF 117 Low Impact Aerobics
- RHF 118 Yoga
- RHF 122 Aerobic Kickboxing
- RHF 126 Stability and Physio-Ball Exercise
- RHF 127 Pilates

*Other RHF courses may be substituted with permission of appropriate faculty.

**Course Descriptions**

- [Undergraduate](#)
- [Graduate](#)
- [Doctorate](#)

**Undergraduate**

Courses with a CON prefix are listed at the end of nursing courses.

**NUR 100 Introduction to Professional Nursing**
This course orients students to the expectations of a baccalaureate education in nursing. Academic communication and critical thinking skills within the context of professional nursing are emphasized. Issues of ethical and professional accountability related to the role(s) of the nurse are explored. Historical and contemporary perspectives on the nature and scope of nursing practice are examined. Cr 3.

**NUR 200 Introduction to Professional Nursing for Advanced Student**
This course has been specifically designed for advanced students who are either transfer students with 60 or more credits or have a degree in another field. The course introduces career opportunities in health care as well as how prior learning and work experiences might build on and
blend into a career in nursing. The historical and contemporary perspectives on the nature and scope of nursing will be investigated through utilization of online resources, advanced library skills, writing, and online discussion. Other topics will include skills of communication, critical thinking and the relationship between professional nursing and the broad base of theoretical and empirical knowledge derived from the behavioral and physical sciences and the humanities. Cr 3.

NUR 203 Mindfulness Based Stress Reduction
Mindfulness is about paying attention without judgment to what is being presented to us in our lives. The core of this course will be the practices of the Mindfulness-based Stress Reduction Program developed at the Center for Mindfulness at the University of Massachusetts Medical School. Students will study the results of research which show benefits of practicing Mindfulness. After learning these practices, students will explore ways to integrate Mindfulness into work, family, health, and relationships, particularly into teaching, nursing, social work, and counseling health professions. Cr 3.

NUR 211/511 Nursing Role: Accelerated/Option
This seminar introduces accelerated and option program nursing students to content in nursing history, theory, and research. Students will consider the major constructs of nurse, health, and caring practice. It is a transitional course that seeks to prepare students for the accelerated programs of study at USM, provide a framework for understanding professional education, and to explore the transition into nursing. Cr 1.

NUR 300/509 Health Assessment
This course provides knowledge and skills essential to conduct in-depth bio-psycho-social-cultural health assessment of well individuals throughout the life span. Emphasis is placed on data collection through effective communication and physical skills followed by data analysis and identification of nursing diagnoses. Prerequisites: Anatomy and Physiology I and II, NUR 100 and a GPA of 2.75. NUR 509 is offered in the summer and is open only to option students. Cr 3.

NUR 301/508 Health Assessment Lab
This laboratory course provides knowledge and skills essential to conduct an in-depth bio-psycho-social-cultural, holistic health assessment of well individuals through the life span. Emphasis is placed on data collection through development of communication and physical examination skills. Data will be analyzed and nursing diagnoses developed. Concurrent with NUR 300/509. NUR 508 is offered in the summer and is open only to option students. Cr 2.

NUR 306/512 Nursing Arts and Science
This course introduces the student to concepts and skills basic to the art and science of nursing. The nursing process is introduced as a problem-solving tool and is used along with scientific principles in the teaching of foundational nursing therapeutics used in most practice settings. Prerequisites: 24 credits, a GPA of 2.75, and Anatomy and Physiology I and II (or concurrent). NUR 512 is offered in the summer semester and is open only to option students. Cr 3.

NUR 307/305/514 Fundamentals in Nursing Lab
This course focuses on the cognitive basis, scientific principles, and manipulative component of psychomotor skills used when implementing foundational nursing therapeutics, which promote, maintain, and restore the health of the client. Concurrent with NUR 306 or 512. NUR 305/514, offered in summer semester, are open only to accelerated/option students. Cr 2.

NUR 308 Professional Communication and Technology Utilization in Nursing
This course emphasizes a critical examination of how technology and communication can enhance the understanding of the historical development of the profession of nursing. Students explore professional development in nursing theory, using written and oral communication skills and learn to present information effectively using a variety of sources and techniques. To achieve this objective, the course will introduce APA style of referencing; review basic tenets of good writing style; present information access and utilization skills through library computer searches; explore basic computer skills such as e-mail, listserv membership, Internet searching and critique; and support the development of public presentation skills through the use of presentation software. Prerequisite: RN licensure or permission of instructor. Cr 3.

NUR 309 Health Assessment for RNs
This course provides the RN student with knowledge and skills essential to conduct in-depth bio-psycho-social-cultural health assessments of well individuals. The course includes examination of the concepts of wellness and health promotion across the life span. Prerequisite: RN licensure. Cr 2.

NUR 310 Health Assessment Lab for RNs
This course provides the opportunities for the RN to apply knowledge and skills necessary to conduct total health assessments. Concurrent with NUR 309. Prerequisite: RN licensure. Cr 2.

NUR 314 RN Credit Option
RNs graduating from a diploma program or an associate degree program will be awarded basic nursing credits upon successful completion of NUR 308 Professional Communication and Technology Utilization in Nursing and the Health Sciences. Prerequisites: RN licensure, NUR 308. Cr maximum of 30.
NUR 317 Maternal Child Health in a Developing Country
Students will explore international health issues common to Latin American countries that directly impact women and children. Students will gain a more thorough understanding of environmental, socio-cultural, and political factors that affect maternal child health in a developing nation. Through this course and the clinical experience linked with it, students will explore aspects of partnership building with an international community-based organization to assess health risk factors and plan health promoting activities specific to identified children's health issues. Students will gain an understanding of risk assessment, which includes problem posing and formulation of solutions, as part of their coursework. This coursework is closely tied to the Dominican Republic International Service Learning program. Cr 1.

NUR 318 Evidence-based Practice in Nursing
This online course introduces the student to evidence-based practice in nursing. Using models of critical appraisal, students learn competencies in the synthesis, integration, and evaluation of current best evidence for decision-making in advancing evidence-based nursing practice. This course is open to transfer students, accelerated students and option students who have taken a research course in quantitative methodology. The student must submit the prior course syllabus for evaluation. Cr 1.

NUR 319 Qualitative Inquiry in Nursing
This online course introduces the student to qualitative health-related research methodology. Students learn the qualitative research process, different approaches to research design and the distinctive features of each qualitative design. Using models of critical appraisal of qualitative health-related research findings, students learn competencies in the synthesis, integration, and evaluation of qualitative inquiry for decision-making in advancing evidence-based nursing practice. This course is open to transfer students, accelerated students and option students who have taken a research course in quantitative methodology. The student must submit the prior course syllabus for evaluation. Cr 1.

NUR 323/541 Adult/Older Adult Health Nursing
During this course, students will explore evidence-based nursing therapeutics which support both the adult and the older adult client experiencing health problems. The course considers major health problems in the United States, focusing on nursing knowledge needed for care of adults and older adults experiencing acute and chronic alterations in health in a variety of care settings. This course will encourage students to develop and practice critical thinking skills necessary for delivery of family-centered care in today's complex health care system. The roles of collaboration, advocacy, and teaching are introduced as the student nurse interacts with clients and their support systems across the continuum of care. Prerequisite: NUR 100, 200, or 211; NUR 300/301 or 509/508; NUR 306/307 or 305, or 512/514; BIO 345; CON 302 or 502 (within one year). NUR 541 is offered in the fall semester and is open only to option students. Cr 3.

NUR 325/542 Adult/Older Adult Health Nursing Lab
Students will intervene therapeutically with adults and older adults experiencing health problems. Students will practice problem-solving skills and critical thinking as they perform nursing roles in acute care settings. Concurrent with NUR 323 or 541. NUR 542 is offered in the fall semester and it open only to option students. Cr 4.

NUR 326 Dominican Republic Community Nursing Partnership I
Cr 1.

NUR 327 Dominican Republic Community Nursing Partnership II
Cr 3.

NUR 328 Dominican Republic Community Nursing Partnership III (optional)
Cr 1.

NUR 330/530 Mental Health Nursing
This course examines the theory and practice of psychiatric/mental health nursing. Assessment of clients and intervention strategies are explored. Interdisciplinary aspects of mental health care delivery and current issues in mental health nursing are discussed. Prerequisite: CON 302 or 502; Concurrent with NUR 323/325 or 541/542. NUR 530 is offered in the fall semester and is open only to option students. Cr 3.

NUR 331/531 Mental Health Nursing Lab
This course offers students an opportunity to focus nursing practice on promotion, maintenance, and restoration of mental health. Clinical experience is provided in a mental health/psychiatric nursing setting. The emphasis is on application of concepts of mental health/psychiatric nursing. Concurrent with NUR 330 or 530. NUR 531 is offered in the fall semester and is open only to option students. Cr 2.

NUR 332/532 Nursing Care of the Older Adult in the Community
The focus of this course is the family-centered care of older individuals in the community. Emphasis is on nursing assessment, diagnosis, and therapeutic interventions with individuals and families coping with chronic illnesses. Health promotion/risk reduction strategies are applied. The roles of the nurse in interdisciplinary community settings are explored. Ethical issues unique to community settings are analyzed. Prerequisite: NUR 323 or 541 or concurrent. NUR 532 is offered in the fall semester and is open only to option students. Cr 3.

NUR 339 Community Nursing Partnerships I
This course is the first one in a two-course series (NUR 339 and NUR 341). Over two semesters students will engage in a partnership with a specific community. This sequence of courses incorporates the concepts of partnership building, risk identification, and health promotion within a
community-based context. Students will collaborate with community partners to develop an understanding of both short- and long-term needs of the community. Problem-posing and problem-solving will come from the community. Students will engage in ongoing community assessment, support communities in developing long term interventions/approaches, and engage in evaluation of community level practice. Students will identify individuals and families within their communities who would benefit from individual and family-based nursing assessment, planning, intervention, and evaluation. Students will work with health care providers in these communities to assess the need for services and augment the services available. Students will engage in both formative and summative evaluation over the course of their interaction with the community. Students will consider issues of continuation and termination as they work with individuals, families, fellow students, and community partners. Prerequisite or concurrent: CON 356 and NUR 323/325. Cr 2.

**NUR 341 Community Nursing Partnerships II**
This course is the second one in a two-course series. See NUR 339 for description. Prerequisite: NUR 339. Cr 2.

**NUR 370 Theory for Clinical Practice**
This course focuses on the nursing profession and the process of knowledge development within the profession. The intent is to provide participants with opportunities to explore the processes of inquiry in nursing. Participants will have opportunities to explore various modes of nursing inquiry, including scientific, philosophical, and historical. Praxis, or the development of knowledge through the cycle of acquiring experience, reflecting on experience, and enhancing practice is central to understanding what influences nursing. Relationships between practice, theory, and research are explored. Four foundational concepts: personal meaning, ways of knowing, time/transitions, and context/culture serve to focus critical reflections in this course. In recognizing multiple ways of developing knowledge, participants have the opportunity to explore how practice may differ within varying perspectives. Prerequisite: Matriculation in USM SON, RN licensure or permission of instructor. Cr 3.

**NUR 386 Geary Clinical Cooperative**
This course is a combination of a two-credit elective nursing course offered during the summer and a paid summer experience (10 weeks full time with a Registered Nurse preceptor at Maine Medical Center-MMC). Students are socialized into the professional role of the nurse through hands-on experience, mentoring, observational experiences, and seminar discussions focused on evidence-based nursing practice. There are seminar meetings with instructor and assignments to complete throughout the summer. Prerequisite: NUR 323/325, GPA 3.0, and an accepted application for employment at MMC. Cr 2.

**NUR 413/513 Advanced Nursing Skills Lab**
This course builds on the theory, scientific principles, and psychomotor skills introduced in NUR 306/307 or 305 or 512/514 to promote role development in the core competencies of nursing practice. Prerequisites: NUR 306/307 or 305 or 512/514; concurrent with NUR 423/523, and 425/526. Cr 1. NUR 513 is offered in the spring semester and is open only to option students.

**NUR 419 Community Nursing Partnerships for RNs**
This course incorporates the concepts of partnership building, risk identification, risk reduction, and health promotion within a community based context. Students work with selected communities that are developing long-term solutions to previously identified health problems. Open to RN students only. Prerequisites: Matriculation in USM SON. NUR 309/310, NUR 308, CON 356, RN licensure, SON health requirements. Cr 2.

**NUR 421/543 Reproductive and Sexual Health Nursing**
This course focuses on the theory and research in reproductive and sexual health care. While emphasis is placed on holistic nursing care of diverse healthy families from preconception through the childbearing process, high risk conditions, including end of life care for neonates, and the interventions necessary for successful adaptation are also discussed. Male and female reproductive health issues and nursing care across the lifespan will be presented. NUR 543 is offered in the spring semester and is open only to option students. Prerequisite: NUR 323/325 or 523/542. Cr 3.

**NUR 422/544 Reproductive and Sexual Health Nursing Lab**
This course offers students experience in providing holistic nursing care to individuals and families engaged in childbirth experiences. Emphasis is placed on health needs and alterations during the childbearing process, as well as promotion and maintenance of health before, during, and after childbirth. NUR 544 is offered in the spring semester and is open only to option students. Concurrent with NUR 421/543. Cr 2.

**NUR 423/523 Management of the Critically Ill Adult/Older Adult**
The course will examine evidence-based therapeutic nursing interventions which support adult and older adult clients experiencing complex health problems. This course will encourage students to practice critical thinking skills necessary for delivery of ethical care to individuals and families experiencing high acuity illnesses. The roles of leader, collaborator, and coordinator are discussed as the nurse interacts with clients who are viewed as holistic beings. Prerequisites: NUR 323/325 or 541/542. NUR 523 is offered in the spring semester and is open only to option students. Cr 3.

**NUR 424/524 Clinically-Applied Genetics**
This course explores the genetic basis of human health and disease. It examines the specific mechanisms by which genetic differences give rise to altered body function and influence disease risk, and how these differences are inherited. It emphasizes the advances in genetics that impact the prevention, diagnosis, and treatment of illnesses and conditions. In so doing, it both addresses the basic science of genetics and explores related clinically-applied topics such as the ethical implications of genetics, genetic screening, genetic risk assessment, and gene therapy. NUR 524, the graduate-level class, will include an additional 1-hour per week seminar. Prerequisites: NUR 323 or 541 or consent of instructor. Cr 3.
NUR 425 Management of the Critically Ill Adult/Older Adult Lab
Students will intervene therapeutically with adults and older adults experiencing complex health problems. Students practice problem-solving skills and critical thinking as they perform nursing roles in acute care settings. Concurrent with NUR 423. Cr 2.

NUR 427/545 Child Health Nursing
In this course, students examine family-centered nursing care in the health promotion and health care of children. Class discussions focus on theories, research, and literature related to health needs and common health problems of children. Family, heredity, environment, and socioeconomics are among the factors examined in discussions of nursing in child health. NUR 545 is offered in the spring semester and is open only to option students. Prerequisites: NUR 323/325 or 523/542. Cr 3.

NUR 428/516 Child Health Nursing Lab
Child health lab provides an opportunity for the student in various health care settings to apply the theoretical concepts of health promotion, maintenance, and restoration with children and their families who are at risk or may be experiencing alterations in health. NUR 516 is offered in the spring semester and is open only to option students. Concurrent with NUR 427 or 545. Cr 2.

NUR 436 Community Nursing Partnerships for Accelerated B.S. Students
In this course students work within a community partnership to care for individual clients/families and work with residents in developing community-based health programs. This experience provides students with an opportunity to care for culturally diverse individuals, families, and groups. Leadership roles including ongoing community partnership development will be emphasized. Prerequisite or concurrent: CON 356 and NUR 323/325. Cr 2.

NUR 437 Community Nursing Partnerships for Accelerated B.S. Students
Building on NUR 436, this course continues to focus on the experiences of partnership building with a diverse population in a community setting. The concepts of risk reduction and health promotion are applied to the development of an intervention with a segment of the community. Evaluation of the intervention is considered part of continuous community assessment as well as partnership development. Prerequisite: NUR 436. Cr 2.

NUR 439 Community Nursing Partnerships III
This is an elective course. See NUR 339 for course description. Prerequisite: NUR 339, 341. Cr 2.

NUR 470 Leadership, Management, and Ethics
Students explore professional and ethical issues that affect delivery of health care as well as the complexity of the nurse case management role using theories related to complex systems, leadership, and change. This course also provides an overview of the management and leadership roles in nursing practice with a major focus on organizational analysis, leadership and change theories, and quality improvement. This course must be taken the last semester in the curriculum. Cr 3.

NUR 474 Professional Issues: Leadership, Management, and Organizations for RNs
This course provides the RN student with an overview of the theoretical frameworks of management and leadership roles in nursing practice with a major focus on organizational analysis. Focus is on leadership and change theories, conflict management, and quality improvement for the delivery of health care services. Prerequisite: Matriculation in the USM SON, NUR 308, NUR 309/310. Cr 3.

NUR 476 Theory Related to Clinical Specialty for RNs
This course allows the RN student to develop and enhance clinical theory, knowledge, and practice using self-designed study with a focus on a self-selected clinical specialty. An overview of current theoretical models of care, nursing therapeutics, and evidence-based practice is provided and then used to develop a broader understanding of practice and care issues unique to the clinical specialty. Prerequisites: Matriculation in the USM SON, NUR 308, NUR 309/310. Cr 3.

NUR 480 Practicum/Care Management
This practicum provides a culminating intensive clinical experience that provides students with an opportunity to refine their clinical practice. The course emphasizes the integration of the multiple roles of nursing and serves as a vehicle for enhancing critical thinking and communication. The primary purpose of the course is to develop competency in nursing care, including organizational, prioritization, and decision-making skills. End of life issues and professional ethics as applicable to a wide range of settings will be explored. To the degree possible, students select a practicum site consistent with their area of special interest with seminar sharing of the issues of diverse roles, clients, settings, and philosophies of practice. All students will present orally and demonstrate competency utilizing technical presentation applications. Prerequisite: All theory-linked clinical courses must be taken prior to or concurrent with NUR 480. Concurrent clinical courses cannot be in clinical area of practicum placement. NUR 480 is the final clinical course. Cr 3.

NUR 526 Management of the Critically Ill Adult/Older Adult Lab
Option students will intervene therapeutically with adults and older adults experiencing complex health problems. Students practice problem-solving skills and critical thinking as they perform nursing roles in acute care settings. Concurrent with NUR 523. NUR 526 is offered in the spring semester and is open only to option students. Cr 4.

NUR 538 Community Nursing Partnership for Option Students
In this course students work within a community partnership to care for individual clients/families and work with residents in developing community-based health programs. This experience provides students with an opportunity to care for culturally diverse individuals, families, and groups. Leadership roles including ongoing community partnership development will be emphasized. NUR 538 is offered in the fall semester and is open only to option students. Prerequisite: CON 356, Cr 2.

Nursing and Health Professions Interdisciplinary CON Courses

CON 216 Emergency Response
This course will cover the topics prescribed by the American Red Cross in their emergency response course, including respiratory and cardiac emergencies, wounds, poisoning, sudden illness, burns and other topics. Successful completion of the course requirements will lead to Emergency Response certification, including adult, child, and infant CPR, from the American Red Cross. Cr 3.

CON 219 Lifetime Physical Fitness and Wellness
The primary emphasis of this course is to teach students how to take control of their personal health and lifestyle habits. Major areas will include nutrition/weight management, fitness training techniques, flexibility, coronary risk factor management, muscular strength/endurance, stress management, and other wellness-related topics. Class content will include readings, discussions, self-assessment activities, and development of personalized nutrition and physical activity plans. Cr 3.

CON 252 Human Nutrition
This course examines the basic concepts of human nutrition and their application to the needs of human beings throughout the life cycle. Discussion of factors affecting food practices and attitudes is included. Prerequisites: BIO 211 or SCI 172 or SCI 270. Cr 3.

CON 261 Introduction to Naturopathic Medicine
This course offers a comparative study of conventional and Naturopathic medical models, as part of the Minor in Holistic and Integration Health. Naturopathic medicine integrates current medical science with traditional natural therapies, to promote health and to prevent disease. Students will gain an understanding of Naturopathic principles, philosophy and treatment modalities including nutrition, homeopathy, herbal medicine, mind-body techniques and environmental medicine. Cr 3.

CON 270 Holistic Approaches to Reproductive Health
This course will enable the student to look critically at reproductive health options through the lifespan. Through readings, podcasts, PowerPoint presentations, and online discussions, we will weigh evidence related to alternative, complementary, and natural approaches to managing reproductive health issues. The course will follow a life span, growth and development approach. Course topics will include natural family planning methods, holistic contraception, infertility and pregnancy issues, holistic birth support skills, and holistic care of the newborn after birth. In addition, adult reproductive issues will be covered including menopause, erectile dysfunction, and sexuality in aging. The student will participate online via the discussion board, online quizzes, short essays, and complete an assignment to create a holistic teaching page related to a reproductive health topic. Offered as an online course. Cr 3.

CON 280 Holistic Health I
This course explores the realm of holistic health, emphasizing the integration of body, mind and spirit. Specific techniques and therapies will be introduced including, but not limited to, nutrition, stress management, meditation, therapeutic movement and massage, music, and others. The primary goal is to bring greater self-confidence, increased knowledge, and self-responsibility about health into each student's life. Cr 3.

CON 281 Holistic Health II
This course explores the realm of holistic health in greater depth. A strong component will focus on approaches to healing, including such topics as nutrition, meditation, creative imagery, crystals, and herbal remedies. Spiritual and metaphysical dimensions will be integrated as they relate to the total well-being of the individual. The primary goal is to become conversant with holistic approaches that are widely used in promoting and supporting self-healing in both self and others. Often offered as an online course. Prerequisite: CON 280 or permission of instructor. Cr 3.

CON 283 Healing and Spirituality
This course will explore the links between spiritual understandings and physical and mental health. Focusing on global spiritual and religious traditions, the course will examine the determinants of health and the healing techniques utilized in each faith. We will also examine the ways in which religious values and expectations become internalized and affect the ways in which we interpret our wellness and our discomforts. This course is designed to offer an opportunity to become familiar with the world's faith traditions, and to explore spirituality as it relates to healing, both personally and institutionally. Cr 3.

CON 284 Botanical Therapies
The use of medicinal plant remedies can offer a rich, effective, and safe addition to health care for a variety of common illnesses and conditions. With dramatic increase in use of herbal preparations, however, questions of effectiveness and safety arise for both health care consumers and their providers. This course will give the historical background on the use of medicinal plants in the U.S. and Europe, examine the current legal status of plant remedies and herbal practitioners, review the most commonly used botanical remedies available, and discuss the benefits and risks that attend the use of these and other medicinal plant preparations. Cr 3.

CON 285 Perspectives on Animal-Assisted Therapy
This course explores the role of pets and other animals in contemporary society with a special emphasis on understanding the role animals may
play in the treatment/rehabilitation of persons with a variety of physical and psychological disabilities. Lectures, discussions, guest speakers, and a variety of A/V materials will be utilized to meet course objectives. Cr 3.

CON 288 Reiki: Energy Medicine
This class will provide the student with Reiki Level I and II certification. Reiki is an ancient form of healing from Tibet. Rei means universal life, Ki means energy. Reiki means life for energy and is based on the idea that we are energy. Reiki is a hands-on, light touch, healing energy. Many healthcare organizations are interested in alternative or complementary approaches to care and are offering services such as Reiki to help decrease pain, anxiety, depression, and aid in the comfort and well-being of their clients. To provide these services there are additional training and certifications required. The class will combine both lecture and hands-on experiences. In addition, the class will engage in service learning by providing Reiki treatments to the community. Cr 3.

CON 302/502 Pharmacology
This course provides an overview of the principles of pharmacokinetics and pharmacodynamics. The major drug categories are reviewed with emphasis placed on the therapeutic use, action, and adverse reactions of selected prototype drugs. Emphasis is placed on the benefits and risks of drug therapy, thereby preparing the health professional for safe, therapeutic pharmacologic interventions. There is no clinical component to this course. For nursing majors, CON 302/502 must be taken within one year of enrolling in NUR 323/325 or 541/542. Prerequisites: BIO 211 or SCI 172 or SCI 270 and sophomore standing. Cr 3.

CON 311 Psychosocial Interventions for Older Adults
This course will explore the normal aging process in addition to a variety of chronic conditions experienced by older adults. The focus of the course will be on non-pharmacological intervention strategies for older adults residing in community and clinical agencies. Intervention examples include stress management, animal-assisted therapy, storytelling, autobiographical writing, bibliotherapy, adventure-based activities, air mat therapy, and "simple pleasures" activities. Other topics of study will include attitudes, stereotypes, and social issues that affect older adults today. Off-campus service learning experiences will be expected along with in-class discussions. Cr 3.

CON 314 Wellness Education and Counseling
This course is designed to facilitate an understanding of how to plan, implement, and evaluate wellness education programs. Teaching and learning styles will be addressed. Counseling skills will be practiced. Teaching techniques and tips will be highlighted. The course follows a learning-by-doing and reflection-in-action approach to education. Students will participate in experiential group and individual processes and be expected to apply personal insight when working with others.

CON 321/322 Health-Related Research
Introduction to health-related research with an emphasis on understanding the research process and becoming a consumer of research. Critique of health-related research findings to health professions and their application to professional practice is a major component of this course. CON 322 is a Writing Intensive course. For nursing majors, CON 321 must be completed before taking any 400-level nursing course. Prerequisite: PSY 105, LCC 150 or MAT 120. Cr 3.

CON 352 Nutrition for Physical Performance
The in-depth study of general nutritional practices applied to athletes and other individuals who are physically active. The course will emphasize basic cellular metabolism as it relates to energy production and expenditure during the course of preparation and training for athletics and physical activity. Weight control, use of ergogenic aids and nutritional supplements will also be discussed. Prerequisites: ALT, EXS, HEF major; CON 252; SPM 330 or concurrent. Cr 3.

CON 356 Concepts in Community Health
This course introduces the concepts and principles basic to the development and maintenance of the community's health. The epidemiological process guides the survey of current major health issues. The course focuses on the health issues of groups in the community at local, state, national, and global levels. Cr 3.

CON 435 Death and Dying: Contemporary Issues
This course focuses on dying, death, and bereavement in contemporary Western society within the context of theory, research, and practice. Issues around sudden death and dying from a chronic and/or terminal illness will be explored. Selected topics include cardiopulmonary resuscitation, palliative and hospice care, pain and symptom management, physician assisted suicide, family caregiving at the end of life, advance care planning, pregnancy loss, and the death of a child. Normal grief will be differentiated from pathological or traumatic grief. Finally, the continuum of services (e.g., support groups, psycho-educational groups, Internet chat groups) that are available for bereaved persons will be explored. Cr 3.

CON 440 International Health
This course is a multi-disciplinary elective course which presents multiple perspectives on improving the health of populations in the interconnected global environment. Cr 3.

CON 490 Therapeutic Touch
This course will introduce the theory and practice of the Krieger-Kunz method of Therapeutic Touch. Concentration will be on the practice of Therapeutic Touch as an intentionally directed process of energy exchange, using the hands to facilitate the movement of energy, and restoring
balance to the energy system of the human body. The course will focus on the understanding of the basic principles of the human energy field; intuition; intentionality; benefits; theory; principles; process; and experiential learning of the Therapeutic Touch technique. Through readings, lecture, demonstrations, and practice, students will integrate the TT process with considerations of creating a healing environment, the ethics of practice, and integrating holistic health and self-care. Cr 3.

CON 497 Substance Use and Abuse: Issues and Policies
This course is an interdisciplinary examination and study of issues and policies surrounding alcohol and other drugs. Emphasis is placed on epidemiology; pharmacology; theoretical models; strategies for prevention, treatment, and relapse prevention; needs of special populations; and ethical, legal, and socio-political aspects surrounding addiction. Cr 3.

Graduate (Back to top)

Advanced Practice Concentrations - Courses

NUR 601 Advanced Pharmacotherapeutics
This course builds upon undergraduate understanding of pharmacological principles and agents by preparing students to evaluate and prescribe medications for common preventative, acute, and chronic health problems across the lifespan. The regulatory aspects of drug administration and prescription from the perspective of advanced nursing practice are examined. The development of clinical decision-making skills essential to safe, effective, and ethical pharmacological interventions are the focal point of the course. Current concepts in pharmacogenomics and pharmacological therapies as part of the treatment of commonly encountered health problems are stressed. Cr 3.

NUR 602 Advanced Health Assessment
This course builds upon and extends undergraduate knowledge of anatomy, physiology, pathophysiology, and health assessment of individuals across the life span. Physical assessment and diagnostic reasoning skills needed for advanced practice nurses are emphasized. Abnormal assessment findings are related to underlying pathophysiology. Cr 4.

NUR 603 Nursing Theory and Knowledge Development
Contemporary issues in theory development and the social production of knowledge for nursing are explored in this course. The social and historical context of knowledge development in nursing are examined with an emphasis on the relationship between theory, research, and practice in nursing. Cr 3.

NUR 604 Nursing Research
This course prepares nurses in advanced practice to appraise and use research and other evidence to provide high quality health care, initiate change, improve nursing practice, and evaluate their own practice systematically. Emphasis is on developing relevant clinical questions, searching for studies and other evidence, systematic appraisal of evidence, and determining whether and how to apply the findings. Commonly used research designs are explained. Strategies for organizing evidence and implementing evidenced-based practice changes are explored. Cr 3.

NUR 606 Leadership, Health Policy, and Role
The complexity of the American Health Care System and current efforts to restructure the system are examined in this course. Past, current, and potential roles of advanced practice nurses related to access, and the goals of Healthy People 2020 are examined. Socio-political, economic, and ethical issues embedded in public policy decisions are explored. Attention is given to the role of advanced practice nurses in influencing, creating, and implementing policy in diverse populations across the lifespan. Cr 3.

NUR 608 Applied Theories of Advanced Interpersonal Skills
Theories of communication, group, family/developmental, stress, consultation, and crisis are examined as they relate to interpersonal relations. The emphasis is on the acquisition of advanced communication skills and strategies for analyzing effective and ineffective communication. Self-reflection is an underlying thread when applying a range of theories to practice. Cr 3.

NUR 650 Primary Care of the Adolescent
The emphasis in this course is on evidence-based assessments and interventions for adolescents. Anticipatory guidance and education for the parents of these adolescents and strategies for prioritizing adolescent and family health care and health education needs are emphasized. Cr 1.

NUR 651 Womens Health in Primary Care
This course is designed to prepare advanced practice nurses to provide women's health care from adolescence to geriatrics in the primary care setting. The emphases are on prevention, promotion, maintenance, and restoration of health. Evidence-based approaches to assessment, intervention, and evaluation of women's health issues are addressed. Cr 1.

NUR 652 Primary Care of the Well Child
The emphasis in this course is on evidenced-based assessments and interventions for well infants and children. Anticipatory guidance and education for the parents of these children and strategies for prioritizing child and family healthcare and health education needs are emphasized. Cr 1.

NUR 653 Primary Care of the Child with Episodic Illness
The emphases are on assessment and interventions for children with acute illnesses and education for the parents and children. Development of
physical and psychosocial assessment and intervention skills specific to the pediatric population in the primary care setting are addressed. Decision making related to prioritizing child and family health care and health education needs is emphasized. Cr 2.

NUR 654 Prenatal Care in Primary Care
This course is designed to prepare advanced practice nurses to provide primary care to the well prenatal woman. Focus is on health promotion, assessing and minimizing risk, and preventing complications. Emphasis is on collaboration and ensuring continuity of care. Cr 1.

NUR 658 Graduate Clinical Project
This course is designed to promote the effective application of research and other evidence to clinical practice. Examples may include evaluating and/or modifying current practice standards, disseminating research results, increasing clinical application of evidence-based interventions, or adapting and designing a research-based intervention. Cr 3.

NUR 664 Primary Health Care of the Adult I
This is the first of three sequential theory courses in the family nurse practitioner concentration. Emphasis is on the provision and primary care to individuals and families in the context of community. Assessment, diagnosis, intervention, and management strategies related to acute episodic care and health maintenance of adolescent, adult, and older adult populations are stressed. Particular focus is on the development of physical, psychosocial, and cultural assessment and intervention skills specific to these populations in primary care settings. Cr 3.

NUR 665 Primary Health Care of the Adult II
This is the second of three sequential theory courses in the family nurse practitioner concentration. Emphasis is on the provision of health promotion and primary care to adolescents through older adult in the context of community. Within the context of chronicity, the emphases are on assessment, diagnostic, intervention, and management strategies related to long-term health problems and the accompanying social and cultural issues in adolescent, adult, and older adult populations. Particular focus is on the interdisciplinary and collaborative aspects of the advanced practice, direct care for selected groups, and principles of evidenced-based practice. Cr 3.

NUR 666 Primary Health Care of the Adult III
This is the final of three sequential practicums/seminars in the family nurse practitioner concentration. Emphasis is on providing health promotion and primary care to older adults. The focus is on gerontological concerns and complex health issues. Emphasis is on evidenced-based approaches to assessment and management of older adults within the context of family and community across settings. Cr 3.

NUR 667 Clinical Practicum and Seminar I
This is the first of three sequential practicums/seminars in the family nurse practitioner concentration. Emphasis is on providing health promotion and primary care to individuals and families in the context of community. The application of assessment, diagnostic, intervention, and management strategies to selected populations who need acute care and health maintenance is stressed. Particular focus is on using physical, psychosocial, and cultural assessment and intervention skill, and reflection on process issues related to clinical practice. Cr 3.

NUR 668 Clinical Practicum and Seminar II
This is the second of three sequential practicums/seminars in the family nurse practitioner concentration. Emphasis is on providing health promotion and primary care to individuals and families in the context of community. The application of assessment, diagnostic, intervention, and management strategies to selected populations related to long-term health problems and the accompanying social and cultural issues is stressed. Particular focus is on the integration and application of didactic information into clinical practice, development and refinement of the clinical decision-making process, critical evaluation of evidenced-based decisions, and reflection on process issues related to clinical practice. Cr 3.

NUR 669 Clinical Practicum and Seminar III
This is the final of three sequential practicums/seminars in the family nurse practitioner concentration. Emphasis is on providing health promotion and primary care to individuals and families in the context of community. The application of assessment, diagnostic, intervention, and management strategies in selected populations across the life span with emphasis on the older adult is stressed. Emphasis is also on the refinement of skills reflective of beginning-level competency as an advanced practice nurse. Cr 3.

NUR 671 Foundations of Advanced Practice Mental Health Nursing
The focus of this course is the advanced practice role of psychiatric mental health nurses. Specific emphasis is on advanced mental health assessment across the lifespan and the initial clinical interview from a theoretical and research perspective. The health care environment is discussed and implications for psychiatric mental health nursing practice and research are examined. Cr 3.

NUR 672 Biological and Behavioral Components of Mental Health and Illness
Mental health and illness across the life span are examined in this course. Various theories and their application to mental health are addressed. Foundations of mental health and typical clinical presentations of acute and chronic psychiatric illnesses are explored. Major psychiatric disorders and medical mimics are discussed with an emphasis on use of the DSM criteria and the formulation of differential diagnoses. Cr 3.

NUR 673 Clinical Practicum and Seminar II
This is the first of three sequential practicums/seminars in the psychiatric mental health nurse practitioner concentration. The application of theory in working with adults and older adults is the focus of this clinical course with emphasis on individual psychotherapy. Pharmacological
Interventions and effective medication management are integrated. Cr 3.

**NUR 674 Advanced Psychiatric Mental Health Care of Adults & Older Adults**
This is the first of three sequential theory courses in the psychiatric mental health nurse practitioner concentration. The focus of this course is to examine the theoretical and evidenced-based practice foundations of advanced psychiatric nursing with adults and older adults. Specific emphasis is on interventions with individuals who have Axis I and Axis II diagnoses based on the DSM criteria. Cr 3.

**NUR 676 Advanced Psychiatric Mental Health Care of Groups & Vulnerable Populations**
This is the final of three sequential theory courses in the psychiatric mental health nurse practitioner concentration. The focus of this course is to examine the theoretical foundations of complex systems, groups, and vulnerable populations across the lifespan. Cr 3.

**NUR 679 Clinical Practicum and Seminar III**
This is the final of three sequential practicums/seminars in the psychiatric mental health nurse practitioner concentration. The application of theory in working with groups and vulnerable populations across the life span is the focus of this clinical. Emphasis is on integrating knowledge, attaining advanced practice competencies, and working collaboratively with members of the health care team in providing holistic care to clients. Pharmacological interventions and effective medication management are integrated. Cr 3.

**NUR 680 Advanced Psychopharmacology**
Clinical application of pharmacotherapeutic principles to psychiatric disorders across the life span are examined. Theory and principles of neurobiology are analyzed and applied. Drug pharmacodynamics, pharmacokinetics, pharmacogenomics, indications, contraindications, interactions, and side-effects are evaluated. Methods for evaluating efficacy of treatment and adjustment of pharmacotherapeutic regimens are emphasized. Cr 3.

**NUR 685 Advanced Psychiatric Mental Health Care of Children, Adolescents, and Families**
This is the second of three sequential theory courses in the psychiatric mental health nurse practitioner concentration. The mental needs of children and adolescents in the context of families are explored. Developmental frameworks are utilized to examine common psychiatric diagnoses including symptom clusters and comorbidities. Emphases are on the approaches to assessment, diagnosis, and management of children and adolescents with a range of mental needs reflective of evidenced-based research. Cr 3.

**NUR 686 Clinical Practicum and Seminar I**
This is the second of three sequential practicums/seminars in the psychiatric mental health nurse practitioner concentration. The application of theory and evidenced-based practice in assessment, diagnosis, and management of children and adolescents in the context of families is the focus of this course. Pharmacological interventions and effective medication management are integrated. Cr 3.

**NUR 690 Role Seminar**
The major focus of the seminar is to prepare students to make a successful transition from graduate student to advanced practice nurse. Issues such as becoming credentialed, negotiating a contract, developing a portfolio, networking, resume writing, and utilization of resources will be addressed. Emphasis is placed on developing strategies for negotiating systems and creating work environments supportive of novice advanced practice nurses. Cr 1.

**NUR 695 Directed Study**
A student will select a faculty member to guide readings to a chosen topic. A research paper may be required. Credit allocation up to three credits is negotiated with faculty. Cr var.

Dual MS in Nursing/MBA Courses

**NUR 697 Nursing Management Clinical Immersion I**
This is the first in a sequence of two clinical courses in the M.S. portion of the M.S./M.B.A. Program. The focus is on synthesis and application of knowledge gained in the nursing and business core courses and role acquisition and socialization as a nurse administrator. Emphasis is on assessment and need identification in an organization, resulting in appropriate intervention strategies to impact the delivery of patient care in health care organizations. Economic, political, and other relevant factors affecting the organization and delivery of health care will be analyzed. Cr 3.

**NUR 698 Nursing Management Clinical Immersion II**
This is the final in a sequence of two clinical courses in the M.S. portion of the M.S./M.B.A. Program. The focus is on models of innovation and change in the health care system. Implementation and evaluation of intervention strategies for the delivery of quality patient care within an organizational setting are emphasized. Cr 3.

Clinical Nurse Leader, Nursing Education, and Nursing Management Concentrations - Courses

**NUR 610 Integrated Health Assessment & Pharmacology**
Integrated concepts from health assessment and pharmacology are utilized to achieve high quality outcomes for education, management, and practice. Evidence-based nursing and interdisciplinary approaches to outcomes management are emphasized. Cr 3.
NUR 614 Theoretical Foundations of Leadership and Role
Explore multiple theories integral to implementation of a leadership role for the masters prepared nurse. The emphasis is on acquisition and application of leadership, organization, ethics, interpersonal, and information management concepts to improve clinical processes, safety, and patient/institutional outcomes. Cr 3.

NUR 615 Clinical Project I
This is the first course in a two to three credit course sequence designed to facilitate project planning and management, evidenced-based practice, and/or education praxis. Emphasis is on leadership and project design. The clinical project may vary based on the concentration in which the student is enrolled. Cr 1.

NUR 617 Clinical Project II
This is the second course in a two- to three-credit course sequence designed to facilitate project planning and management, evidenced-based practice, and/or education praxis. The student continues with the project proposed in semester one. Emphasis is on implementation, data collection, and analysis in semester two. Cr 1.

NUR 618 Clinical Project III
This is the third course in a two- to three-credit course sequence designed to facilitate evidenced-based practice. Emphasis in this third semester is on project completion, evaluation and dissemination. Cr 1.

NUR 621 Clinical Seminar I
This is the first in a series of two to three clinical seminars. Emphasis is on synthesis and application of knowledge and theoretical principles to achieve role acquisition and socialization within the student's concentration. Focus is on organizational and role assessment and assimilation. Self-reflection and critique of evolving role acquisition is emphasized. Practicum is required in a setting relevant to the student's concentration. Cr 3.

NUR 622 Clinical Seminar II
This is the second in a series of two to three clinical seminars. Students continue to assimilate role competencies with emphasis on implementation and evaluation in more complex situations. Self-reflection and critique of evolving role acquisition is emphasized. Clinical practicum is required in a clinical, organizational, or education setting relevant to the student's academic concentration. Cr 3.

NUR 623 CNL Immersion: Clinical Seminar III
This is the third in a sequence of clinical seminars, designed in partnership with clinical agencies, as a 300-hour capstone CNL clinical immersion practicum. Faculty, preceptors, and students periodically meet to discuss experience, issues, role development, and implementation. Self-reflection on the evolving CNL role is emphasized. Cr 3.

NUR 624 An Interprofessional Approach to Population-Based Health
An interprofessional approach to caring for populations across the lifespan is the focus of this course. Major components include concepts of health, levels of prevention, epidemiology of wellness, global health issues, and control of health problems. Community assessment, planning, intervention, and evaluation of complex and chronic health related issues are stressed. Cr 3.

NUR 625 Principles of Health Care Finance
An introduction to health care financial management principles, practices, tools, and models is the focus of this course. The relationships between financial management and quality outcomes will be explored. Information systems and technology will be used to plan, monitor, and evaluate fiscal resources for practice and program initiatives. Cr 3.

NUR 628 Health Systems, Policy, and Economics
A critical analysis of socioeconomic, political, legal, ethical, and global factors that affect health care delivery is emphasized. The relationships among policy, economics, and outcomes are explored. The focus is on the role of the nurse to influence health care policy, quality improvement, and financial decision making of health care delivery, equity in access, and patient safety. Cr 3.

MS Option Program Courses

CON 502 Pharmacology
This course provides an overview of the principles of pharmacokinetics and pharmacodynamics. The major drug categories are reviewed with emphasis placed on the therapeutic use, action, and adverse reactions of selected prototype drugs. Emphasis is placed on the benefits and risks of drug therapy, thereby preparing the nursing student for safe, therapeutic pharmacologic interventions. First semester of curriculum. Cr 3.

CON 521 Health-Related Research
Introduction to health-related research with an emphasis on understanding the research process and becoming a consumer of research. Critique of health-related research findings to health professions and their application to professional practice is a major component of this course. Option students must complete CON 521 before enrolling in NUR 541. Prerequisite: PSY 105 or MAT 120. Cr 3.

CON 556 Concepts in Community Health
This course introduces the concepts and principles basic to the development and maintenance of the community's health. The epidemiological process guides the survey of current major health issues. The course focuses on the health issues of groups in the community at local, state,
NUR 508 Health Assessment Practicum
The course provides knowledge and skills essential to conduct an in-depth bio-psycho-social-cultural, holistic health assessment of well individuals through the life span. Emphasis is placed on data collection through development of communication and physical examination skills. Data will then be analyzed and nursing diagnoses developed. Concurrent with NUR 509. Cr 2.

NUR 509 Health Assessment
This course provides knowledge and skills essential to conduct in-depth bio-psycho-social-cultural health assessment of well individuals throughout the life span. Emphasis is placed on data collection through effective communication and physical skills followed by data analysis and identification of nursing diagnostics. Cr 3.

NUR 511 Nursing Role for MS Option Students
This seminar introduces accelerated and option program nursing students to content in nursing history, theory, and research. Students will consider the major constructs of nurse, health, and caring practice. It is a transitional course that seeks to prepare students for the accelerated programs of study at USM, provide a framework for understanding professional education, and for exploring the transition into nursing. Cr 1.

NUR 512 Nursing Arts and Sciences for MS Option Students
This course introduces the student to concepts and skills basic to the art and science of nursing. The nursing process is introduced as the problem-solving tool, and is used along with scientific principles in the teaching of foundational nursing therapeutics used in most practice settings. First semester of curriculum. Cr 3.

NUR 513 Advanced Nursing Skills - Lab
This course builds on the theory, scientific principles, and psychomotor skills introduced in NUR 512/514 to promote role development in the core competencies of nursing practice. Prerequisites: NUR 512 and 514, concurrent with NUR 523, and 526. Cr 1.

NUR 514 Fundamentals of Nursing Labs for MS Option Students
Provides an historical and contemporary perspective on the nature and scope of nursing and focuses on theory, scientific principles, and psychomotor skills used to implement the foundational nursing therapeutics that promote, maintain, and restore the health of the client. Concurrent with NUR 512. Cr 3.

NUR 516 Child Health Nursing - Lab
Child health lab provides an opportunity for the student in various health care settings to apply the theoretical concepts of health promotion, maintenance, and restoration with children and their families who are at risk or may be experiencing alterations in health. Concurrent with NUR 545. Cr 2.

NUR 523 Management of the Critically Ill Adult/Older Adult for MS Option Students
Students examine evidence-based therapeutic nursing interventions that support adult and older adult clients experiencing complex health problems. Viewing clients as holistic beings, students study and analyze the skills necessary for delivery of care to high acuity adult and older adult clients. Concurrent with NUR 526. Cr 3.

NUR 526 Management of the Critically Ill Adult/Older Adult Clinical for MS Option Students
Students will intervene therapeutically with adults and older adults experiencing complex health problems. Students practice problem-solving skills and critical thinking as they perform nursing roles in acute care settings. Open to second degree option students only. Concurrent with NUR 523. Cr 4.

NUR 530 Mental Health Nursing for MS Option Students
This course examines the theory and practice of psychiatric/mental health nursing. Assessment of clients and intervention strategies are explored. Interdisciplinary aspects of mental health care delivery and current issues in mental health nursing are discussed. Concurrent with NUR 531. Cr 3.

NUR 531 Mental Health Nursing - Lab
This course offers students an opportunity to focus nursing practice on promotion, maintenance, and restoration of mental health. Clinical experience is provided in a mental health/psychiatric nursing setting. The emphasis is on application of concepts of mental health/psychiatric nursing. Concurrent with NUR 530. Cr 2.

NUR 532 Nursing Care of the Older Adult in the Community
The focus of this course is the family-centered care of older individuals in the community. Emphasis is on nursing assessment, diagnosis, and therapeutic interventions with individuals and families coping with chronic illnesses. Health promotion/risk reduction strategies are applied. The roles of the nurse in interdisciplinary community settings are explored. Ethical issues unique to community settings are analyzed. Prerequisite: NUR 541 or concurrent. Cr 3.

NUR 538 Community Nursing Partnership for MS Option Students
In this course students work within a community partnership to care for individual clients/families and work with residents in developing
This introductory course provides the student with knowledge and nursing strategy to better meet the needs of those affected by forensic-related health care situations and ultimately improve patient outcomes. The history and development of forensic nursing as a scientific subspecialty of nursing is explored. The forensic nursing process; application of the forensic nursing role (i.e. sexual assault management, death investigation, child death review, abuse/neglect, emergency department, etc.); violence and victimology; injury identification and interpretation; evidence recognition, collection, preservation, and documentation; and forensic nursing and the medical/legal interface are also explored. Cr 3.

NUR 542 Adult/Older Adult Health Nursing - Lab
Students will intervene therapeutically with adults and older adults experiencing health problems. Students will practice problem-solving skills and critical thinking as they perform nursing roles in acute care settings. Concurrent with NUR 541. Cr 4.

NUR 543 Reproductive and Sexual Health
This course focuses on the theory and research in reproductive and sexual health care. While emphasis is placed on holistic nursing care of diverse healthy families from preconception through the childbirth process, high risk conditions, including end of life care for neonates, and the interventions necessary for successful adaptation are also discussed. Male and female reproductive health issues and nursing care across the lifespan will be presented. Prerequisite: NUR 541/542. Cr 3.

NUR 544 Reproductive and Sexual Health Nursing - Lab
This course offers students experience in providing holistic nursing care to individuals and families engaged in childbirth experiences. Emphasis is placed on health needs and alterations during the childbirth process, as well as promotion and maintenance of health before, during, and after childbirth. Concurrent with NUR 543. Cr 2.

NUR 545 Child Health Nursing
In this course, students examine family-centered nursing care in the health promotion and health care of children. Class discussions focus on theories, research, and literature related to health needs and common health problems of children. Family, heredity, environment, and socioeconomics are among the factors examined in discussions of nursing in child health. Prerequisites: NUR 541/542. Concurrent with NUR 546. Cr 3.

Graduate Electives

NUR 519 Introduction to Forensic Nursing
This introductory course provides the student with knowledge and nursing strategy to better meet the needs of those affected by forensic-related health care situations and ultimately improve patient outcomes. The history and development of forensic nursing as a scientific subspecialty of nursing is explored. The forensic nursing process; application of the forensic nursing role (i.e. sexual assault management, death investigation, child death review, abuse/neglect, emergency department, etc.); violence and victimology; injury identification and interpretation; evidence recognition, collection, preservation, and documentation; and forensic nursing and the medical/legal interface are also explored. Cr 3.

NUR 524 Clinically-Applied Genetics
This course explores the genetic basis of human health and disease. It examines the specific mechanisms by which genetic differences give rise to altered body function and influence disease risk, and how these differences are inherited. It emphasizes the advances in genetics that impact the prevention, diagnosis, and treatment of illnesses and conditions. In so doing, it both addresses the basic science of genetics and also explores related clinically-applied topics such as the ethical implications of genetics, genetic screening, genetic risk assessment, and gene therapy. NUR 524, the graduate-level class, will include an additional 1-hour per week seminar. Cr 3.

NUR 526 Natural Therapies for Clinical Conditions
Therapeutic diet, nutritional supplementation, herbal medicine, and lifestyle modifications are examined in the context of evidenced-based therapies for certain clinical conditions. The underlying physiology behind the conditions, the clinical presentation and physical signs, and the analysis of basic laboratory findings are reviewed. How to individualize the application of natural therapies is discussed. An appreciation of problem-solving therapeutic issues in a clinical setting is achieved through case study review. Cr 3.

NUR 682 Orthopedic Evaluation and Treatment for the Primary Health Care Professional
Current clinical literature on the prevention, recognition, assessment, and treatment of sports-related orthopedic conditions that occur in the physically active is reviewed in this course. A lab component is included that provides practice in common orthopedic screening techniques as part of pre-participation screening as well as practice in evaluation of sports-related injuries and initial interventions. Cr 3.

Certificate of Graduate Study in Nursing Education - Courses (blended format)

NUR 636 Foundations of Nursing Education
This is the first of three sequential courses designed to prepare the professional nurse for teaching roles. Historical and philosophical
underpinnings of education are explored. Emphasis is given to reflection on personal experience, exploration of current issues in nursing education, nursing education theory, and critical analysis of theories of learning and teaching. Cr 3.

**NUR 637 Methods of Education in Nursing**
This is the second of three sequential courses designed to prepare the professional nurse for teaching roles. Components of course and curriculum development including assessment of learners' needs, course objectives and outcome measures, content selection and development, and teaching strategies are examined. Emphasis is on developing expertise as an educator by increasing sensitivity, knowledge, and skill in creating effective teaching programs that reflect an understanding of the learner, context, and content. Cr 3.

**NUR 638 Education Practicum and Seminar**
This is the third of three sequential courses designed to prepare the professional nurse for teaching roles. In this course the concept of "praxis" is fully realized. With guidance from the faculty, students will select an educational experience to develop, implement, and evaluate. Experiences may include, however are not limited to, in-service programs, classroom and clinical teaching, and community education programs. Cr 3.

**Doctorate (Back to top)**

**NUR 700 Genetics and Immunology: Scientific Foundations for Practice**
This course provides an integrated discussion of the vital basic science concepts in the areas of genetics and immunology that underlie advanced nursing practice. Emphasis is placed on those aspects of basic science that are most directly applicable to the understanding of disease processes and advanced nursing practice. In the area of genetics this includes the analysis of genetic information for decision making around disease management and the communication of genetic information to others. In the area of immunology it includes understanding how the immune system contributes to disease and how it can be manipulated as part of disease therapy. Cr. 4.

**NUR 701 Ethical Approaches to Practice Dilemmas**
Examination of selected ethical frameworks and their application to practice are the focus of this course. Exemplars are used to illustrate how the principles of ethics can guide decision making when a clinical, organizational, interprofessional, or research dilemma occurs. Emphasis is on development of the leadership qualities necessary for the implementation of the DNP role. Cr. 3.

**NUR 702 Informatics Technology**
The contributions of health care information to quality assurance and improvement in patient care is the focus of this course. Factors that contribute to the adoption of health care information technologies and the challenges regarding their successful utilization are examined. Health care information technologies used in the assessment of patient outcomes, provider productivity, and health care programs are analyzed. Cr. 3.

**NUR 703 Professional Communication**
Examination of advanced communication skills within various clinical settings, organizations and communities is the focus of this course. Contemporary views of small group communication theory including functional theory, symbolic convergence theory, structuration theory and the naturalistic paradigm are discussed. Group development, group communication processes, and methods for analyzing group communication are also examined. Interprofessional communication, conflict negotiation, and the value of peer groups are explored. Cr. 3.

**NUR 704 Models of Care: Transforming the Practice Environment**
The goal of this course is to provide the DNP student with the knowledge and skills necessary to assume a leadership role in transforming healthcare and educational environments. Concepts associated with evidenced-based nursing practice models are introduced and examined. Strategies for creating a culture of evidenced-based practice for individuals, aggregates, and systems are identified. The concepts of information management and translation science are examined and tools to apply evidence to practice are emphasized. Cr. 3.

**NUR 705 Clinical Residency & Capstone I**
This is the first of two seminar/clinical practicums in the DNP concentration designed to expand the student’s breadth and/or depth of clinical knowledge and skills in an area of practice. Emphasis is on developing and demonstrating leadership expectations within the framework of the DNP role. This is accomplished by application of clinical knowledge to deliver or create, implement or evaluate practice interventions, health delivery systems, and/or clinical teaching. Each residency includes a capstone project. The focus of this project in the first residency is on assessment and either an implementation or intervention project at a group or organizational level. Cr. 6.

**NUR 706 Clinical Residency & Capstone II**
This is the second of two seminar/clinical practicums in the DNP concentration designed to expand the student’s breadth and/or depth of clinical knowledge and skills in an area of practice. Emphasis is on developing and demonstrating leadership expectations within the framework of the DNP role. This is accomplished by application of clinical knowledge to deliver or create, implement or evaluate practice interventions, health delivery systems, and/or clinical teaching. This residency includes a continuation of the capstone project. The focus of this project in the second residency is on evaluation of the project implemented or intervention delivered in the previous semester and disseminating the knowledge learned. Cr. 6.

**NUR 625 Principles of Health Care Finance**
An introduction to health care financial management principles, practices, tools, and models is the focus of this course. The relationships between financial management and quality outcomes will be explored. Information systems and technology will be used to plan, monitor, and evaluate
fiscal resources for practice and program initiatives, Cr. 3.

GRS 701 Doctoral Continuation Credits
This is a one-credit course that permits doctoral degree candidates registered for less than six credits to retain eligibility for financial aid, university-funded fellowships, scholarships, graduate assistantships, student health insurance, loan deferment, visa compliance, and access to University services, including USM computers, library, and recreational facilities. Requirements include receiving certification of adequate academic progress from the program coordinator and dissertation/capstone chair, and obtaining approval from the Office of Graduate Studies. Cr. 1.

MPH 670 Quality Improvement
This course introduces students to the principles and practice of quality improvement in medical care and public health organizations. The course content focuses on describing, measuring, improving, and evaluating the quality of health care for patients and populations. Students develop competencies in identifying and conceptualizing opportunities for quality improvement; selecting and using quality improvement tools and methods; and presenting their work in professional meetings. The theories and concepts of quality measurement, quality improvement implementation, and evaluation are presented. Students become familiar with a range of commonly used quality improvement tools and methods and gain experience in applying them. Examples and case studies are drawn from medical care providers and public health programs. Cr 3.

MPH 525 American Health System
Introduces students to the organization, financing, and management of the American healthcare and public health systems and the dynamic changes that are affecting health organizations as a result of market-based and policy forces. Students develop an understanding of: (1) the key components of healthcare and public health, (2) how organizations and systems are financed, regulated, and managed in a dynamic market and policy environment, (3) the changing role of population health and public health systems, and (4) the efficiency, effectiveness and equity of health services. Cr 3.

AMS 535 Epidemiology
This course is intended to give students a basic foundation in principles for the conduct and interpretation of population-based studies of the distribution, etiology, and control of disease. Topics include randomized experiments, non-randomized cohort studies, case-control studies, cross-sectional and ecological studies, screening of health populations, measures of effect, causal inference, sources of bias, and problems of measurement. Recent publications from the epidemiologic and general medical literature will be used to illustrate the application of the concepts to specific epidemiologic issues and to develop skills in interpreting quantitative information. Cr 3.
Physics

Physics Overview

Chair of the Department: Jerry Lasala, 229 Science Building, Portland
Professor: LaSala; Associate Professors: Nakroshis, Ziffer

The field of physics is concerned with the study of matter, energy, motion, and the interaction of material particles. It is a cornerstone science that attempts to explain at a fundamental level the concepts underlying phenomena important to the other physical sciences, to the biological sciences, and to engineering. The Physics Department provides elementary courses to introduce students to the field, general and topical courses that support the other science departments and engineering, and a four-year program leading to a B.A. degree in physics. The physics major covers the traditional areas of modern and classical physics, and is intended to prepare graduates for careers in physics and related technical areas or for graduate school.

BA in Physics

Description

Students that major in physics are usually interested in the fundamental laws that describe how nature works. These laws are inherently mathematical in nature, so physics majors are typically also interested in and skilled at mathematics. Studying physics at the University of Southern Maine will train you in the core areas of physics, from Newtonian Mechanics, to Electromagnetism, Optics, and Quantum Mechanics. In addition you will have advanced courses available from Optics, Electronics, Computational Physics, and Astrophysics. In their Junior year, all physics majors take Intermediate Physics laboratory, where you work together in groups to perform more advanced laboratory experiments, learn more serious data and error analysis techniques, learn how to present data in a 10 minute talk, and learn how to typeset your reports in a format suitable for professional journal publication. You'll graduate with a good skill set for further scientific research or graduate school. These days, with computers playing such a vital role as tools to gather and analyze data, and to perform simulations, we encourage students to take Physics 261 to satisfy their computing requirement.

All majors are strongly encouraged to get involved with research with one of our faculty members, as there is no better way to learn physics than being actively involved with research. Students that do well in their courses and are engaged in research within the department typically have a very good acceptance rate to graduate school Ph.D. Programs in physics. Past graduates have attended graduate programs at University of New York at Stony Brook, University of Rhode Island, Brandeis University, UCLA, Pennsylvania State University, all with full scholarships.

Our program is small, but has a dedicated faculty that teach all of the lectures and discussion sections, something you won't find at larger institutions.

Program Requirements

The minimum number of credits in physics and related areas (exclusive of the University's Core curriculum) required for the physics major: 61. A student majoring in physics must take 37 credit hours of physics courses including some requirements and some electives as outlined below. In addition, the major requires 16 credits of mathematics courses, 8 credits of chemistry courses, and a demonstration of competency in computer programming.

1. Required courses
   PHY 114K, 116 Introductory Physics Laboratory I and II
   PHY 121K, 123 General Physics I and II (PHY 111K may replace PHY 121K with Departmental permission.)
   PHY 211, 213 Nonclassical Physics I and II
   PHY 221, 223, 225 Classical Physics I, II, and III
   PHY 240 Intermediate Laboratory I
   CHY 373 Physical Chemistry II

2. Electives. In addition to the required courses, the student must take a minimum of 6 credits of physics courses numbered 200 or higher: three credits from each of groups A and B below.
Group A
PHY 251 Principles of Electronics
PHY 261 Computational Physics
PHY 281 Astrophysics
PHY 375 Optics

Group B
PHY 242 Intermediate Laboratory II
PHY 311 Quantum Mechanics

The physics major must also complete the following courses:
MAT 152 Calculus A
MAT 153 Calculus B
MAT 252 Calculus C
MAT 350 Differential Equations
CHY 113 and 114K Principles of Chemistry I with Lab
CHY 115 and 116 Principles of Chemistry II with Lab

Suggestions for demonstrating competency in computer programming include:
COS 160 and 170 Structured Problem Solving: Java
PHY 261 Computational Physics (recommended)

To graduate as a physics major, a student must maintain a minimum GPA of 2.0 in all courses which satisfy the major requirement, and a minimum overall GPA of 2.0.

Minor in Physics

Description
The field of physics is concerned with the study of matter, energy, motion, and the interaction of material particles. It is a cornerstone science that attempts to explain at a fundamental level the concepts underlying phenomena important to the other physical sciences, to the biological sciences, and to engineering. The Physics Department provides elementary courses to introduce students to the field, general and topical courses that support the other science departments and engineering, and a four-year program leading to a B.A. degree in physics.

The physics major covers the traditional areas of modern and classical physics, and is intended to prepare graduates for careers in physics and related technical areas or for graduate school. Another option for students with an interest in physics, but majoring in other areas, is the physics minor.

Program Requirements
The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 19. The required courses are PHY 121K, 123 or PHY 111K, 112; PHY 114K, 116; PHY 211, PHY 240; at least 3 credits of physics courses numbered 200 or higher.

Course Descriptions

PHY 101 Introduction to Physics
An elementary approach to the study of mechanics, heat, sound, electricity, magnetism, light, and modern physics, intended for the student who desires a one-semester introduction to the subject with emphasis on concepts as opposed to problem solving. Students desiring laboratory work should also register for PHY 102. Students planning to major in any of the natural sciences are not directed to this course but rather to a more advanced introductory course. Prerequisite: high school algebra. Cr 3.

PHY 102 Introduction to Physics Laboratory
Laboratory experiments and additional material designed to supplement the topics considered in PHY 101. Prerequisite: concurrent registration in PHY 101 or permission of the instructor. Cr 1.
PHY 111 Elements of Physics I
The first of a two-semester non-calculus sequence in introductory physics, intended particularly for life-science majors. Topics to be covered include mechanics, waves, sound, and thermal physics. Lectures, demonstrations, and problem solving will help the student develop an understanding of physical phenomena. Mathematical treatment is at the level of algebra and trigonometry. This course is not recommended for students planning to major in the physical sciences or engineering. It should be taken concurrently with PHY 114, Introductory Physics Laboratory I. Prerequisite: successful completion of the University's minimum proficiency requirement in mathematics. Three hours of lecture and one hour of recitation per week. Cr 4.

PHY 112 Elements of Physics II
A continuation of PHY 111, intended particularly for life-science majors. Topics to be covered include electricity, magnetism, optics, and modern physics. Lectures, demonstrations, and problem solving will help the student develop an understanding of physical phenomena. Mathematical treatment is at the level of algebra and trigonometry. This course is not recommended for students planning to major in the physical sciences or engineering. It should be taken concurrently with PHY 116, Introductory Physics Laboratory II. Prerequisite: PHY 111 or equivalent. Three hours of lecture and one hour of recitation per week. Cr 4.

PHY 114 Introductory Physics Laboratory I
Experiments designed to illustrate the concepts studied in PHY 111 and PHY 121. Prerequisite: concurrent registration in PHY 111 or 121. Two hours per week. Cr 1.

PHY 116 Introductory Physics Laboratory II
Experiments designed to illustrate the concepts studied in PHY 112 and PHY 123. Prerequisite: concurrent registration in PHY 112 or PHY 123. Two hours per week. Cr 1.

PHY 121 General Physics I
The first of a two-semester sequence introducing the fundamental concepts of physics, using calculus. Topics to be covered include mechanics, waves, sound, and thermal physics. This course is recommended for students who plan further study in physical sciences, mathematics, or engineering. It should be taken with PHY 114, Introductory Physics Laboratory I. Prerequisite: prior or concurrent registration in MAT 152 or equivalent experience. Three hours of lecture and one and one-half hours of recitation per week. Cr 4.

PHY 123 General Physics II
A continuation of PHY 121, introducing the fundamental concepts of physics, using calculus. Topics to be covered include electricity, magnetism, and light. This course is recommended for students who plan further study in physical sciences, mathematics, or engineering. It should be taken concurrently with PHY 116, Introductory Physics Laboratory II. Prerequisites: PHY 121 or equivalent and one semester of calculus. Three hours of lecture and one and one-half hours of recitation per week. Cr 4.

PHY 211 Nonclassical Physics I
The first of a two-semester sequence covering the principal topics which show the departure of physics from its classical roots. Topics will include relativity and atomic structure. Prerequisite: PHY 123 or PHY 112, and MAT 152. Cr 3.

PHY 213 Nonclassical Physics II
A continuation of PHY 211, covering the principal topics which show the departure of physics from its classical roots. Topics will include quantum physics, nuclear physics, and particle physics. Prerequisite: PHY 211. Cr 3.

PHY 221 Classical Physics I
The first of a three-semester sequence offering an intermediate-level treatment of the principal topics of classical physics. The focus for this course is mechanics, including particle motion, oscillations, and noninertial reference systems. Prerequisite: PHY 121 and prior or concurrent registration in MAT 252. Cr 3.

PHY 222 Classical Physics II
A continuation of PHY 221, offering an intermediate-level treatment of the principal topics of classical physics. This course will continue a study in mechanics and start a study in electrostatics. Prerequisite: PHY 123, PHY 221, and MAT 252. Cr 3.

PHY 225 Classical Physics III
A continuation of PHY 223, offering an intermediate-level treatment of the principal topics of classical physics. Topics will continue through magnetism and electrodynamics, leading to Maxwell's equations. Prerequisite: PHY 223. Cr 3.

PHY 240 Intermediate Laboratory I
A selection of experiments designed to illustrate the more important principles of classical and modern physics. Prerequisites: prior or concurrent registration in a 200-level physics course and two semesters of calculus. Six hours per week. Cr 3.

PHY 242 Intermediate Laboratory II
A selection of experiments illustrating the important principles of classical and modern physics. Prerequisite: prior or concurrent registration in a 200-level physics course and two semesters of calculus. Cr 3.
**PHY 251 Principles of Electronics**
An introduction to electronics including DC and AC circuits, transistors, operational amplifiers, and combinatorial and sequential logic devices. The laboratory will cover the use of electronic instrumentation as well as illustrate principles. Prerequisite: MAT 152D or equivalent, or permission of instructor. Cr 3.

**PHY 261 Computational Physics**
This project-oriented course uses the Python programming language and introduces methods of computer simulation and their diverse applications in the physical world. Examples of projects include projectile motion, planetary systems, chaotic systems, and thermal systems. Methods include numerical solutions to differential equations and Monte Carlo techniques. The course emphasizes structured programming, although no background in computer programming is required. Prerequisite: PHY 121 and prior or concurrent registration in MAT 153, or permission of instructor. Cr 3.

**PHY 281 Astrophysics**
An intermediate-level course in the physics of the astronomical universe. Topics covered include classical astronomy, celestial mechanics, the structure and evolution of stars and galaxies, and cosmology. No previous background in astronomy is required. Prerequisite: PHY 221. Cr 3.

**PHY 311 Quantum Mechanics**
A study of the quantum physics of atoms, nuclei, and particles. Topics covered include wave particle duality; the Schrodinger Wave Equation and its application to a variety of quantum systems, three-dimensional and time-dependent systems, and photons. Prerequisite: PHY 213 and PHY 221. Cr 3.

**PHY 375 Optics**
An intermediate-level study of the more important principles of geometric and physical optics, with illustrations of both classical and modern applications. Prerequisites: PHY 223 and two semesters of calculus. Cr 3.

**PHY 390 Independent Laboratory Study in Physics**
An independent study involving primarily laboratory work. Prerequisite: permission of instructor. Cr 1-3.

**PHY 410 Independent Study in Physics**
Reading and discussion of advanced subjects or instruction in special topics or research. Prerequisite: permission of instructor. Cr 1-3.

**PHY 440 Advanced Physics Laboratory I**
This course may involve a series of experiments in physics or, by permission of the instructor, an advanced project in experimental physics. Prerequisites: PHY 240, and at least one 300-level physics course. Cr 3.

**AST 100 Astronomy**
A descriptive survey of modern astronomy. Topics include theories about the origin and development of the universe, stellar evolution, the solar system, galaxies, observational methods and recent discoveries. No prerequisite. Cr 3.

**AST 103 Activities and Experiments**
A one-credit course meeting weekly for two hours. May be taken concurrently with AST 100 to fulfill requirements for a science laboratory experience. Includes exercises on the Moon's orbit, Earth's orbital motion, rotation of Saturn's rings, the Sun, the Crab Nebula, variable stars, pulsars, Hubble's law, and galaxies. Two planetarium sessions. Prerequisite: Prior or concurrent registration in AST 100. Cr 1.
Psychology

Psychology Overview

Chair of the Department: John Broida, 512 Science Building, Portland

Professors: Brown, Gayton, Thornton; Associate Professors: Broida, Johnson, Sytsma, Thompson, Vella; Lecturer: Eppolito

The Department of Psychology offers a four-year program for students majoring in psychology. It also includes courses for students majoring in allied fields, as well as for students wishing an orientation to the field of psychology as part of their general education. Courses are designed to create an awareness of the fundamental principles of psychology, psychological research, and the means by which psychological knowledge is acquired. The emphasis is upon the scientific inquiry into basic phenomena and principles of behavior, not upon the development of professional skills.

BA in Psychology

Description

The Department of Psychology offers a four-year program for students majoring in psychology. It also includes courses for students majoring in allied fields, as well as for students wishing an orientation to the field of psychology as part of their general education. Courses are designed to create an awareness of the fundamental principles of psychology, psychological research, and the means by which psychological knowledge is acquired. The emphasis is upon the scientific inquiry into basic phenomena and principles of behavior, not upon the development of professional skills.

Program Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 46.

Required Courses:
- PSY 101 and 102 General Psychology (3 credits each semester) to be taken as a two-semester sequence
- PSY 105 Statistics in Psychology
- PSY 205 Experimental Methodology
- PSY 206 Methodology Lab
- PSY 220 Psychology of the Lifespan
- PSY 230 Social Psychology
- PSY 233 Psychopathology
- PSY 338 Theories of Personality
- PSY 350 Psychology of Learning
- PSY 360 Cognitive Processes
- PSY 361 Sensation and Perception
- PSY 365 Physiological Psychology
- PSY 371 History and Systems

Other courses offered by the Department numbered 300 or above can be taken as electives to complete the 46-hour minimum. In addition, BIO 321 Neurobiology and BIO 405 Animal Behavior can be used to complete this requirement. Students must achieve a 2.0 average and grades of C- or better in all courses that count toward fulfillment of the major requirements.

Successful completion (with a grade of C- or better) of PSY 101 is the prerequisite for the following upper division psychology courses:
- PSY 205 Experimental Methodology
- PSY 206 Methodology Lab
- PSY 210 Popular Psychology
- PSY 230 Social Psychology
- PSY 323 Psychology of Infancy and Childhood
- PSY 324 Psychology of Adolescence
Successful completion (with a grade of C- or better) of both PSY 101 and PSY 102 is the prerequisite for the following upper division psychology courses:

- PSY 220 Psychology of the Lifespan
- PSY 232 Psychology of Adjustment
- PSY 233 Psychopathology
- PSY 235 Psychology of Women
- PSY 350 Psychology of Learning
- PSY 365 Physiological Psychology
- PSY 371 History and Systems of Psychology

Additional prerequisites for PSY 205, PSY 206, PSY 323, PSY 324, PSY 325, PSY 326, PSY 365 and PSY 366 are listed in their course descriptions below.

In addition, successful completion (with a grade of C- or better) of the following non-psychology course is required for psychology majors. This course should be completed by the end of the sophomore year:

- BIO 111 Human Anatomy and Physiology I (Prerequisite for PSY 365)

PSY 101 and PSY 102 should be successfully completed (with a grade of C- or better) no later than the end of sophomore year by students who plan to major in psychology. All majors should also complete PSY 205, and PSY 206 (with grades of C- or better) no later than the end of their junior year.

No required course in which a student earns an unsatisfactory grade (below C-) can be repeated more than one time. Students earning an unsatisfactory grade in the repeated course will be dropped from the major. Students will have the option of appealing this decision; each student's appeal will be reviewed by the entire department faculty. Guidelines for readmission will be provided to students who are dropped from the major.

Transfer psychology majors who have taken an introductory psychology course that was completed in one semester have the option of taking PSY 102 or having it waived. If a transfer psychology major waives PSY 102, he or she must take an additional three credits of 300 level psychology electives. Students who are not psychology majors cannot waive PSY 102. MAT 120 can be used in place of PSY 105.

All students are reminded that, in addition to meeting Departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the Core curriculum requirements.

The Department recommends that students who wish to take a more extensive program or who plan to enter graduate school elect, in consultation with their major advisor, other courses in psychology and also include study in related fields, such as mathematics, biology, philosophy, sociology, anthropology, computer science, and social work.

Psychology majors who plan to attend graduate school should keep in mind that Graduate Record Examinations must be taken no later than December of their senior year. Students should plan to complete as many psychology courses as possible by the end of the fall semester of their senior year.

To be eligible to declare the psychology major, matriculated students must have earned 15 USM credits with a minimum 2.5 GPA and have met the USM college readiness writing and math requirements.

**Independent/Directed Study**

With the permission of a faculty sponsor, junior and senior psychology majors may elect to participate in independent/directed study in one or more of the following courses: PSY 400 Independent Research; PSY 401 Research Apprenticeship; PSY 405 Teaching Apprenticeship and PSY 410 Internship/Field Experience. No more than 12 credits may be earned in any combination of these courses.

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**Course Descriptions**
PSY 101 General Psychology I
An introduction to the study of behavior as a natural science. Among the topics covered are: method of inquiry, physiological foundations of behavior, sensation and perception, motivation and emotion, learning and thinking. This course is a prerequisite for all courses in the Department. Cr. 3.

PSY 102 General Psychology II
A continuation of Psychology 101. It deals with complex psychological processes such as ability testing, personality, conflict, behavior disorders and therapy, and social and industrial behavior. Prerequisite: PSY 101 with a grade of C- or better. Cr 3.

PSY 105 Statistics in Psychology
A general introduction to the techniques of descriptive, predictive, and inferential statistics. Emphasis is placed on measures of central tendency and variability, correlation, hypothesis testing, and simple analysis of variance. Prerequisite: successful completion of the University's mathematics college readiness requirement. Cr 3.

PSY 205 Experimental Methodology
Emphasis on the principles, methods, and techniques of experimental psychology. Applications of general methodology and specific techniques to the design of experiments in behavioral research. Prerequisite: Successful completion of PSY 101 and PSY 105 with grades of C- or better; corequisite PSY 206. Cr 3.

PSY 206 Methodology Lab
This course applies the scientific method to selected areas of experimental psychology. Such areas may include animal learning, physiological, sensation-perception, cognition, social-personality, and developmental psychology. Report writing and interpretation of statistical results will be emphasized. Prerequisite: Successful completion of PSY 101 and 105 with grades of C- or better; corequisite: PSY 205. Cr 1.

PSY 210 Popular Psychology
This course develops students' skills of critical analysis and interpretation through an examination of popular versions of psychology. Students also explore social and cultural influences on popular forms of psychology in different historical periods. Prerequisites: Successful completion of PSY 101 with a grade of C- or better. Cr 3.

PSY 220 Psychology of the Lifespan
This is a broad introductory course focusing on the theories, research methods, and the status of scientific knowledge about human development across the lifespan. The course focuses on the interplay of psychological and environmental factors in physical, cognitive, social, and personality development from birth through adulthood. Prerequisites: Successful completion of PSY 101 and 102 with grades of C- or better. Cr 3.

PSY 230 Social Psychology
The psychological principles that enter into the social behavior of the individual. Areas of consideration include perception, communication, attitude formation, interpersonal attraction, and group behavior. Prerequisites: Successful completion of PSY 101 with a grade of C- or better. Cr 3.

PSY 232 Psychology of Adjustment
A study of the development of personality patterns, modes of behavior, life styles, and coping mechanisms considered normal in this society. Consideration of their value to individual functioning. Prerequisites: Successful completion of PSY 101 and 102 with grades of C- or better. Cr 3.

PSY 233 Psychopathology
The etiology, development, and manifestation of the major forms of mental illness with particular emphasis upon the neuroses and psychoses. Psychological, social, and biological factors that contribute to maladjustment are examined. Credit may not be earned for both SBS 303 and PSY 233. Prerequisites: Successful completion of PSY 101 and 102 with grades of C- or better. Cr 3.

PSY 235 Psychology of Women
Psychology of women and psychological literature relevant to men and women. Some topics include physiological and personality differences between the sexes, sex-role development, role conflict, women and traditional therapy. Prerequisites: Successful completion of PSY 101 and 102 with grades of C- or better. Cr 3.

PSY 323 Psychology of Infancy and Childhood
This is an advanced course where students with a solid background in developmental psychology will explore in detail the psychological issues and events that occur during the course of infancy and childhood. Current research focusing on the interplay of psychological and environmental factors in physical, cognitive, social, and personality development of individuals from conception to puberty will be explored. Prerequisites: Successful completion of PSY 101, and either PSY 220 or HRD/SBS 200 with grades of C- or better. Cr 3.

PSY 324 Psychology of Adolescence
This advanced course will provide an overview of theories, issues, and research in the study of human development from early adolescence to early adulthood. The interplay of biological and cognitive factors, interpersonal relationships, social structure, and cultural values in shaping the individual's development will be examined. The role of adolescence in both the individual's life course and evolution of the culture as a whole

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will be considered. Prerequisites: Successful completion of PSY 101, and either PSY 220 or HRD/SBS 200 with grades of C- or better. Cr 3.

**PSY 325 Psychology of Adulthood and Aging**
This is an advanced course in developmental psychology focusing on the adult portion of the lifespan. The course will provide an overview of the major theories, issues, and research in the scientific study of adulthood. The interplay of biological and cognitive factors, interpersonal relationships, social structure, and cultural values in shaping the individual's development will be examined. Prerequisites: Successful completion of PSY 101, and either PSY 220 or HRD/SBS 200 with grades of C- or better. Cr 3.

**PSY 326 Psychology of Social and Linguistic Development**
This seminar explores research addressing infant and child social and linguistic development. The main focus is on brain development, temperament, attachment, linguistic growth, and early social cognition as the basis for children's emergent social and communicative competence. Students are expected to contribute to discussion and debates each week. Prerequisites: Successful completion of PSY 101, and either PSY 220 or HRD/SBS 200 with grades of C- or better. Cr 3.

**PSY 338 Theories of Personality**
A survey of the major contemporary approaches to the study of personality. Different theories are compared, their impact upon current thinking evaluated, and their research contributions assessed. Prerequisites: Successful completion of PSY 101 with a grade of C- or better. Cr 3.

**PSY 340 Behavior Modification**
An introduction to the principles of operant conditioning with emphasis on the application of operant techniques in educational, correctional, and therapeutic situations. Prerequisites: Successful completion of PSY 101 with a grade of C- or better. Cr 3.

**PSY 350 Psychology of Learning**
Experimental findings on the fundamental principles that underlie the acquisition and retention of new behavior. Emphasis is placed on operant and respondent conditioning and the experimental analysis of behavior. Prerequisites: Successful completion of PSY 101 and 102 with grades of C- or better. Cr 3.

**PSY 360 Cognitive Processes**
A review of contemporary experimental and theoretical work on human information processing. Topics include pattern recognition, memory, attention, decision making, language, problem solving, and creativity. Emphasis will be placed on research methodology and on the interpretation of experimental findings. Prerequisites: Successful completion of PSY 101 with a grade of C- or better. Cr 3.

**PSY 361 Sensation and Perception**
An examination of perceptual processes and sensory systems. Emphasis is on experimental methodology, research findings, and theoretical interpretations. Prerequisites: Successful completion of PSY 101 with a grade of C- or better. Cr 3.

**PSY 365 Physiological Psychology**
Basic neuroanatomy, neurophysiology, and endocrinology, and the relationships between nervous system functioning and behavior. Physiological analysis of sensory function, motivation, and learning. Prerequisites: Successful completion of PSY 101,102, and BIO 111 with grades of C- or better. Cr 3.

**PSY 366 Drugs, Mind, and Behavior**
The physiological and behavioral effects of drugs are examined in light of current research. Also considered are theories relating to the use/abuse of drugs, tolerance, addiction, and drug interactions. Prerequisites: Successful completion of PSY 101 and one semester of biology with grades of C- or better. Cr 3.

**PSY 368 Health Psychology**
This course is designed to introduce the student to the discipline of health psychology from a bio-psychosocial perspective. An integrative approach will be provided via discussion of the biological and psycho-physiological foundations of health and disease, including the topics of stress and coping, prevention, diet, substance abuse, and chronic illness. Prerequisites: Successful completion of PSY 101 with grade of C- or better. Cr 3.

**PSY 371 History and Systems of Psychology**
A survey of the history of psychological thought from its beginnings in Greek philosophy to modern times. Special attention will be given to the influence of philosophy and natural science on the development of contemporary psychology. The course concludes with a survey of the major systems. Prerequisite: Successful completion of PSY 101 and 102 with grades of C- or better. This course will satisfy the intensive writing requirement. Cr 3.

**PSY 380 Psychology and the Law**
This course represents an intensive study of the role of psychology in the legal process with particular emphasis upon the insanity defense, competency to stand trial, and involuntary commitments. Also considered are those psychological factors that relate to such topics as jury selection and deliberation, eyewitness testimony and credibility, and courtroom strategy. A term paper is required of all students. Prerequisites: PSY 101, 102, 233 and/or permission of the instructor. Cr 3.
PSY 400 Independent Research
This course provides junior and senior psychology majors the opportunity to pursue guided reading/research on a topic of their choosing. Each independent study project will be conducted with advice and guidance from the sponsoring faculty member. Prerequisites: junior or senior standing, successful completion (with grades of C- or better) of PSY 205 and PSY 206, completion of independent study application describing the proposed reading/research project, permission of faculty sponsor. Cr 1-3.

PSY 401 Research Apprenticeship
This course provides junior and senior psychology majors the opportunity to develop further insight into the research process through direct involvement with ongoing faculty research. Prerequisites: junior or senior standing, successful completion (with grades of C- or better) of PSY 205 and PSY 206, completion of independent study application describing the reading/research project and tasks or activities they will be performing, permission of faculty sponsor. Cr 1-3.

PSY 405 Teaching Apprenticeship
This course provides psychology majors the opportunity to assist teaching faculty and to develop deeper understanding of course materials and college teaching. Teaching apprentices are selected by faculty. Prerequisites: junior or senior standing, completion of independent study application describing their relevant course experiences and tasks/activities they will be performing, permission of faculty sponsor. Cr 1-3.

PSY 410 Internship/Field Experience
This course provides junior and senior psychology majors the opportunity to apply their psychology training in organizations and community service projects. Currently students may participate in the USM-Hall School Mentor project. Prerequisites: junior or senior standing, completion of application describing the tasks or activities they will be performing, permission of faculty sponsor and department chair. Cr 1-3.
Recreation and Leisure Studies

RLS Overview

Program Coordinator: Dr. David Jones, Masterton Hall, Portland

The Recreation and Leisure Studies program in the College of Science, Technology, and Health offers a baccalaureate degree in recreation and leisure studies with concentrations in therapeutic recreation and community recreation. In addition, there is a minor in recreation leadership, a minor in nature tourism, and a variety of health/fitness instructional activity courses.

The minor in recreation leadership consists of 20 credit hours. The minor is designed to provide students who are not majoring in recreation and leisure studies with the basic knowledge and skills needed to lead recreation programs in settings such as YMCAs, community recreation centers, and camps.

The minor in nature tourism consists of 19 to 20 credit hours. This minor combines coursework in environmental science and outdoor recreation to provide students with an introductory knowledge of ecotourism, outdoor recreation leadership, and nature interpretation.

In collaboration with the International Ecotourism Society (TIES), we offer a Certificate in Sustainable Tourism. This certificate is available to students from all majors. Students complete nine hours of coursework, participate in one international travel course, and complete an internship with a sustainable tourism agency or business.

In addition to the degree programs and minors, a wide variety of recreation and leisure studies courses, as well as health fitness activity courses, is available. Students are encouraged to pursue recreation, leisure, and instructional health/fitness course offerings as appropriate to their academic program, or their personal development needs.

Additional Information

Retention/Progression Policies

The Recreation and Leisure Studies program adheres to the minimum grade and academic suspension standards described in the Academic Policies section of this catalog. In addition the faculty reserves the privilege of retaining only those students who, in the judgment of the faculty, satisfy the requirements of scholarship, skill, and health necessary for practice as therapeutic recreation specialists. A student who admits to or is found guilty of a violation of academic integrity (see USM Student Academic Integrity Policy) or the American Therapeutic Recreation Society's Code of Ethics can be suspended or dismissed from the program or the University. (The ethics statement is posted in the program's reception area, is discussed in REC 494, and is available through the Program Coordinator.)

A grade of D or F in a REC-prefix core course will stop progression within the respective degree course sequence. Students who receive a grade of D or F in any REC-prefix core course must repeat the course and earn a grade of C- or better. Students who receive a grade of D or F in REC 495, will be allowed to repeat the course once, providing that the student is able to secure an internship placement and the faculty agrees that the student possesses the knowledge, skills, and health necessary to work with clients in an internship setting. Students who repeat Internship must enroll in the appropriate pre-internship course the semester immediately preceding Internship. Students who receive a D or F in a program theory or clinical course must obtain a grade of C– or better when the course is repeated. Students who fail to enroll in therapeutic recreation courses for a one-year period without permission of their academic advisors can be removed from their declared major.

Internship Policies

Policies regarding internship are specified in the program's Student Internship Manual. Internship eligibility requirements are as follows:

B.S. Degree In order to be eligible for the REC 495 Internship placement, baccalaureate degree students must be recreation and leisure studies majors, have completed at least 24 credits from the Core curriculum, plus all of the program's required foundation courses. Students must also possess current Red Cross Emergency Response and CPR certifications, have a grade point average of at least 2.0 and have completed the following major courses: REC 110, REC 121, REC 224, REC 241, REC 353, REC 382, REC 383, REC 494, CON 311 and one three credit recreation elective with grades of C- or better. Students wishing to complete an internship outside of the faculty's direct supervision area (approximately a 120-mile radius from USM) must have a GPA of at least 2.6. Internship opportunities extend throughout New England and beyond. Students must apply to agencies and be accepted by an agency for internship. Internships are earned, not assigned. The program cannot guarantee that students will be able to obtain internships in the southern Maine area.

Transfer into the B.S. Degree Program in Recreation and Leisure Studies from other USM Academic Programs

Students enrolled in other USM programs of study must meet with the Program Coordinator to discuss transfer requirements and their reasons for
transfer. Such students should have completed REC 110, ENG 100, PSY 101, and BIO 111 or equivalent with grades of C- or better or have completed at least one semester at USM and be in good academic standing. Acceptance into the program is also dependent on reasons for transfer and space availability.

**BS in Recreation and Leisure Studies - Community Recreation Concentration**

**Description**

The concentration in Community Recreation enables students wishing to work in settings other than health care the opportunity to develop the knowledge base and skills needed to deliver recreation activities in myriad of community based work settings.

This curriculum, in addition to meeting the general education requirements of the university Core Curriculum, provides students with the philosophical foundation, historical context, as well as the leadership and programming skills necessary to compete in today’s job market. Embedded within the course work are a variety of volunteer opportunities, structured practicums, and field work experiences to allow students to apply and practice their newly developed knowledge and skills.

**Program Requirements**

In addition to the requirements listed in the BS, the following courses are required to complete the Community Recreation Concentration:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC 226</td>
<td>Lifetime Leisure Activities</td>
<td>3</td>
</tr>
<tr>
<td>REC 231</td>
<td>Arts and Crafts Programming &amp; Leadership</td>
<td>3</td>
</tr>
<tr>
<td>REC 233</td>
<td>Outdoor Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 386</td>
<td>Facility Management</td>
<td>3</td>
</tr>
<tr>
<td>REC 493</td>
<td>Pre Fieldwork</td>
<td>3</td>
</tr>
<tr>
<td>REC 499</td>
<td>Management in Community Recreation</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required Foundation Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOS 300</td>
<td>Organizational Theory</td>
<td>3</td>
</tr>
<tr>
<td>LOS 304</td>
<td>Organizational Budgeting</td>
<td>3</td>
</tr>
<tr>
<td>LOS 312</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>PSY (choose from several options)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PHE 302</td>
<td>Coaching Philosophy and Fundamentals</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credits (with Core) 121

**BS in Recreation and Leisure Studies - Therapeutic Recreation Concentration**

**Description**

The purpose of therapeutic recreation is to promote the development of functional independence and to facilitate the development, maintenance and expression of an appropriate leisure lifestyle for persons with mental, physical, emotional and/or social limitations. Accordingly, this purpose is accomplished through the provision of educational and participatory services in both treatment and non-treatment settings. These services assist clientele in eliminating barriers to leisure, developing leisure skills and attitudes which meet their needs, and in optimizing their leisure involvement. Therapeutic recreation professionals use leisure and recreation to enhance each client's health status and leisure lifestyle, both of which are imperative in the development of human potential.

**Program Requirements**

In addition to the requirements listed in the BS, the following courses are required to complete the Therapeutic Recreation Concentration:

Credits
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON 311 Psychosocial Interventions for Older Adults</td>
<td>3</td>
</tr>
<tr>
<td>REC 121 Introduction to Therapeutic Recreation Service</td>
<td>3</td>
</tr>
<tr>
<td>REC 353 Implications of Disabling Conditions for Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td><strong>Recreation</strong></td>
<td></td>
</tr>
<tr>
<td>REC 382 Assessment and Documentation in Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 383 Facilitation Techniques in Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 494 Professional Foundations of Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td><strong>Practice</strong></td>
<td></td>
</tr>
<tr>
<td>REC 495 Internship</td>
<td>12</td>
</tr>
<tr>
<td>REC 498 Management and Professional Development in Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td><strong>Recreation</strong></td>
<td></td>
</tr>
<tr>
<td>Recreation electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Required foundation courses (10.5Cr)</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 211 Human Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>BIO 212 Practical Human Anatomy and Physiology</td>
<td>1.5</td>
</tr>
<tr>
<td>PSY 102 General Psychology II</td>
<td>3</td>
</tr>
<tr>
<td>PSY 233 Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits (with Core)</strong></td>
<td>121</td>
</tr>
</tbody>
</table>

**Community Recreation Concentration**

In addition to the courses required by everyone in the major, the following courses are required to complete the Community Recreation Concentration:

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC 226 Lifetime Leisure Activities</td>
<td>3</td>
</tr>
<tr>
<td>REC 231 Arts and Crafts Programming &amp; Leadership</td>
<td>3</td>
</tr>
<tr>
<td>REC 233 Outdoor Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 386 Facility Management</td>
<td>3</td>
</tr>
<tr>
<td>REC 493 Pre Fieldwork</td>
<td>3</td>
</tr>
<tr>
<td>REC 499 Management in Community Recreation</td>
<td>3</td>
</tr>
<tr>
<td><strong>Required Foundation Courses</strong></td>
<td></td>
</tr>
<tr>
<td>LOS 300 Organizational Theory</td>
<td>3</td>
</tr>
<tr>
<td>LOS 304 Organizational Budgeting</td>
<td>3</td>
</tr>
<tr>
<td>LOS 312 Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>PSY (choose from several options)</td>
<td>3</td>
</tr>
<tr>
<td>PHE 302 Coaching Philosophy and Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits (with Core)</strong></td>
<td>121</td>
</tr>
</tbody>
</table>

**BS in Recreation and Leisure Studies**

**Description**

The baccalaureate degree program in recreation and leisure studies consists of 121 credit hours. Students entering the degree program will select one of two available concentrations, Therapeutic Recreation or Community Recreation. Upon completion of the degree requirements, the student may seek employment as a recreation therapist, recreation staff in a variety of municipal or nonprofit environments, as an activity coordinator, or recreation generalist. Students who complete internships under the supervision of a Certified Therapeutic Recreation Specialist will be eligible to sit for the National Council for Therapeutic Recreation Certification examination.

**Program Requirements**

The four-year program in recreation and leisure studies consists of, in addition to the Core curriculum requirements, the following courses leading to the bachelor of science degree which are to be taken by students in both concentrations. The curriculum is subject to change as a result of faculty evaluation.
Required Recreation Core Courses (27 Cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON 216 Emergency Medical Response</td>
<td>3</td>
</tr>
<tr>
<td>CON 219 Lifetime Physical Fitness and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>REC 110 Foundations of Recreation and Leisure Studies</td>
<td>3</td>
</tr>
<tr>
<td>REC 241 Recreation Leadership</td>
<td>3</td>
</tr>
<tr>
<td>REC 353 Implications of Disabling Conditions for Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 495 Internship/Fieldwork</td>
<td>12</td>
</tr>
</tbody>
</table>

Electives (6 Cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC 223 Introduction to Nature Tourism</td>
<td>3</td>
</tr>
<tr>
<td>REC 224 Inclusive &amp; Special Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 226 Lifetime Leisure Activities</td>
<td>3</td>
</tr>
<tr>
<td>REC 231 Arts and Crafts Programming and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>CON 285 Perspectives on Animal Assisted Therapy</td>
<td>3</td>
</tr>
<tr>
<td>CON 288 Reiki: Energy Medicine</td>
<td>3</td>
</tr>
<tr>
<td>CON 314 Wellness Education and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>RHF XXX Two 1.5-credit health/fitness courses</td>
<td></td>
</tr>
</tbody>
</table>

Required foundation courses (10.5 Cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111 Human Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>BIO 112 Practical Human Anatomy and Physiology</td>
<td>1.5</td>
</tr>
<tr>
<td>HRD/SBS 200 Multicultural Human Development</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101 General Psychology I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credits (with Core) 121

Therapeutic Recreation Concentration

In addition to the courses required of everyone in the major, the following courses are required to complete the Therapeutic Recreation Concentration:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CON 311 Psychosocial Interventions for Older Adults</td>
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<tr>
<td>REC 121 Introduction to Therapeutic Recreation Service</td>
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</tr>
<tr>
<td>REC 382 Assessment and Documentation in Therapeutic Recreation</td>
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<tr>
<td>REC 383 Facilitation Techniques in Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 494 Professional Foundations of Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 495 Internship</td>
<td>12</td>
</tr>
<tr>
<td>REC 498 Management and Professional Development in Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>Recreation electives</td>
<td>6</td>
</tr>
</tbody>
</table>

Required foundation courses (10.5Cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 211 Human Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>BIO 212 Practical Human Anatomy and Physiology</td>
<td>1.5</td>
</tr>
<tr>
<td>PSY 102 General Psychology II</td>
<td>3</td>
</tr>
<tr>
<td>PSY 233 Psychopathology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credits (with Core) 121

Community Recreation Concentration

In addition to the courses required by everyone in the major, the following courses are required to complete the Community Recreation Concentration:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC 226 Lifetime Leisure Activities</td>
<td>3</td>
</tr>
</tbody>
</table>
Certificate in Gerontology

Description

Over the next 20 years, the number of Americans over the age of 65 will double. Additionally, the number of adults over 85 who need acute, primary, and long-term care will increase five-fold. This demographic shift will significantly increase the demand for professionals with the skills and knowledge to care for the health, psychological, social, and spiritual needs of older adults.

The Certificate Program in Gerontology is designed to help professionals currently working with older adults, as well as individuals preparing for health and human services professions, develop their capacity to serve this clinically complex population. The program is based on the multidisciplinary competencies recommended by the Partnership for Health in Aging.

Students may complete the five courses in the program in one year by taking one course in each 7-week session or they may proceed at their own pace.

Program Requirements

15 undergraduate credits are required for this certificate. These courses may be taken in any sequence.

Required Courses (6 credits)- Courses are offered every year.

- HRD 310 Aging and the Search for Meaning
- CON 313 Health in Later Years

Elective Courses (choose 3 of the following)- These courses may vary each year.

- CON 390 Evaluation and Health Assessment of the Older Adult
- HRD 312 The Spiritual Challenges and Opportunities of Aging
- CON 318 Adult Development and Aging
- STH 315 Rehabilitation Services for Older Adult
- SWO 375 Gender and Aging
- STH 300 Partnering with Family Caregivers

The program recommends that students have junior/senior status or some college experience if they are experienced professionals. The individual courses require that all students have taken a college level writing course and at least one course in either psychology or sociology. Students should be prepared for a rigorous academic experience as all courses are upper level and the 7-week format is intensive.

Students may complete the entire certificate or select individual courses.

http://www.usm.maine.edu/online/online-certificate-program-gerontology

Recommended Course Sequence
Admission Information

If you are interested in completing this Gerontology certificate online, simply complete the Enrollment Form or call us at (207) 780-5900, and we will assist you through the enrollment process.

Certificate in Sustainable Tourism

Description

Your Ticket to Out There!

In conjunction with the International Ecotourism Society (TIES), USM is providing students with an exciting opportunity to become certified as sustainable tourism providers. Through TIES's University Consortium Certificate Program students gain a holistic understanding of structuring, programming and implementing sustainable tourism. The TIES/UCC Program at USM provides students with an inherent, reality-based understanding of the principles of sustainable tourism, preparing for a future as tourism professionals.

Choose your adventure and learn to bring others with you. The program includes nine hours of course work with online options, one study abroad course and a 400-hour internship that includes a capstone project. Certification fee: $250

Interested in applying?

1. Review program details on TIES website www.ecotourism.org/ucc
2. Interview with Dr. David B. Jones, Recreation and Leisure Studies program (dbjones@usm.maine.edu or (207) 780-4587)
3. Complete the online UCC application and submit Student Program fee ($250)
4. Notice of acceptance within one month of application
5. Once accepted, complete TIES-UCC Plan of Study with Academic Consortium Advisor, Dr. David B. Jones, EdD, CTRS

Program Requirements

The UCC Study Plan at the University of Southern Maine incorporates:

- REC 223/ESP 223 Nature-based Tourism (3 credits – either classroom/online)
- Two courses that address sustainability
- At least one international course provided through USM a UCC member university that focuses on sustainable tourism:
  - International Travel Sustainable Tourism Course to Newfoundland (USM)
  - International Travel Sustainable Tourism Course to Belize (USM) - International Travel Sustainable Tourism Course (UCC member university)
- A 400 hour internship focused on elements of sustainable tourism

Minor in Nature Tourism

Description

The nature tourism minor is jointly offered by the Recreation and Leisure Studies program and the Department of Environmental Science in the College of Science, Technology, and Health. The minor combines coursework to provide students with an introductory knowledge of ecotourism, outdoor recreation leadership, and nature interpretation. Safe and responsible use of outdoor environments is a prime focus of the minor. Enrollment in the nature tourism minor can increase student understanding and enjoyment of nature while enhancing future employment opportunities in ecotourism and adventure recreation businesses, wilderness equipment outfitters, or organizations that focus on environmental education.
Program Requirements

The minor is open to undergraduate students* and requires the completion of 19 to 20 credit hours of coursework.

Students seeking the minor in nature tourism must complete the following courses:

Required Courses (16 credits) Credits
ESP 110/REC 233 Nature Based Tourism 3
ESP 101, 102 Fundamentals of Environmental Science with Lab 4
REC 233 Outdoor Recreation 3
ESP 203 Environmental Communication 3
REC 218 Wilderness Emergency Response 3

Elective Courses (3-4 credits)
ESP 101 102 Fundamentals of Environmental Science with Lab 4
ESP 150 Environmental Science Field Immersion 3
REC 367 Adventure Based Counseling 3

Not all classes are offered every semester. Some courses may have prerequisites.

*Recreation and leisure studies majors can only substitute REC 218 Wilderness Emergency Response for CON 216 Emergency Response if they are enrolled in the nature tourism minor and have completed either ESP 110 or ESP 101K and 102K. In addition, recreation and leisure studies majors may not take REC 234 Outdoor Recreation Leadership as a REC general elective. This course may be taken in addition to the requirements of their degree.

Minor in Recreation Leadership

Description

The minor in recreation leadership is designed to provide students with the basic knowledge and skills necessary to lead recreation programs in setting such as YMCAs, Boys and Girls Clubs, community recreation centers, and camps. The minor is especially appropriate for those students majoring in fields such as education, psychology, nursing, criminology, business, and social work who intend to use recreation activities as part of their practices.

Program Requirements

The minimum number of credits required for the minor is 20.

Students seeking the minor in recreation leadership must:

- Complete REC 110 Introduction to Recreation and Leisure, REC 241 Recreation Leadership, and REC 224 Inclusive Leisure Services (9 credits total).
- Complete three of the following courses: REC 226 Lifetime Leisure Activities, REC 231 Arts and Crafts Programming and Leadership, REC 233 Outdoor Recreation, CON 311 Psychosocial Interventions for Older Adults, CON 314 Wellness Education and Counseling, or REC 367 Adventure Based Counseling (9 credits total).
- Complete two 1-credit or 1.5-credit RHF courses from the following: RHF 106 Ballroom Dance, RHF 107 Aerobics, RHF 109 Beginning Weight Training, RHF 118 Yoga, RHF 122 Aerobic Kickboxing, RHF 121 Self Defense, or RHF 123 Introduction to Sea Kayaking.

Not all courses are offered every semester. Some courses have prerequisites. Other RHF courses can be substituted with permission. Contact the Recreation and Leisure Studies Program Coordinator to sign up for this minor.

Course Descriptions
A course fee is assessed in Emergency Medical Response (CON 216), Wilderness Emergency Medical Response (REC 218), Arts and Crafts Programming and Leadership (REC 231), Adventure Based Counseling (REC 367), Assessment and Documentation in Therapeutic Recreation (REC 382), Professional Foundations of Therapeutic Recreation Practice (REC 494), and selected RHF courses.

**RHF 100-Level Recreation/Fitness Courses**
RHF courses are designed to provide education and skill development in a particular recreation or health/fitness activity. Because skill and/or fitness development are objectives in all RHF courses, students must attend and participate in class activities in order to pass. The program reserves the right to request written medical clearance for participation in courses that require high intensity exercise. An * after a course number indicates that students will be required to pay a vendor charge for access to activity environments and/or equipment. The course instructor will explain any charge. The following are the RHF activity areas: RHF 101 Tennis; RHF 106 Ballroom Dance; RHF 107 Aerobics; RHF 109 Beginning Weight Training; RHF 117 Low Impact Aerobics; RHF 118 Yoga; RHF 121 Self-Defense; RHF 122 Aerobic Kickboxing; RHF 126 Stability and Physio-Ball Exercise; and RHF 127 Pilates. Cr 1.5 each

**RHF 123 Introduction to Sea Kayaking and Introduction to Cross-Country Skiing**
Cr 1 each.

**REC 110 Foundations of Recreation and Leisure Studies**
This course addresses the concepts of leisure, play, and recreation, emphasizing the role leisure should play in modern society. Lectures and discussions on societal attitudes toward work and leisure stress the need to keep these in proper perspective. Students will concentrate on the psychological aspects of optimal experience and quality of life. Community leisure services will be addressed. Assignments will encourage students to explore leisure lifestyle attitudes. Cr 3.

**REC 121 Introduction to Therapeutic Recreation Services**
An overview of therapeutic recreation including historical and philosophical foundations, service models, professional functions and service settings. The psychology of disability will be included as will an introduction to disabling conditions. Prerequisite: therapeutic recreation major or instructor permission. Spring semester only Cr 3.

**REC 223/ESP 223 Nature Based Tourism**
This course covers the basics of nature tourism, a broad category that covers ecotourism, adventure tourism, and a variety of activities and programs involving the outdoors. An emphasis is placed on Maine and northern New England nature tourism. REC 223/ESP 223 is one of the required courses for the nature tourism minor offered jointly between the Recreation and Leisure Studies program and the Department of Environmental Science. Cr 3.

**REC 218 Wilderness Emergency Medical Response**
This course prepares students to stabilize and care for victims of medical emergencies in remote and wilderness area settings when advanced medical professionals are not readily available. The course is a requirement for students enrolled in the nature tourism minor. Students who successfully complete the course will qualify for certification by the American Red Cross in Wilderness Emergency Response and CPR for the Professional Rescuer. Cr 3.

**REC 224 Inclusive and Special Recreation**
This course will explore how to include persons with disabilities into non-treatment focused recreation programs and services. Disability awareness and history plus physical and program access will be explored with a focus on requirements specified by federal ADA legislation. Recreation and sport organizations for persons with disabilities as well as assistive devices that enable access will also be examined. Prerequisite: REC 110 or instructor permission. Cr 3.

**REC 226 Lifetime Leisure Activities**
Through participation in a variety of recreational pursuits, students will explore the rules, techniques, strategies, and adaptations for successful participation by those individuals with disabilities. Youth sport development, leadership techniques for teaching physical recreation activities and basic motor learning concepts will also be addressed. Cr 3.

**REC 229 Adapted Aquatics Laboratory**
This course introduces students to the therapeutic medium of water as it is used to promote the physical, psychological, and social well-being for persons with disabilities. The lab will require students to participate in a community-based adapted aquatics program under the supervision of a therapeutic recreation, adapted aquatics specialist. Students will be given a general introduction to the disabilities presented by program participants and will be required to learn and apply adapted aquatics assessments, skills, and program management knowledge. Each student will negotiate, with the instructor, the aquatics program that will be attended. The lab will require approximately two hours on site per week. Prerequisites: Instructor permission, plus passage of basic swimming skills and lifting tests. Cr 1.

**REC 231 Arts and Crafts Programming and Leadership**
Students will learn about the therapeutic benefits of art and craft activities and how to plan, adapt, organize, and lead crafts programs and activities. The course will require students to participate in a variety of craft activities such as leatherwork, weaving, quilting, sand painting, and other appropriate projects. Spring semester only Prerequisite: instructor permission. Cr 3.
REC 233 Outdoor Recreation
This course focuses on safe, sustainable, nature-based recreation with an emphasis on "leave no trace" principles. The role of park systems and wilderness environments relative to recreation in modern society will be examined. A variety of outdoor recreation activities will be introduced. Several class trips will be required; thus students must be prepared to pay charges (a total of no more than $20) for access to outdoor activity environments and equipment. Cr 3.

REC 234 Outdoor Recreation Leadership
This course examines outdoor leadership as a vocation and focuses on the environmental planning, implementation, and risk management knowledge and skills needed to lead outdoor trips and activities competently. Students will assist the REC 233 instructor in leading outdoor activities. Students may also be required to take part in a class planned overnight trip. Prerequisites: REC 233, nature tourism minor, and/or instructor permission. Cr 3.

REC 241 Recreation Leadership
This course will provide students with the basic knowledge and methods necessary for effective leadership in recreation settings. Students will be required to participate in projects, presentations, and discussions which are aimed at helping them develop and analyze leadership skills in a variety of recreation program areas such as special events, expressive arts, passive recreation, outdoor recreation, and sports. Fall semester only.

REC 353 Implications of Disabling Conditions for Therapeutic Recreation
This course provides an overview of physical and developmental disabilities with emphasis on etiology, clinical descriptors, rehabilitation, and educational concerns. Examination of the impact of disability on leisure and therapeutic recreation programming will be addressed, as will barriers that affect communication and interactions between persons with and without disabilities. Cr 3.

REC 367 Adventure Based Counseling
The course focuses on how to facilitate and then process outdoor/adventure/recreation activities as a means to improve self-concepts, develop group cohesion and uncover feelings, among others. Course objectives will be met through experiential as well as theoretical methods, thus allowing the student to acquire the skills necessary to lead groups through similar activities. Class format will be lectures, discussions, group activities, and presentations by class members. The course will address how to plan, implement, lead, debrief, and evaluate adventure experiences. Cr 3.

REC 382 Assessment and Documentation in Therapeutic Recreation
This course examines therapeutic recreation services in a variety of settings. Emphasis will be on assessment and documentation within healthcare settings. Students will learn assessment, individual treatment planning, intervention strategies, and the development of treatment protocols. Students will be required to work in groups and participate in class leadership. A 24-hour practicum experience in a therapeutic recreation program is required. Spring semester only. Prerequisites: Recreation and Leisure Studies major or Recreation Leadership minor, REC 332, HRD/SBS 200. Cr 3.

REC 398 Independent Study
This course is open only to students majoring or minoring within the program who have identified a topic, relevant to their course of study, that they want to study in depth and for which there is no existing appropriate course. Students must obtain a faculty supervisor and negotiate a written independent study contract with this person. Independent study forms can be obtained from the program. Cr 1-3.

REC 494 Professional Foundations of Therapeutic Recreation Practice
This course will prepare students for an extended internship experience. Students will complete all of the tasks necessary to secure an internship placement. Serious study and discussion of topics such as professional conduct, ethics, safety, and risk management will be required. This course must be taken immediately prior to Internship. Spring semester only. Prerequisites: Recreation core courses and instructor's permission. Cr 3.

REC 495 Internship
Students are required to work a minimum of 560 hours in an agency that provides therapeutic recreation services. During this period the students will apply the knowledge, methods, and leadership techniques which have been learned in academic courses. Students will be directly supervised by qualified agency personnel and indirectly supervised by faculty. This course is usually taken the senior year. Prerequisites: REC 494 and instructor's permission. Health insurance is required of students enrolled in this course. Cr 12.

REC 498 Management and Professional Development in Therapeutic Recreation
An overview of management roles in therapeutic recreation settings with major focuses on comprehensive program development, supervision of professional and volunteer personnel, policy and strategy development and quality assurance. Each student is required to develop a comprehensive program and policy manual. Students will apply the information learned during internships to course assignments and discussions. Prerequisite: REC 495. Cr 3.
Department of Technology

Technology Overview

Chair of the Department: David J. Early, John Mitchell Center, Gorham

Professor: Anderson, Marshall; Associate Professors: Blue, Wilson, Zaner

Programs in the Department of Technology develop management and technical professionals for employment in a wide variety of technical environments. The curriculum consists of general education, a technical specialty, and management courses that produce graduates with the specialty / general education combination widely sought after by today's organizations. In these programs, technical and related concepts are presented in an applied approach encompassing classroom interaction, laboratory activities, field experiences, engagement with local business and industry, and opportunities for internships / cooperative education.

The Department offers three degree programs leading to a bachelor of science (B.S.) in Technology Management with concentrations in industrial management, precision manufacturing, information and communications technology, construction management, and electro-mechanical systems, a bachelor of science (B.S.) in Applied Technical Leadership which builds on a wide variety of associate degrees and experience, and a (B.S.) in Information Technology.

The B.S. in applied technical leadership program is available only for transfer and nontraditional students. It requires either an associate degree or occupational experience and training equivalent to an associate degree.

Admission Requirements

(All Programs) Students must meet all University of Southern Maine admission requirements.

The Department of Technology has approved transfer pathways from several of Maine's community colleges and regionally accredited community or technical colleges. The purpose of these pathways is to allow individuals with specific associate's degrees to complete a bachelor of science degree with a focus in areas such as: industrial management, electro-mechanical systems, precision manufacturing, information and communications technology, construction management, and information technology.

Students seeking admission to the Applied Technical Leadership degree program will be screened for either an associate degree or a combination of non-credit training and experience equivalent to an associate degree. Students without an associate degree are required to prepare a portfolio documenting their competence.

Additional Information

Internship

The Department of Technology, recognizing the value of integrating theory and practice through application in actual work environments encourages internships for qualified students. An internship provides a wide range of opportunities for applying knowledge and skills obtained in a classroom or laboratory to actual work situations. Permission of the advisor and the internship coordinator is needed to register for an internship.

Laboratory fees

Laboratory fees to cover the cost of materials, supplies, and computer resources are added to ITT courses and selected ITC and ITS courses.

BS in Applied Technical Leadership

Description

This degree program is designed to provide career advancement opportunities for experienced personnel employed in a variety of technically
oriented career fields such as fire science, law enforcement, medical technology, business operations, service industries, and others.

Students seeking admission to the Applied Technical Leadership degree program will be screened for either an associate degree or a combination of non-credit training and experience equivalent to an associate degree. Students without an associate degree are required to prepare a portfolio documenting their competence.

Program Requirements

Bachelor of Science in Applied Technical Leadership
(for nontraditional/transfer students)

The minimum number of credits required for the degree: 121

University Requirements
  Writing Readiness
  Math Readiness

University Core
  College Writing
  Quantitative Reasoning - MAT 140 (or above)
  Creative Expression
  Socio-cultural - Economics (ECO)
  Science Exploration - with Lab
  Cultural Interpretation
  Ethical Inquiry
  Diversity
  International
  Thematic cluster - Professional Practices Recommended
  Cluster course 1
  Cluster course 2
  Cluster course 3
  Capstone ITP 460

Departmental Requirements
  ITP 210 Technical Writing
  ABU 190 Spreadsheet & Problem Solving
  or MAT 148 Applied Calculus
  Statistics
  Computer
  Natural Science

General Elective - 6 Credits
  (Academic, Professional or Technical)

Professional
  ITP 230 Project Management
  ITP 250 Management Information Systems
  ITP 280 Industrial Organization, Management, & Supervision
  ITP 310 Facility Planning
  ITP 340 Fundamentals of Quality
  ITP 350 Teambuilding and Facilitation
  ITP 381 Human Resource Development
  ITP 410 Technical Operations and Strategies
  ITP 490 Cost Analysis & Control
  ITS 320 Occupational Safety and Health
  ACC 110 Financial Accounting Information for Decision Making

Technical/Occupational Specialization - 36 Credits
  Occupational Assessment/Elective Courses
    ITP 400 Occupational Competency
BS in Information Technology

Description

The Bachelor of Science in Information Technology degree is designed to prepare individuals to develop, manage and maintain computer and network systems in organizations. Areas of study include: organizational issues and information systems, application technologies, software methods and technologies, systems infrastructure, and computer hardware and architecture.

The degree is specifically designed to accommodate students with associate degrees in information technology. There is also a four year curriculum for students wishing to complete the entire degree at the University of Southern Maine.

Program Requirements

Bachelor of Science in Information Technology
(for traditional students)

The minimum number of credits required for the degree: 121

University Requirements

Writing Readiness
Math Readiness

University Core

College Writing
EYE 112 Built Environment
Quantitative Reasoning - MAT 120
Creative Expression
Socio-cultural - Economics (ECO)
Science Exploration - Physics or Chemistry with Lab
Cultural Interpretation
Ethical Inquiry
Diversity
International
Thematic cluster - Professional Practices Recommended
Cluster Course 1
Cluster Course 2
Cluster Course 3
Capstone ITT 460

Departmental Requirements

ITP 210 Technical Writing
ITP 230 Project Management
ITP 250 Mgmt. Info. Systems
ITP 350 Teambuilding & Facilitation
MAT 108 College Algebra
MAT 145 Discrete Math

General Electives - 6 credits
(Academic, Professional or Technical)

Technical

ITT 181 Computer Applications & Concepts
ITT 241 Info. & Comm. Technologies
ITT 272 Intro. Computer Networking
ITT 281 Internet Web Site Development
Bachelor of Science in Information Technology  
(for transfer students)

The minimum number of credits required for the degree: 120

University Requirements
- Writing Readiness
- Math Readiness

University Core
- College Writing
- Quantitative Reasoning - MAT 120
- Creative Expression
- Socio-cultural - Economics (ECO)
- Science Exploration - Physics or Chemistry with Lab
- Cultural Interpretation
- Ethical Inquiry
- Diversity
- International
- Thematic cluster - Professional Practices Recommended
- Cluster Course 1
- Cluster Course 2
- Cluster Course 3
- Capstone ITT 460

Departmental Requirements
- ITP 210 Technical Writing
- ITP 230 Project Management
- ITP 250 Mgmt. Info. Systems
- ITP 350 Teambuilding & Facilitation
- MAT 108 College Algebra
- Finite Math

General Electives
- (Academic, Professional or Technical)

Application Electives - Context area
- Application Elective
- Application Elective
- Application Elective

Technical Courses
Technical courses within the major differ depending on the community college curriculum, but are fulfilled by courses taken as part of an
associate degree in information technology plus selected courses at the University of Southern Maine. Competency standards identified by the Association for Computing Machinery and articulation agreements between the schools are used to determine course equivalencies.

**BS in Technology Management - Concentration in Construction Management**

**Description**

Please see the main [BS in Technology Management](#) listing for all concentration-specific information.

**Program Requirements**

Please see the main [BS in Technology Management](#) listing for all concentration-specific information.

**BS in Technology Management - Concentration in Electro-Mechanical Systems**

**Description**

Please see the main [BS in Technology Management](#) listing for all concentration-specific information.

**Program Requirements**

Please see the main [BS in Technology Management](#) listing for all concentration-specific information.

**BS in Technology Management - Concentration in Industrial Management**

**Description**

Please see the main [BS in Technology Management](#) listing for all concentration-specific information.

**Program Requirements**

Please see the main [BS in Technology Management](#) listing for all concentration-specific information.

**BS in Technology Management - Concentration in Information and Communications Technology**

**Description**

Please see the main [BS in Technology Management](#) listing for all concentration-specific information.
Program Requirements

Please see the main BS in Technology Management listing for all concentration-specific information.

BS in Technology Management - Concentration in Precision Manufacturing

Description

Please see the main BS in Technology Management listing for all concentration-specific information.

Program Requirements

Please see the main BS in Technology Management listing for all concentration-specific information.

BS in Technology Management

Description

Students in the Technology Management degree program will become technically oriented management professionals who plan, direct, organize, and control operations in a wide variety of industrial, business, and service organizations. In the program, students concentrate in one of the areas listed below.

Industrial Management Concentration

This concentration is designed to prepare graduates for leadership and management positions in a wide variety of technical environments. Students in this concentration take courses to understand the many organizational elements and functions composing industrial operations. Students completing this program will develop a broad-based, cross-sectional/functional understanding as a "generalist" management professional. This concentration is available to transfer students with an associate degree in a technical discipline and nontraditional students with related technical experience and training equivalent to an associate degree.

Precision Manufacturing Concentration

This concentration is designed to prepare graduates for leadership and management positions in a computer-intensive/automated manufacturing environment. Students in this concentration take management oriented courses in areas such as project management, industrial organization, facility planning, production control, quality, cost analysis & control, safety, accounting, and information systems. This concentration is available to transfer students with an associate degree in a manufacturing discipline and nontraditional students with related technical experience and training equivalent to an associate degree.

Information and Communications Technology Concentration

This concentration is designed to prepare graduates for leadership and management positions in a computer applications-oriented environment integral to most organizations. Students in this concentration take courses that emphasize theory and application relating to the management and operation of computer and technical systems used for communications, information management, control technology, and publishing. Students completing this program will develop a focused understanding of computer applications-based and data/information-intensive operations. Students completing this program may also elect to complete minors in computer science, business administration, economics, or studio art. This concentration is available to four year students and transfer students with an associate degree in an information related discipline and nontraditional students with related technical experience and training equivalent to an associate degree in an information related discipline.

Construction Management Concentration

This concentration is designed to prepare graduates for advancement opportunities in construction-related industries primarily as superintendents, project managers, estimators, construction managers, or project executives. Students in this concentration take courses that emphasize theories
and applications of construction contract administration, including: planning, managing, directing, organizing, and controlling construction operations. This concentration is also available to nontraditional and transfer students with enough related technical experience or coursework to satisfy the technical competency requirements of the concentration. To satisfy the technical competency requirements, nontraditional students may complete a portfolio demonstrating the completion of college-level work and specialized training that can be fully documented and qualifies for transfer credit into USM by means of a portfolio assessment. Transfer students may satisfy the technical competency requirements, through the completion of a construction-related associate's degree program from a regionally accredited community college or simply transfer into the 4 year course of study.

Electro-Mechanical Systems Concentration

This concentration is designed to prepare graduates for career leadership and management positions in computer-controlled/automated, equipment-intensive environments. Students in this concentration take courses that emphasize theory and application relating to the design, control, and integration of electrical, mechanical, hydraulic, and pneumatic components and assemblies. This concentration is also available to nontraditional and transfer students with enough related technical experience or coursework to satisfy the technical competency requirements of the concentration or to students with an associate's degree in an electricity/electronic, mechanical or computer related area. Students completing this program will develop a focused understanding of power and control systems utilized in industrial, environmental protection, construction, medical, transportation, alternate energy, and military sectors.

Program Requirements

All students must meet University Core curriculum requirements and additional Departmental requirements. Specific requirements for bachelor of science degree programs offered through the Department of Technology are indicated in the following tables. A minimum of 15 credit hours or 5 courses must be taken in the Department.

Students in the technology management degree program will be required to complete a senior assessment as part of the graduation requirement.


- Concentration in Industrial Management
  (for nontraditional/transfer students)
- Concentration in Information and Communications Technology
  (for traditional students)
- Concentration in Information and Communications Technology (for nontraditional/transfer students)
- Concentration in Precision Manufacturing
  (for nontraditional/transfer students)
- Concentration in Construction Management
  (for traditional students)
- Concentration in Construction Management
  (for nontraditional/transfer students)
- Concentration in Electro-Mechanical Systems
  (for traditional students)
- Concentration in Electro-Mechanical Systems
  (for nontraditional/transfer students)

Concentration in Industrial Management
(for nontraditional/transfer students)

The minimum number of credits required for the degree: 121

University Requirements
Writing Readiness
Math Readiness

University Core
College Writing
Quantitative Reasoning - MAT 140 (or above)
Creative Expression
Socio-cultural - Economics (ECO)
Science Exploration - Physics with Lab
Cultural Interpretation
Ethical Inquiry
Diversity
International
Thematic cluster - Professional Practices Recommended
Cluster course 1
Cluster course 2
Cluster course 3
Capstone ITT 460

Departmental Requirements
- ITP 210 Technical Writing
- MAT 148 Applied Calculus
- Statistics
- ITT 181 Computer Applications & Concepts
- Physical Science

General Elective - 6 Credits
(Academic, Professional or Technical)

Professional
- ITP 230 Project Management
- ITP 280 Industrial Organization, Management, & Supervision
- ITP 310 Facility Planning
- ITP 330 Production Control
- ITP 340 Fundamentals of Quality
- ITP 350 Teambuilding and Facilitation
- ITP 381 Human Resource Development
- ITP 410 Technical Operations and Strategies
  - OR ITP 250 - Management Information Systems
- ITP 490 Cost Analysis and Control
- ITS 320 Occupational Safety and Health
  - OR ITS 300 Ergonomics/Time Study
- ACC 110 Financial Accounting Information for Decision Making

Technical/Occupational Specialization (36 Credits)
- ITT 400 Occupational Competency (Portfolio Assessment)
  - Or an associate's degree from an accredited institution with Department approval.

NOTE: Students in the Technology Management degree programs will be required to complete a senior assessment as part of the graduation requirement.

Concentration in Information and Communications Technology
(for traditional students)

The minimum number of credits required for the degree: 121

University Requirements
- Writing Readiness
- Math Readiness

University Core
- College Writing
- EYE 112 Built Environment
- Quantitative Reasoning - MAT 140 (or above)
- Creative Expression
- Socio-cultural - Economics (ECO)
- Science Exploration - Physics or Chemistry with Lab
- Cultural Interpretation
- Ethical Inquiry
- Diversity
- International
- Thematic cluster - Professional Practices Recommended
  - Cluster course 1
  - Cluster course 2
  - Cluster course 3
  - Capstone ITT 460

Departmental Requirements
ITP 210 Technical Writing
MAT 148 Applied Calculus
Statistics
Computer Programming
ITP 250 Management Information Systems
Physical Science

General Elective - 3 Credits
(Academic, Professional or Technical)

Professional Required
ITP 230 Project Management
ITP 280 Industrial Organization, Management, & Supervision
ITP 350 Teambuilding and Facilitation
ITP 381 Human Resource Development
ITS 320 Occupational Safety and Health
OR ITS 300 Ergonomics/Time Study

Professional Electives - 12 credits
From approved ITP courses or students completing an approved minor may use courses in their minor as professional electives if they are not required courses in the INT program or otherwise used to fulfill INT degree requirements. Courses may not be used to fulfill more than one requirement on the degree worksheet. When the minor is used to fulfill the thematic cluster, the remaining minor courses may be used as professional electives up to the 1/3 restriction of the core. The remaining professional elective requirements will be filled using department professional courses. Approved minors are listed below:
Computer Science
Economics
Business Administration
Studio Art

Technical Required
ITT 181 Computer Applications & Concepts
ITT 241 Information and Communications Technologies
ITT 272 Intro to Computer Networking
ITT 281 Internet Web Site Development
ITT 282 Computer Aided Design
ITT 311 Telecommunications
ITT 343 Graphic Communications Technologies
ITT 373 Intermediate Computer Networking
ITT 382 Advanced Web Site Development

Technical Electives - 12 Credits
ITT Designated Courses

NOTE: Students in the Technology Management degree programs will be required to complete a senior assessment as part of the graduation requirement.

Concentration in Information and Communications Technology
(for nontraditional/transfer students)

The minimum number of credits required for the degree: 121

University Requirements
Writing Readiness
Math Readiness

University Core
College Writing
Quantitative Reasoning - MAT 140 (or above)
Creative Expression
Socio-cultural - Economics (ECO)
Science Exploration - Physics or Chemistry with Lab
Cultural Interpretation
Ethical Inquiry
Diversity
International
Thematic cluster - Professional Practices Recommended
Cluster course 1
Cluster course 2
Cluster course 3
Capstone ITT 460

Departmental Requirements
ITP 210 Technical Writing
MAT 148 Applied Calculus
Statistics
Computer Programming
ITP 250 Management Information Systems
Physical Science

General Elective - 9 Credits
(Academic, Professional or Technical)

Professional Required
ITP 230 Project Management
ITP 280 Industrial Organization, Management, & Supervision
ITP 350 Teambuilding and Facilitation
ITP 381 Human Resource Development
ITS 320 Occupational Safety and Health
OR ITS 300 Ergonomics/Time Study

Professional Electives - 12 credits
From approved ITP courses or students completing an approved minor may use courses in their minor as professional electives if they are not required courses in the INT program or otherwise used to fulfill INT degree requirements. Courses may not be used to fulfill more than one requirement on the degree worksheet. When the minor is used to fulfill the thematic cluster, the remaining minor courses may be used as professional electives up to the 1/3 restriction of the core. The remaining professional elective requirements will be filled using department professional courses. Approved minors are listed below:
- Computer Science
- Economics
- Business Administration
- Studio Art

Information/Communications Specialization (36 credits)

An associate's degree from an accredited institution with Department approval.

NOTE: Students in the Technology Management degree programs will be required to complete a senior assessment as part of the graduation requirement.

Concentration in Precision Manufacturing
(for non-traditional/transfer students)

The minimum number of credits required for the degree: 121

University Requirements
- Writing Readiness
- Math Readiness

University Core
- College Writing
- Quantitative Reasoning - MAT 140 (or above)
- Creative Expression
- Socio-cultural - Economics (ECO)
- Science Exploration - Physics with Lab
- Cultural Interpretation
- Ethical Inquiry
- Diversity
International
Thematic cluster - Professional Practices Recommended
Cluster course 1
Cluster course 2
Cluster course 3
Capstone ITT 460

Departmental Requirements
ITP 210 Technical Writing
MAT 148 Applied Calculus
Statistics
ITT 181 Computer Applications & Concepts
Physical Science

General Elective - 3 Credits
(Academic, Professional or Technical)

Professional
ITP 230 Project Management
ITP 330 Production Control
ITP 340 Fundamentals of Quality
ITP 410 Technical Ops. and Strategies
  OR ITP 250 Management Information Systems
ITP 490 Cost Analysis and Control
ITS 300 Ergonomics/Time Study
ITS 320 Occupational Safety and Health
ACC 110 Financial Accounting Information for Decision Making

Technical
ITP 221 Power and Energy Processing
ITP 323 Fluid Power
ITP 425 Applied Process Control Engineering
ITP 427 Applied Automation Engineering

Technical/Occupational Specialization (36 Credits)

ITT 400 Occupational Competency (Portfolio Assessment)
  OR an associate's degree from an accredited institution with Department approval.

NOTE: Students in the Technology Management degree programs will be required to complete a senior assessment as part of the graduation requirement.

Concentration in Construction Management
(for traditional students)

The minimum number of credits required for the degree: 121

University Requirements
Writing Readiness
Math Readiness

University Core
College Writing
EYE 112 Built Environment
Quantitative Reasoning - MAT 140 (or above)
Creative Expression
Socio-cultural - Economics (ECO)
Science Exploration - Physics with Lab
Cultural Interpretation
Ethical Inquiry
Diversity
International
Thematic cluster - Professional Practices Recommended
Cluster course 1
Cluster course 2
Cluster course 3
Capstone ITT 460

Departmental Requirements
ITP 210 Technical Writing
MAT 148 Applied Calculus
Statistics
ITT 181 Computer Applications & Concepts
Physical Science

Professional
ITC 100 Introduction to Construction Management
ITC 341 Construction Documents & Specifications
ITC 351 Construction Cost Estimating
ITC 432 Construction Project Management
ITC 442 Construction Jobsite Management
ITP 230 Project Management
ITP 250 Management Information Systems
   OR ITP 410 Technical Operations & Strategies
ITP 280 Industrial Organization Management and Supervision
ITP 490 Cost Analysis & Control
ITS 320 Occupational Safety and Health
ACC 110 Financial Accounting
BUS 280 Legal Environment of Business

Technical
ARC 221 Concepts of Structure UMA
ARC 231 Materials & Methods UMA
ARC 322 Structures II UMA
ARC 332 Construction Techniques UMA
ESP 260 Soil & Water Conservation
ITT 221 Power & Energy Processing
ITT 231 Technical Visualization
ITT 282 Computer Aided Design
   ITP 425 Applied Process Control Engineering
   ITP 440 Internship – Sophomore Summer
   ITP 441 Internship – Junior Summer

Technical Elective - 3 Credits
   ITP Designated Courses

NOTE: Students in the Construction Management concentration degree program will be required to complete a senior assessment; namely, the AIC, Constructor Certification Exam as part of the graduation requirement.

Concentration in Construction Management
(for nontraditional/transfer students)

The minimum number of credits required for the degree: 121

University Requirements
   Writing Readiness
   Math Readiness

University Core
   College Writing
   Quantitative Reasoning - MAT 140 (or above)
   Creative Expression
   Socio-cultural - Economics (ECO)
   Science Exploration - Physics with Lab
   Cultural Interpretation
   Ethical Inquiry
   Diversity
International
Thematic cluster - Professional Practices Recommended
Cluster course 1
Cluster course 2
Cluster course 3
Capstone ITT 460

Departmental Requirements
  ITP 210 Technical Writing
  MAT 148 Applied Calculus
  Statistics
  ITT 181 Computer Applications & Concepts
  ACC 110 Financial Accounting
  Physical Science

Professional
  ITC 100 Introduction to Construction Management
  ITC 341 Construction Documents & Specifications
  ITC 351 Construction Cost Estimating
  ITC 432 Construction Project Management
  ITC 442 Construction Jobsite Management
  ITP 230 Project Management
  ITP 250 Management Information Systems
  OR ITP 410 Technical Operations & Strategies
  ITP 280 Industrial Organization, Management, & Supervision
  ITP 490 Cost Analysis and Control
  ITS 320 Occupational Safety and Health
  BUS 280 Legal Environment of Business

Professional or Technical Elective - 3 Credits

Technical/Occupational Specialization (36 Credits)

NOTE: Completion of the construction management (CM) concentration requires a minimum of 121 credits satisfying the University, department, professional, and technical requirements. Academic course equivalency or transfer from regionally accredited construction-related associate's degree programs can only be applied to the University, department, and/or technical requirements via portfolio assessment or transfer. Students interested in the CM concentration must meet with an academic advisor regarding the suitability of credit for portfolio assessment or articulation as applied to the 121-credit requirement for graduation.

NOTE: Students in the Construction Management concentration degree program will be required to complete a senior assessment; namely, the AIC, Constructor Certification Exam as part of the graduation requirement.

Concentration in Electro-Mechanical Systems
(for traditional students)

The minimum number of credits required for the degree: 121

University Requirements
  Writing Readiness
  Math Readiness

University Core
  College Writing
  EYE 112 Built Environment
  Quantitative Reasoning - MAT 140 (or above)
  Creative Expression
  Socio-cultural - Economics (ECO)
  Science Exploration - Physics with Lab
  Cultural Interpretation
  Ethical Inquiry
  Diversity
  International
  Thematic cluster - Professional Practices Recommended
Cluster course 1
Cluster course 2
Cluster course 3
Capstone ITT 460

**Departmental Requirements**
- ITP 210 Technical Writing
- MAT 148 Applied Calculus
- Statistics
- ITT 181 Computer Applications & Concepts
- Physical Science

**General Electives - 9 Credits**
  (Academic, Professional or Technical)

**Professional**
- ITP 230 Project Management
- ITP 250 Management Information Systems
  - **OR** ITP 410 Technical Operations and Strategies
- ITP 280 Industrial Organization, Management, & Supervision
- ITP 310 Facility Planning
- ITP 330 Production Control
- ITP 340 Fundamentals of Quality
- ITP 350 Teambuilding and Facilitation
- ITP 381 Human Resource Development
- ITP 490 Cost Analysis and Control
- ITS 320 Occupational Safety and Health
- ACC 110 Financial Accounting

**Technical**
- ITT 221 Power and Energy Processing
- ITT 231 Technical Visualization
- ITT 282 Computer Aided Design
- ITT 311 Telecommunications
- ITT 323 Fluid Power
- ITT 425 Applied Process Control Engineering
- ITT 427 Applied Automation Engineering
- ITP 440 Internship

**Technical Electives - 6 Credits**

NOTE: Students in the Technology Management degree programs will be required to complete a senior assessment as part of the graduation requirement.

**Concentration in Electro-Mechanical Systems**
*(for nontraditional/transfer students)*

The minimum number of credits required for the degree: 121

**University Requirements**
- Writing Readiness
- Math Readiness

**University Core**
- College Writing
- Quantitative Reasoning - MAT 140 (or above)
- Creative Expression
- Socio-cultural - Economics (ECO)
- Science Exploration - Physics with Lab
- Cultural Interpretation
- Ethical Inquiry
- Diversity
- International
- Thematic cluster - Professional Practices Recommended
Cluster course 1
Cluster course 2
Cluster course 3
Capstone ITT 460

Departmental Requirements
ITP 210 Technical Writing
MAT 148 Applied Calculus
Statistics
ITT 181 Computer Applications & Concepts
ACC 110 Financial Accounting
Physical Science

Professional
ITP 230 Project Management
ITP 250 Management Information Systems
OR ITP 410 Technical Operations & Strategies
ITP 280 Industrial Organization, Management, & Supervision
ITP 310 Facility Planning
ITP 330 Production Control
ITP 340 Fundamentals of Quality
ITS 320 Occupational Safety and Health

Technical Required
ITT 221 Power and Energy Processing
ITT 323 Fluid Power
ITT 425 Applied Process Control Engineering
ITT 427 Applied Automation Engineering

Professional ITP or Technical ITT Elective - 3 Credits
ITT 440 Internship OR Elective in major

Technical/Occupational Specialization (36 Credits)

NOTE: Completion of the electro mechanical (EM) concentration requires a minimum of 121 credits satisfying the University, department, professional, and technical requirements. Academic course equivalency or transfer from regionally accredited related associate’s degree programs can only be applied to the University, department, and/or technical requirements via portfolio assessment or transfer. Students interested in the EM concentration must meet with an academic advisor regarding the suitability of credit for portfolio assessment or articulation as applied to the 121 credit requirement for graduation.

NOTE: Students in the Technology Management degree programs will be required to complete a senior assessment as part of the graduation requirement.

NOTE: Students who do not bring in at least 23 credits via transfer or portfolio will be required to take an EYE course.

Certificate in Construction Management

Description
This 24 credit certificate program is designed to prepare individuals for advancement opportunities in construction-related industries primarily as site managers, superintendents, project managers, estimators, directors of operations, construction managers, and project executives. Students in this program take courses that emphasize theories and applications of planning, managing, directing, organizing, and controlling construction operations.

This program is available to:

- Construction employees at any level
- Construction managers seeking additional education
• Professionals in occupations related to the construction industry
• Individuals interested in construction management who do not qualify for the degree option

Program Requirements

ITC 100 Intro Construction Management
ITC 351 Construction Cost Estimating
ITC 341 Construction Documents and Specifications
ITC 432 Construction Project Management
ITC 442 Construction Jobsite Management
ITS 320 Occupational Safety & Health
ITP 230 Project Management
ITP 490 Cost Analysis and Control

NOTE: ITP 230 is the pre-requisite for ITC 432

Certificate in Electro-Mechanical Systems

Description

This certificate program is designed to provide participants with a comprehensive understanding of electrical, mechanical, hydraulic, and pneumatic power conversion systems. Hands-on applications are included in all of these areas and provide actual lab based experiences with these systems and devices.

Each participant will also gain knowledge and hands-on experience with Allen Bradley programmable logic controllers (PLCs). PLCs are used to control state-of-the-art alternate energy generation systems, and are used to automate equipment and processes in environmental protection, alternate energy, industrial, construction, transportation, medical, and military sectors.

Program Requirements

ITT 221 Power and Energy Processing 3
ITT 323 Fluid Power 3
ITT 425 Applied Process Control Engineering 3
ITT 427 Applied Automation Engineering 3

Minor in Construction Management

Description

This minor is designed to provide a basis for students interested in construction management. Students in this program take courses that emphasize theories and applications of planning, managing, directing, organizing, and controlling construction operations.

To obtain a minor in a degree or concentration in the Department of Technology, students must take at least nine credits in the minor beyond those used in their major, technical or professional courses in another degree in the Department of Technology, or another minor.

Students can obtain only one minor in a degree or concentration in the Department of Technology, and that minor cannot be in another concentration in their degree.

Only six transfer credits can be used toward a minor in a degree or concentration in the Department of Technology and they must be equivalent to courses in the minor. Transfer courses are subject to review by the minor advisor and subject matter expert.

Any exceptions to this policy must be approved by a vote of the Department faculty.
**Program Requirements**

Minimum of 18 credit hours taken from the list of courses below and monitored by a faculty advisor in the Department. The student must declare the minor. Admission to the minor will require the completion of at least 24 credits in the student's major with a grade point average of 2.0. Successful completion of the minor will require a grade point average of 2.0 in the courses making up the minor.

- ITC 100 - Intro to Construction Management 3
- ITC 351 - Construction Cost Estimating 3
- ITC 341 - Construction Documents and Specifications 3
- ITC 432 - Construction Project Management 3
- ITS 320 - Occupational Safety & Health 3
- ITP 230 - Project Management 3

NOTE: ITP 230 is the pre-requisite for ITC 432

**Minor in Electro-Mechanical Systems**

**Description**

A minor in Electro Mechanical Systems will provide participants with a comprehensive understanding of electrical, mechanical, hydraulic, and pneumatic power systems as well as the Allen Bradley programmable logic controllers that are used to manage these systems. The new state-of-the-art laboratory facility provides hands-on applications with all of these systems and devices.

This technology is used extensively in modern occupations surrounding alternate energy, environmental science, process automation, and the construction, transportation, medical, entertainment, and military sectors. This minor is very advantageous to students majoring in these disciplines as well as those involved with computer science, physics, business, and management information systems.

To obtain a minor in a degree or concentration in the Department of Technology, students must take at least nine credits in the minor beyond those used in their major, technical or professional courses in another degree in the Department of Technology, or another minor.

Students can obtain only one minor in a degree or concentration in the Department of Technology, and that minor cannot be in another concentration in their degree.

Only six transfer credits can be used toward a minor in a degree or concentration in the Department of Technology and they must be equivalent to courses in the minor. Transfer courses are subject to review by the minor advisor and subject matter expert.

Any exceptions to this policy must be approved by a vote of the Department faculty.

**Program Requirements**

Minimum of 18 credit hours taken from the list of courses below monitored by a faculty advisor in the Department. The student must declare the minor. Admission to the minor will require the completion of at least 24 credits in the student's major with a grade point average of 2.0. Successful completion of the minor will require a grade point average of 2.0 in the courses making up the minor.

- ITP 210 - Technical Writing 3
- ITT 221 - Power and Energy Processing 3
- ITT 282 - Computer Aided Design (CAD) 3
- ITT 323 - Fluid Power 3
- ITT 425 - Applied Process Control Engineering 3
- ITT 427 - Applied Automation Engineering 3
Minor in Industrial Management

Description

This minor is designed to provide students with a variety of management courses valuable in technical environments. Students in this minor take courses to understand the many organizational elements and functions composing industrial operations. Students completing this minor will develop a broad-based, cross-sectional/functional understanding as a "generalist" management professional.

To obtain a minor in a degree or concentration in the Department of Technology, students must take at least nine credits in the minor beyond those used in their major, technical or professional courses in another degree in the Department of Technology, or another minor.

Students can obtain only one minor in a degree or concentration in the Department of Technology, and that minor cannot be in another concentration in their degree.

Only six transfer credits can be used toward a minor in a degree or concentration in the Department of Technology and they must be equivalent to courses in the minor. Transfer courses are subject to review by the minor advisor and subject matter expert.

Any exceptions to this policy must be approved by a vote of the Department faculty.

Program Requirements

Minimum of 18 credit hours taken from the list of courses below monitored by a faculty advisor in the Department. The student must declare the minor. Admission to the minor will require the completion of at least 24 credits in the student's major with a grade point average of 2.0. Successful completion of the minor will require a grade point average of 2.0 in the courses making up the minor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ITP 210 - Technical Writing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ITP 280 - Industrial Organization, Management &amp; Supervision</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ITP 310 – Facility Planning</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ITP 330 - Production Control</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ITP 340 - Fundamentals of Quality</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ITP 350 – Teambuilding and Facilitation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ITP 381 - Human Resource Development</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ITP 410 - Technical Operations &amp; Strategies</td>
<td>3 cr.</td>
</tr>
<tr>
<td>*ITP 490 - Cost Analysis &amp; Control</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ITS 300 - Ergonomics/Time Study</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ITS 320 - Occupational Safety &amp; Health</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

*NOTE: Has a pre-requisite of ACC 110 - Financial Accounting

Minor in Information and Communications Technology

Description

This minor is designed to provide students with a variety of courses in information and communications technologies. Most if not all organizations use digital information and communications systems and to an increasing degree employees are expected to have skills in those areas.

To obtain a minor in a degree or concentration in the Department of Technology, students must take at least nine credits in the minor beyond those used in their major, technical or professional courses in another degree in the Department of Technology, or another minor.

Students can obtain only one minor in a degree or concentration in the Department of Technology, and that minor cannot be in another concentration in their degree.

Only six transfer credits can be used toward a minor in a degree or concentration in the Department of Technology and they must be equivalent to...
courses in the minor. Transfer courses are subject to review by the minor advisor and subject matter expert.

Any exceptions to this policy must be approved by a vote of the Department faculty.

**Program Requirements**

Minimum of 18 credit hours taken from the list of courses below monitored by a faculty advisor in the Department. The student must declare the minor. Admission to the minor will require the completion of at least 24 credits in the student's major with a grade point average of 2.0. Successful completion of the minor will require a grade point average of 2.0 in the courses making up the minor.

- ITT 241 Information and Communications Technologies 3
- ITT 270 - Introduction to Computer Hardware 3
- ITT 272 - Introduction to Computer Networking 3
- ITT 281 - Internet Web Site Development 3
- ITT 282 - Computer Aided Design (CAD) 3
- ITT 311 - Telecommunications 3
- ITT 343 - Graphic Communications Technologies 3
- ITT 344 - Digital Video and Animation Technologies 3
- ITT 373 - Intermediate Computer Networking 3
- ITT 376 - Network Security & Ethics 3
- ITT 382 - Advanced Web Site Development 3
- ITT 384 - Advanced Computer Aided Design (CAD) 3
- COS 160 - Structured Problem Solving 3
- COS 170 - Structured Problem Solving Lab 1

(NOTE: COS 160 & 170 must be taken concurrently)

**Minor in Precision Manufacturing**

**Description**

This minor is designed to provide a background computer-intensive/automated manufacturing. Students in this minor take courses in the area of computer-aided design/manufacturing, computer-numeric-control programming (CNC), automated material handling, electronic control technology, computer-integrated manufacturing, rapid prototyping, and systems integration.

**Program Requirements**

Minimum of 18 credit hours taken from the list of courses below by a faculty advisor in the Department. The student must declare the minor. Admission to the minor will require the completion of at least 24 credits in the student's major with a grade point average of 2.0. Successful completion of the minor will require a grade point average of 2.0 in the courses making up the minor.

- ITT 103 - Materials Properties & Testing 3
- ITT 221 - Power & Energy Processing 3
- ITT 231 - Technical Visualization 3
- ITT 241 - Information and Communications Technologies 3
- ITT 252 - Material Processing 3
- ITT 282 - Computer Aided Design 3
- ITT 323 - Fluid Power 3
- ITT 353 - Automated Materials Processes 3
- ITT 384 - Advanced Computer Aided Design 3
- ITT 425 - Electronic Control Technology 3
- ITP 410 - Technical Operations & Strategies 3
Course Descriptions

ITC 100 Introduction to Construction Management
This course is the first course in the construction management program and will introduce students to construction management. Topics include: the scope of the construction industry, the scope of management activities, the bidding process, contracts, project stages, cost estimating, administration, operations and site management, project planning and scheduling, project monitoring, construction safety and health, and personal and company equipment. Offered fall semester only. Cr 3.

ITC 341 Construction Documents and Specifications
This course will consist of a comprehensive overview of the value and importance of how the construction documents define the rights of, responsibilities of, and relationships among all the parties that are necessary for the successful completion of any construction project. Students will gain an understanding of the roles and relationships of all participants, the architect/engineer (A/E), the contractor(s) and all other project participants who must work within guidelines for a successful project, from conception through design and construction to facility management. Investigation into various documents, agreements, conditions of contracts and specifications will be addressed. The importance of standardized document format will be emphasized. Prerequisite: ITC 100 or instructor permission. Offered fall semester only. Cr 3.

ITC 351 Construction Cost Estimating
This course will train students to estimate the costs of various construction activities. Emphasis will be placed on the theory and application of the primary concepts used in the analysis and control of costs pertaining to planning, development, and managing construction operations. The major themes of the budget estimating process; the bid contract estimating process; the negotiated contract estimating process; and advanced estimating techniques will be covered in the course. Spreadsheets and commercial estimating applications will be used. Prerequisite: ITC 100 or instructor permission. Offered fall semester only. Cr 3.

ITC 432 Construction Project Management
This course focuses on construction project scheduling and control using contemporary computer applications. Topics covered include: activity and resource scheduling, schedule updating and control, project resource management, contract management, cost management, contractor integration, and change management. Prerequisites: ITC 100 and ITP 230 or instructor permission. Offered spring semester only. Cr 3.

ITC 442 Construction Jobsite Management
This course will consist of an examination of the responsibilities and challenges of a construction job site superintendent and project manager including construction contract administration. Standards by professional associations including the American Institute of Architects (AIA), Engineers Joint Contract Documents Committee (EJCDC), Design-Build Institute of America (DBIA) and ConsensusDocs will be examined. The major portion of this course will consist of an examination and review of project and site planning, administration, submittals, coordination, materials, methods, codes, QA & QC, safety, project documentation, laws, regulations, interpretations, modifications, claims, disputes, measurements, payments, and closeout. Actual construction examples will be used. Prerequisites: ITC 100 and ITC 341. Offered spring semester only. Cr 3.

ITP 210 Technical Writing
A basic technical writing course that strengthens critical thinking, collaboration, and communication skills. Study includes document purpose, situation analysis, style, format and production of reports, proposals, instructions, procedures, technical descriptions, forms, letters, memos, and visual aids, as well as digital and virtual communication. Fulfills "W" requirement. Prerequisite: ENG 100 or instructor permission. Offered fall and spring semesters and summer session. Cr 3.

ITP 230 Project Management
This course will present a structured analysis of planning, organizing, directing, controlling, and monitoring resources related to project management by completing a set of well-defined tasks. Within this course, significant effort will be devoted to understanding the international social, political, economic, environmental and cultural issues in context of the interrelationships, responsibilities, and demands of project management between technologies, resources, project scope, and budget that impact project success in a global, international environment. Case studies will be used throughout the course to broaden the perspective and understanding of the participant's knowledge and application of project management's best practices, and their ability to create and evaluate projects and project performance in an international, global economy. The introduction of computer-based tools in the management of projects will also be covered. Fulfills the international requirement. Offered fall and spring semesters and online during summer session. Cr 3.

ITP 250 Management Information Systems
This course will serve as an introduction to management information systems in areas such as: decision support systems, resource and human resource management, enterprise resource planning, supply chain management, customer relationship management, project management, and records management. Topics covered will include but are not limited to: systems analysis, system modeling and design, data acquisition, security, and maintenance. Offered fall semester only. Cr 3.

ITP 280 Industrial Organization, Management, and Supervision
An introduction to industrial organization and management. A study of the common elements of industry as it relates to the areas of research and development; industrial relations; production; financial control; marketing; and labor. Management and supervisory theory and practices will be highlighted. Emphasis will also be placed upon contemporary issues/problems/trends associated with a global economy. Offered spring semester
An introduction to current and emerging computer applications. The course includes an overview of basic computer hardware and operating system, file management, and general application software. Emphasis is on computer terms, concepts, and the integration of activities, including

**ITP 310 Facility Planning**
This course provides participants with the analytical tools and knowledge to effectively and efficiently plan the physical facility for a wide variety of enterprises. Case studies used in this course may include: hospitals, airports, manufacturing plant floors, distribution centers, fire departments, grocery and retail stores, college campuses, construction sites, and shopping malls. Offered fall semester and online on a two-year summer rotation. Cr 3.

**ITP 330 Production Control**
Lectures, discussions, and problems dealing with the principles and practices of production and inventory control. Study includes information flow, forecasting, scheduling, capacity planning, material requirements planning, shop floor control, economic order quantities, order point analysis, ABC analysis, line balancing, project scheduling and just-in-time techniques. Prerequisite: basic math competency. Offered fall semester only. Cr 3.

**ITP 340 Fundamentals of Quality**
An overview addressing fundamental concepts and principles of quality control applied to organizations. Major topics include theory and application of qualitative and quantitative tools and techniques as well as quality awards and standards. Specific topics include foundations of quality, planning tools, traditional tools, variability, process set-up verification, pre-control, SPC process capability analysis, acceptance sampling, and quality awards. Prerequisite: MAT 120 or instructor permission. Offered fall semester only. Cr 3.

**ITP 350 Teambuilding and Facilitation**
An exploration to the diversity of topics related to team building, group dynamics, and an introduction to the practices and goals of successful facilitation of face-to-face groups and virtual meetings. Teambuilding topics include member and group participant types and functions; stages to teambuilding; creating and building teams; dysfunctions and conflicts within teams and groups; and teams in the roles of content controllers. Facilitation topics include developing techniques and skills in the role of a meeting facilitator and process leader, identifying and defining individual participant behaviors and how those interrelationships affect team dynamics, developing and designing facilitation agendas, preparing and performing facilitations, facilitating conflict, creating participation, and meeting management and ethical responsibilities. Offered fall and spring semesters. Cr. 3

**ITP 381 Human Resource Development**
Students are introduced to the various functions of human resources in industrial settings. Topics covered include human resource planning, job analysis, employee selection, performance management, compensation, benefits management, safety, training, and employee relations. Offered fall semester only and online on a two-year spring rotation. Cr. 3.

**ITP 410 Technical Operations and Strategies**
This course will focus on the theory and application of concepts utilized to maintain global manufacturing competitiveness. Major topics may include Six Sigma, lean manufacturing, kanban, autonomation, visual signaling, poka-yoke, takt time, and kaizen techniques. Waste elimination, set-up time reduction, and continuous improvement theory and practices will be highlighted. Prerequisite: ITP 310 or instructor permission. Offered on a two-year spring rotation. Cr 3.

**ITP 490 Cost Analysis and Control**
This course will cover the theory and application of concepts used in analysis and control of costs pertaining to planning, developing, and managing industrial operations. Concepts include financial/cost accounting, time value of money, methods of evaluating competing alternatives, economic value-added analysis, and capital equipment cost justification. Prerequisite: ACC 110 or instructor permission. Offered on a two-year spring rotation. Cr 3.

**ITS 300 Ergonomics/Time Study**
A study of the bio-mechanics of the human body and how it interacts with a workplace while performing human activity. Surface electromyography measurements techniques are employed along with lifting analysis software, to measure stress on the body, with the effort to eliminate cumulative trauma disorders. Time study measurement techniques are employed in the development of time standard so one will be able to predict productivity. Prerequisite: basic math concepts or instructor permission. Offered spring semester only. Cr 3.

**ITS 320 Occupational Safety and Health**
This course covers the importance of safety and health in the workplace. Emphasis will be placed on the worker in the work environment with an emphasis on OSHA and other regulatory agencies, measures for identifying and controlling workplace hazards, record keeping and reporting, ergonomics, workplace violence and security, fire prevention, electrical safety, hazardous materials, job safety analysis, risk assessment, machine safeguarding, hazardous waste, and selected environmental problems. This course includes the online delivery of OSHA’s 30 hour training program, powered by 360training.com, an OSHA-authorized provider. Students can select the general industries or construction OSHA program. Offered fall and spring semesters. Cr 3.

**ITT 181 Computer Applications & Concepts**
An introduction to current and emerging computer applications. The course includes an overview of basic computer hardware and operating system, file management, and general application software. Emphasis is on computer terms, concepts, and the integration of activities, including
operating system functions, word processing, spreadsheets, databases, graphics, and communication. Offered fall semester only. Lecture and lab. Cr 3.

**ITT 221 Power and Energy Processing**
A technical investigation into energy converters and transactional power systems. Course emphasis is on mechanical and electrical power converters and transmission systems as well as their applications to modern technology and equipment. Theory and lab applications. Offered fall semester only. Cr 3.

**ITT 231 Technical Visualization**
This is an essential foundational course of conventional Technical Visualization, with an emphasis on technical foundations in sketching and drawing 2D and 3D illustration graphics, and exploring technical visualization skills development for problem solving. Content includes basic skills development using contemporary standards for technical sketching for creating orthographic projections, detail and assembly working drawings, and pictorial projections, instructional storyboarding, and developing visual thinking skills for creating technical visualizations and presentations. This course is an essential foundation to skills developed in ITT 282 Computer Aided Design. Offered spring semester only. Cr 3.

**ITT 241 Information and Communication Technologies**
This course is an assessment of historical and state-of-the-art communication. The course focuses on the diversity of information and communication systems with a commitment to developing an understanding of the international, social, political, economic, environmental and cultural issues in a context of their interrelationships, responsibilities, and demands on technology professionals. This course is designed to engage and raise awareness of socio-economic, legal and ethical impacts of information technology and technological advances in communications. Students will participate in a variety of hands-on projects related to lecture topics on established and emerging information and communication technologies, develop strategies and formulate a proposal for addressing appropriate communication strategies, review literature, develop a report, and make an oral presentation in class. Lecture and lab. Offered fall semester only. Cr 3.

**ITT 270 Introduction to Computer Hardware**
The goal of this course is to introduce the hardware components, and their respective functions, of microcomputer systems. Activities address the specification, assembly, upgrading, and maintenance of microcomputers. Assignments may include readings of articles and Web-based documents, discussions, tours, and hands-on activities dealing with microcomputer hardware. A basic proficiency with personal computers is assumed. Offered on a two-year fall rotation. Cr 3.

**ITT 272 Introduction to Computer Networking**
The goal of this course is to develop an understanding of computer networks and provide basic background necessary for their construction and maintenance. It consists of readings, discussions, tours, and hands-on activities dealing with the structure, hardware, software, and protocols that make up computer networks. Prerequisite: ITT 181 or instructor permission. Offered fall semester only. Cr 3.

**ITT 281 Internet Web Site Development**
This course develops a basic understanding of and skill in the design, development, and maintenance of Web sites. Topics include Internet fundamentals, Web site design methods, XHTML, cascading style sheets, HTML editors, FTP, site maintenance, intellectual property issues, and working with clients. Students will develop sample Web pages and associated planning documents, and maintain a Web site on a server. It is assumed that students will have a working knowledge of personal computers. Offered fall and spring semesters. Cr 3.

**ITT 282 Computer-Aided Design**
An introduction to computer-aided design systems and their relationship to design, drafting, production, and documentation processes. Emphasis is on understanding and utilizing computer-aided design (CAD) hardware and software. The course focuses on basic 2D and 3D functions as they generally apply to computer-aided design applications. Lecture and lab. Prerequisites: computer proficiency and interpretation of technical drawings. Prerequisite: ITT 181 or instructor permission. Offered fall and spring semesters. Cr 3.

**ITT 311 Telecommunications**
An introduction to contemporary telecommunications hardware and applications. Emphasis includes state-of-the-art transmission media such as copper, fiber-optic, and wireless technologies including microwave, radio frequency, and infrared. Additional topics may include: classification of data networks; communications systems parameters such as bandwidth, serial parallel, analog and digital; modulation and multiplexing schemes; and the convergence of data, video, and voice networks. Prerequisite: ITT 181 or instructor permission. Offered fall semester only. Cr 3.

**ITT 323 Fluid Power**
An investigation into the theory and application of hydraulic and pneumatic systems in modern day technology and equipment. Course emphasis includes the design, purpose, construction, and maintenance of fluid power devices and systems. Theory and lab applications. Offered spring semester only. Cr 3.

**ITT 342 Digital Publishing Technologies**
This course explores methods and technologies for the design of digital documents and assemblage of content information and for reproduction and repurposing to a diversity of media. Emphasis is on a practicum utilizing state of the art computer-based desktop publishing hardware and software. Activities and topics include design, layout, and management of color digital document preparation for production and cross-media specifications; digital imaging and color management; digital vector graphics for illustration, large format, and packaging products; and variable
data management for output systems. An emphasis on terminology, applications, processes, materials and substrates used in conventional and
digital workflows for creating artifacts. A combination of weekly lectures, and labs. Prerequisite: ITT 343 or instructor's permission. Cr 3.

**ITT 343 Graphic Communication Technologies**
Graphic communications encompasses a diversity of foundational and state-of-the-art communication technologies as tools for the exchange of ideas and information. This course is a comprehensive survey of conventional and digital graphic communication technologies as reproduction systems devoted to understanding international social, political, economic, environmental and cultural issues in context of the interrelationships, responsibilities, and demands of digital media professionals. As practicum, there will be a hands-on focus on overall digital workflows that incorporate contemporary processes, equipment, and materials; digital imaging and publications; and design of digital documents and illustrations for diverse media. Offered spring semester only. Lecture and Lab Cr 3.

**ITT 344 Digital Video and Animation Technologies**
This course surveys the fundamentals of digital video and animation. A focus on the application of recognized workflows and contemporary processes; and exploring emerging digital technologies for electronically capturing, recording, processing, storing, transmitting, and reconstructing a sequence of still images representing scenes in motion. Topics include established systems and emerging technologies for motion analysis, image processing, codecs, compression rates, and output technologies for image sharing on the Internet and cross-media; and the effect of optical illusion of motion due to the phenomenon of persistence of vision, and the methods of presenting animation as a motion for visualizations and gaming. Prerequisite: ITT 231 or instructor permission. Offered spring semester only. Lecture and Lab Cr 3.

**ITT 373 Intermediate Computer Networking**
The goal of this course is to build upon and further the understanding of computer networks. Activities address the detailed construction, upgrade designs, and maintenance of both large and small networks. Assignments may include readings of articles and Web-based documents, discussions, tours, and hands-on activities dealing with structure, hardware, software, security, and protocols that make up modern computer networks. Prerequisite: ITT 272 (or ITT/TCE 370) or instructor permission. Offered on a two-year fall rotation. Cr 3.

**ITT 376 Network Security and Ethics**
This course examines the issues of network security from both the liabilities and the guarantees that face network administrators and network security officers. Interrelated with the issues of network security are the ethical responsibilities of those who manage computer networks. Topics addressed in this course will include practical approaches to securing networks using risk analysis, cost effective countermeasures, layered defenses, and policy development and implementation procedures. This course addresses current topics in "cyber security" and information security "infosec" issues as they pertain to a broad array of networked devices. Prerequisites: ITT 272 or instructor permission. Offered on a two-year fall rotation. Cr 3.

**ITT 377 Networking for Video and Multimedia**
This course provides a technical introduction to video and multimedia systems as they are developed, delivered, and managed over high-speed networks. Students will explore and work with video and multimedia file formats, and storage systems with a focus on high-speed networks. Video and multimedia standards and protocols will be examined including compression and security aspects of delivering audio, video, animation, games, simulations, and new forms of media. Bandwidth, interactivity, quality of service, platform support, and standards are key components of this course. Prerequisite: ITT272 or instructor permission. Offered on a two year spring rotation. Cr 3.

**ITT 382 Advanced Web Site Development**
This course develops an understanding of techniques that go beyond basic HTML to develop dynamic Web sites. Topics include a review of XHTML and cascading style sheets, server-side programming, writing to and reading from files and databases, site design, and coding standards. Students are expected to be proficient with HTML, HTML editors, JPEG and GIF image manipulation, FTP, and basic Web site maintenance. Some programming experience is desirable. Prerequisite: ITT 281, COS 160 or equivalent, or instructor permission. Offered on a two year spring rotation only. Cr 3.

**ITT 384 Advanced Computer-Aided Design**
An advanced computer-aided design course focusing on three-dimensional modeling, image rendering, and animation. Emphasis is on understanding and utilizing current and emerging computer-aided and design hardware and software to present designs, products, and processes effectively. The course emphasizes basic concepts of three-dimensional model creation and use. Prerequisite: ITT 282 or instructor permission. Offered on a two-year spring rotation. Cr 3.

**ITT 385 Integrative Programming**
Organizations use many disparate technologies that need to communicate and work with each other. Integrative Programming focuses on the "glue" that holds systems together. It surveys several programming languages, including scripting languages, as each has different applications to integration. System architectures such as service-oriented architectures, programming interfaces such as Web services and REST, and programming practices such as mediation support the management, evolution and security of the information systems that support the organization. Prerequisites: COS 160/170 and COS 161 (may be co-requisite). Offered spring semester only. Cr 3.

**ITT 400 Occupational Competency**
This course is designed to allow credit for technical expertise learned on the job or through attendance at appropriate/related schools, workshops, and/or seminars. The student's technical knowledge and skill must be documented through the Department's portfolio assessment procedures. See
advisor for further information. Cr 1-36.

**ITT 425 Applied Process Control Engineering**
A study of concepts, devices, and applications of electronic controllers and input/output components used to automate cutting edge equipment. Hands-on laboratory sessions focus on instrumentation, writing programmable logic controller programs based on an equipment operating specification, downloading, and interfacing discrete real world input / output devices to Allen Bradley programmable logic controllers. Prerequisites: ITT 181, ITT 221, ITT 323 or instructor permission. Offered spring semester only. Cr 3.

**ITT 427 Applied Automation Engineering**
In addition to the theory, participants gain "hands-on" experiences with robots and actually design, fabricate, wire, program, and debug a closed loop automated piece of equipment. Emphasis includes system components, communications integration, programming, and feedback devices. Prerequisites: ITT 221, ITT 323, ITT 425 or instructor permission. Offered spring semester only. Cr 3.

**ITT 440 Related Occupational Experiences/Internships**
This experience is designed to advance technical and supervisory skills during employment with a business or industry. Interested students must meet with the internship coordinator prior to the job search process. The hosting firm and the job description must be approved by the coordinator prior to course registration. Securing suitable employment is the student's responsibility. Formal assignments will be discussed during weekly seminars. Contact the internship coordinator for additional information. Health insurance is required of students in this course. Prerequisite: instructor permission. Offered fall, spring and summer semesters. Cr 1-3.

**ITT 441 Advanced Occupational Experiences/Internships**
This second-level course is a continuation of the occupational/internship experience in ITT 440. It is designed to further advance technical and supervisory skills during employment with a business or industry. Interested students must meet with the internship coordinator prior to the job search process. The hosting firm and the job description must be approved by the coordinator prior to course registration. Securing suitable employment is the student's responsibility. Formal assignments will be discussed during weekly seminars. Contact the internship coordinator for additional information. Health insurance is required of students in this course. Prerequisites: ITT 440 and instructor permission. Offered fall, spring and summer semesters. Cr 1-3.

**ITT 444 Digital Imaging Technologies**
This course will explore digital photography fundamentals and discuss and apply workflows for digital imaging systems. Emphasis on fundamental image capture, equipment calibration of input and output devices, creating color management profiles for digital cameras, imaging technologies, and output devices. Course includes lecture and hands-on labs for creating, capturing and manipulating digital images for cross-media applications and content management systems. Prerequisite: ITT 343 or instructor permission. Cr 3.

**ITT 460 Capstone**
This is a senior level course that integrates curriculum content from previous courses to create a capstone experience with a focus on project management. Students will use project management and technical communication techniques to select, complete, and report on an individual or team project that demonstrates achievement at the application and syntheses level. Prerequisite: graduating senior status and instructor permission. Offered fall and spring semesters. Cr 3.

**ITT 490 Directed Study**
Provides upper-level students an opportunity to pursue independently a topic, project, or experiment of interest. Students will prepare a contract or proposal for study to be conducted and, upon completion, submit findings in a scholarly report or other evidence of merit. Prerequisite: instructor permission. Offered fall and spring semesters. Cr var.
Self-Designed Major Programs

BA in Self-Designed Major with a Concentration In Elementary and Middle School STEM Education

Description

The undergraduate Science, Technology, Engineering, and Mathematics (STEM) Self-Designed Contract Major for pre-service elementary and middle (K – 8) education teachers is designed to prepare those seeking elementary and middle school (K – 8) certification in Maine with a strong foundation in mathematics and science and essential knowledge in integrating the disciplines through modeling, engineering, research, and technology. The overarching goal of the program is to prepare the pre-service teachers with a deep understanding of the Common Core Mathematics and Next Generation Science Standards. The coursework models best teaching practices and emphasizes using reading and writing across the STEM curriculum and focuses on hands-on, problem-based learning. Interested students should see the STEM education coordinator upon acceptance at USM, matriculation, upon choosing this major, or as early in their time at USM as possible. Further concentration in Elementary Education offers a continuous focus on both the theory and practice of teaching through a sequence of pre-internship education courses and field experiences.

Students completing the degree will have satisfied the USM Core Curriculum, the STEM Education Major, and Elementary Education Concentration, as well as liberal arts courses required for initial K-8 teacher certification. Graduates who complete the degree are eligible for recommendation for K-8 teacher certification in Maine. A minimum of 77 credits are required for the STEM Education major (note: additional credits are required for the Elementary Education Concentration and liberal arts courses required for initial K-8 teacher certification in Maine) and USM requires 120 credits total for graduation.

Program Requirements

USM Core Courses (including pre-internship education courses that are required for the Concentration in Elementary Education; 24 additional credits above those required by the major)

- Early Year Experience – EYE 112 Built Environment: Energy (This is a required course for all students to complete the major even those who have already completed or are not required to take an EYE course.) – 3 credits
- College Writing (ENG 100 College Writing is recommended.) – 3 credits
- Quantitative Reasoning – MAT 120 Introduction to Statistics (This course is a requirement for the major.) – 4 credits
- Socio-Cultural Analysis – HRD 200: Multicultural Growth and Development (This course is a requirement for the Elementary Education Concentration.) – 3 credits
- Science Exploration – This is fulfilled by several courses that are required for the major.
- Cultural Interpretation – (ENG 120 Introduction to Literature is recommended.) – 3 credits
- Creative Expression – EDU 230 Teaching through the Arts (This course is recommended for this track of the Elementary Education Concentration.) – 3 credits
- Ethical Inquiry, Social Responsibility, and Citizenship: EDU 310 What is the Purpose of Education in a Democracy? (Requirement for the Elementary Education Concentration and the International core requirement) – 3 credits
- Diversity: EDU 305 Foundations of Cultural and Linguistic Diversity (This course also serves as the first course in the cluster.) – 3 credits
- Education in a Democratic Society Cluster – Additional required courses are SED 335 - Students with Exceptionalities in General Education & SED 420 Multi-Tiered Systems of Educational Support
- Capstone – SDM 405: Capstone in STEM Education: Engineering, Technology, and Mathematical and Scientific Modeling – 3 credits

Major Coursework (Total credits required for the major is 78 – 80)

Mathematics Content (24 credits)

- MAT 108 College Algebra – 4 credits
- MAT 120 Introduction to Statistics – 4 credits
- MAT 131 Number Systems for Elementary School Teachers – 3 credits
- MAT 231 Algebra for Elementary School Teachers – 3 credits
- MAT 232 Geometry for Elementary School Teachers – 3 credits
- MAT 152 Calculus A or MAT 220 Statistics for the Biological Sciences – 4 credits
- MAT 242 Applied Problem Solving – 3 credits
Science Content (27-29 credits)

- STH 111 Life Science & Ecology for K-8 Teachers – 4 credits
- STH 112 Physical & Earth/Space Science for K-8 Teachers – 4 credits
- CHY 113 and CHY 114 Principles of Chemistry I and Lab – 4 credits
- PHY 111 and PHY 114K Elements of Physics I and Lab – 5 credits
- ESP 125 and ESP 126 Introduction to Environmental Ecology and Lab – 4 credits
- One of the following 200-level science courses: ESP 207/GEY 207 Atmosphere: Science, Climate, and Change; GEY 208 Environmental Geology; ESP 260 Soil/Water Conservation Engineering; or ESP 280 Research and Analytical Methods – 3 to 4 credits
- One of the following 300 or 400-level science courses: ESP 303 Wetlands Ecology; GEY 205 Water Resources: Science and Issues; ESP 313 Renewal Energy; ESP 341 Limnology; ESP 412 Field Ecosystem Ecology; or ESP 413 Forestry Ecology – 3 to 4 credits

Engineering and Interdisciplinary STEM Content (6 credits)

- EYE 112 Built Environment: Energy (This is a required course for all students to complete the major even those who have already completed or are not required to take an EYE course) – 3 credits
- SDM 405: Capstone in STEM Education: Engineering, Technology, and Mathematical and Scientific Modeling – 3 credits

Mathematics and Science Content and Pedagogy (21 credits)

- MME 400 Elementary Mathematics Methods – 3 credits
- EDU 452 Teaching Science K-8 – 3 credits
- MME 435 Professional Internship – 9 credits (Will be taken over 2 semesters)
- MME 436 Teaching Seminar – 6 credits (Will be taken over 2 semesters)

Additional Professional Education Internship Year Requirements for Elementary Concentration/Certification (9 credits)

- EDU 451 Teaching Social Studies K-8 (3 credits)
- EDU 465 Teaching Reading K-8 (3 credits)
- EDU 466 Teaching Writing Process K-8 (3 credits)

Electives:

Students must complete elective credit to complete the 120 credit hour degree. For those seeking elementary certification, the Core Curriculum allows students to meet the minimum requirements for distributed credits across the liberal arts (i.e., all students must have at least 6 credits in English, math, science, and social studies). The following courses are also recommended:

Social Studies (6 credits) – HTY 101 Western Civilization I & HTY 123, United States History Since 1900

Students should consider taking education courses that will support them to become better teachers including, but not limited to, topics such as literacy, technology, understanding and collaborating with families.

Other Requirements:

All undergraduate and graduate students who matriculate into an Educator Preparation program or pathway in USM summer 2013 or later are required to subscribe to the Tk20 online data management system. The subscription allows students to use the system for assessment, advisement, field-experience and career portfolio management. The subscription fee of $103 covers some of the expenses related to the administration and assessment of the program. For loan purposes, it will be eligible for consideration as part of costs. The subscription is a one-time payment and must be made by each student during the first semester of program or pathway matriculation (check with individual programs and pathways for specific subscription timelines). Subscription instructions are posted on the Office of Educator Preparation web site: http://usm.maine.edu/educatorpreparation.

Please note Professional Education Council Policy: In order for USM’s Education Preparation Unit program completers to be recommended by the institution to the state for certification or licensure, the candidate must provide evidence of meeting all certification requirements including proficiency on the standards relevant to his/her state approved professional program and this evidence must be compiled and assessed within the context of the Unit’s data management system (i.e., Tk20).

For the purposes of field placements in schools during the educational cluster and internship year, students are required to complete and show documentation of the fingerprinting process outlined by the Maine Department of Education: http://www.maine.gov/doe/cert/fingerprinting/

Students must maintain a high level of academic achievement. Minimum academic requirements are as follows:

A grade of C or better in all University Core and major coursework.
A grade of B or better in all professional education coursework.

An overall GPA of 3.00 or better.

Prior to admission to the professional internship year, students must pass the Praxis II exam and demonstrate satisfactory progress toward the State of Maine Core Teaching Standards.
Professional & Continuing Education

Executive Director: Monique M. LaRocque
Director of Program Development: Susan Nevins; Director of Operations: Stacy Calderwood; Executive Director, National Resource Center (NRC) for Osher Lifelong Learning Institutes: Kali Lightfoot; Director of Online Teaching and Learning: Khusro Kidwai

Professional and Continuing Education (PCE) provides and supports opportunities which enable students to make progress towards completing their degrees, expand their professional capacities, and enrich their lives through lifelong learning. PCE offers winter and summer sessions to provide year-round opportunities as well as online and weekend formats to increase access for all students. PCE supports the transition and/or development of academic programs into alternative formats and schedules that meet the needs of today's diverse student population. Through partnerships with academic departments the division provides leadership in expanding programs geared to the adult population and marketing and student services necessary to support these programs.

Program Areas

USM Online

PCE works with academic departments to offer undergraduate and graduate programs in a fully online format. For 2014-15, the following programs are available online:

- **Undergraduate Degrees**
  - B.S. in Business Administration, General Management, Generalist Track
  - B.A. in Liberal Studies, Humanities Track
  - B.S. in Applied Technical Leadership
  - B.S. in Leadership and Organizational Studies
  - B.S. in Leadership and Organizational Studies, Integrative Professional Studies Track
  - B.A in Communication

- **Undergraduate Certificates**
  - Certificate in Gerontology
  - Certificate in Leadership Studies
  - Certificate in Creative Leadership and Global Strategy

- **Graduate Degrees**
  - M.S. in Adult and Higher Education
  - M.S. in Special Education
  - M.A. in Leadership Studies

- **Graduate Certificates**
  - Certificate of Graduate Study in Leadership
  - Certificate of Graduate Study in Creative Leadership and Global Strategy

USM Summer

USM Summer offers over 500 courses, both on campus and online, in condensed formats ranging from one to seven weeks. In addition, a variety of innovative institutes and conferences are sponsored during the summer months. Short-term travel programs offer students a vibrant learning experience and an excellent opportunity to earn up to six credit hours in one- to five-week international or domestic travel-based courses. Contact us by email at summer@usm.maine.edu, by phone at (207) 780-5900, or online at usm.maine.edu/summer

USM Winter

USM Winter offers online courses and some short-term travel-based courses during the break between fall and spring semesters. This term provides an opportunity for students who want to accelerate their degree progress. Contact us by email at winter@usm.maine.edu, by phone at (207) 780-5900, or online at usm.maine.edu/winter

USM Weekend

USM Weekend offers a variety of courses from Friday evenings through Saturday afternoons each term, making onsite, traditional academic coursework more feasible for working adults. Contact us by email at pce@usm.maine.edu or by phone at (207) 780-5900.
USM Off-Campus

USM provides a variety of distance education courses at the University College Centers in Bath/Brunswick and Saco/Biddeford, along with other statewide sites. These Centers offer an array of services including registration, admission, financial aid, and academic advising.

- Bath/Brunswick, 9 Park Street, Bath, ME 04530, (207) 442-7736 or 800-696-2329
- Saco/Biddeford, 110 Main Street, Saco Island, Saco, ME 04072, (207) 282-4111 or 800-696-3391

Professional Development Programs

Professional Development Programs (PDP) provide professional development opportunities for individuals with a focus on intensive, in-depth certificate programs and short-term, skills-based courses in Business and Industry Professional Practices; Communication and Business Skills; Human Resources; Supervision and Leadership; Training and Development; Grant Writing and Fundraising; and Healthcare Practice, Management, and Leadership. These noncredit programs earn CEUs that are required by some professions for re-licensure. PDP also offers customized training to meet the specific business needs of local organizations. Training can be delivered at the Abromson Center in Portland or on site. Contact us by email at pce@usm.maine.edu, by phone at (207) 780-5900, or online at usm.maine.edu/pdp.

Osher Lifelong Learning Institute (OLLI) at USM

The Osher Lifelong Learning Institute (OLLI) at USM is a membership organization for people 50 years and older, committed to providing a variety of intellectually challenging courses and activities in a creative and inclusive learning community. An extensive array of liberal arts and science courses are peer taught by volunteer faculty. There are no entrance requirements or grades, and no college background is needed. OLLI at USM also sponsors lectures including the SAGE series, social activities, and educational travel. Membership and course fees are affordable and scholarships are available. Contact us by phone at (207) 780-4406 or online at usm.maine.edu/olli.

National Resource Center for Osher Lifelong Learning Institutes

The National Resource Center for Osher Lifelong Learning Institutes is a communication hub disseminating management resources and best practices, planning conferences, and providing general support for a network of 119 OLLIs in 50 states with 137,000 total members over the age of 50 participating in “learning for the joy of learning”. The OLLIs are funded by The Bernard Osher Foundation of San Francisco. The National Resource Center also houses the office of the Maine Senior College Network which provides communication, and resources for the 17 Senior Colleges located throughout Maine. Contact us by phone at (207) 780-4128 or online at www.osopher.net or www.maineseniorcollege.org.

Service Courses

PCE offers service courses that fulfill specific requirements of some USM programs.

**ABU 190 Spreadsheets and Problem Solving**

Spreadsheet proficiency is a graduation requirement for some academic programs. Proficiency can be demonstrated by earning a C or higher grade in this course, or by successfully passing a spreadsheet proficiency exam. ABU 190 is an examination of problem-solving techniques using modern computer applications software. The primary focus is on the use of electronic spreadsheets as a problem-solving tool, including proper spreadsheet model design and the use of appropriate graphical representation of model results. Other computer problem-solving software is examined. Interpretation and effective communication of results, both written and oral, are practiced. Every semester. Prerequisite: MAT 101 (C- or higher) or equivalent proficiency and computer literacy. Cr 3.

PCE Student Services

PCE provides a team of Service Representatives and Advisors in support of all PCE programming.

Student Service Representatives

Student Service Representatives provide student inquiry support and registration services for all PCE program areas including: summer, winter, online, non-degree, and professional development programs.

Enrollment and Student Success Advisors

PCE also provides student support services for online, non-degree, and adult (25+) students from initial inquiry through graduation. This
includes support from an Enrollment Advisor, who guides students through the admission process, including financial aid, prior learning experience, transfer evaluation and course registrations. Students who matriculate into an online degree or certificate program, are assigned to an Online Advisor who will support them through graduation. Students who matriculate into a campus program are assigned advisors through Student Success.

Student Service Center

Our PCE Student Service Center is located in the USM Abromson Center at 88 Bedford Street, Portland, Maine. Contact us by email at pce@usm.maine.edu, by phone at (207) 780-5900, or online at usm.maine.edu/pce/services.

Faculty Services

Center for Technology Enhanced Learning (CTEL)

The Center for Technology-Enhanced Learning (CTEL) offers the following resources to USM faculty, staff, and students: learning design support, faculty development, and support with the use of learning technologies including the Blackboard learning management system. With the goal of expanding higher education opportunities for the people of Maine and beyond, CTEL focuses its efforts on supporting courses and academic programs that attract new audiences to USM, for example, place-bound or working adults. CTEL works closely with other USM units including the Glickman Library, ITMS, Learning Commons, and Faculty Commons. CTEL delivers the following year-round programming: monthly CTEL Speaker Series, monthly CTEL Newsletters, biweekly CTEL Workshops. CTEL also offers the following grant programs: CTEL Course Design grants, CTEL Technology-Enhanced Learning grants, and CTEL Travel Awards. Contact CTEL by phone: (207) 780-4077, email: ctel-help@usm.maine.edu, or online: usm.maine.edu/ctel.

Event Management Services

Conference Services

Conference Services provides comprehensive event planning services to internal and external groups accessing USM facilities for meetings, conferences or other functions. Services (including space rentals, catering, registration, reporting, logistics, and planning) are available both on and offsite. Contact us by phone at (207) 780-5960, email at conferences@usm.maine.edu, or online at usm.maine.edu/conferences.
University of Maine School of Law

University of Maine School of Law

Dean: Peter Pitegoff

Juris Doctor


The University of Maine School of Law offers high-quality legal education to a carefully selected student body. With a fine faculty, excellent library resources, and a nationally oriented curriculum strong in basic legal courses, the Law School takes pride in educating students who become capable and motivated attorneys and leaders in a range of other fields.

The academic program is rigorous and demanding. Thanks to the school's size, its students have the benefit of small classes, frequent and informal contact with the faculty, and a supportive atmosphere. This sense of collaboration is embraced by students, faculty, staff and alumni.

Maine Law averages less than 300 students, making it one of the smallest law schools in the country. The student body is remarkably varied in age, professional and academic experience, and background.

The Law School's 20 full-time faculty members, along with part-time instructors drawn from practicing attorneys and the judiciary, represent a diversity of backgrounds, expertise, and interests. Maine Law is fully accredited by the American Bar Association and is a member of the Association of American Law Schools. Established in Portland in 1962, it is the law school of the University of Maine System, and it shares a campus with the University of Southern Maine in Portland.

Maine Law’s location is accessible for students with disabilities and provides facilities for classroom and seminar discussion, library research, moot court participation, clinical practice, legal publications, and student activities.

For more information on the Law School, contact the Admissions Office, University of Maine School of Law, 246 Deering Avenue, Portland, ME 04102, (207) 780-4341; visit the Law School web site at http://www.mainelaw.maine.edu; or on Facebook at www.facebook.com/umainelaw.

Cumberland Legal Aid Clinic

The Cumberland Legal Aid Clinic is one of the oldest clinical programs of its kind in the nation. Established in 1970, the Clinic provides free legal aid to more than 600 low-income individuals and families every year. It is a defining program of Maine Law, providing practical skills training for students, and helping to fulfill the school’s commitment to social justice. All legal services are provided by law students who are enrolled in one of four clinical courses: General Practice, Prisoner Assistance, Juvenile Justice, and Refugee and Human Rights. Students represent real clients in real cases. From intake meetings to filing court documents to standing up before a judge, student attorneys handle all aspects of client relations and case management, under the close supervision of faculty who are leaders in their fields.

Externship Program

In the Externship Program, students work for a semester in a government agency, business or nonprofit organization for academic credit. This program gives students an opportunity to develop essential professional skills while making valuable contacts throughout Maine and, in some cases, around the country. Students can be placed in externship positions that are offered regularly, such as with the U.S. Attorney’s Office, Pine Tree Legal Assistance, Conservation Law Foundation and many others. Or they can “make their own” externships at any number of agencies or institutions. Students have worked alongside seasoned lawyers in cities and towns throughout Maine, as well as distant locales such as Washington, D.C., and Alaska.

Center for Oceans and Coastal Law

The Center for Oceans and Coastal Law is devoted to research and education in ocean law and policy. It supports the marine law curriculum and
the Ocean and Coastal Law Journal. The Center's current research areas include law of the sea, maritime security, comparative marine law, international maritime boundary delimitation, maritime ports, ocean and coastal resources and their management, and the marine environment of the Gulf of Maine. The Center for Oceans and Coastal Law has active ties and research collaborations with leading universities and maritime institutes around the world.
Office of Sponsored Programs

Pre-award Services

The Office of Sponsored Programs (OSP) is responsible for encouraging externally funded initiatives in support of program-related activities of academic, research and development, and administrative units, and serves as the major resource to faculty and staff who wish to pursue such projects. The Office maintains information on and promotes awareness of funding opportunities, assists in refining project ideas and matching them with a potential sponsor's priorities and requirements, assists in the preparation of grant applications, and serves as the final approving authority for such applications.

In addition to having access to many on-line funding sources, OSP maintains a subscription to an online funding opportunities database via InfoEd Global's SPIN database. This is accessible by all faculty and staff and can be invaluable to individuals seeking to do their own searches.

Post-award Services

The OSP provides financial management assistance and administrative support to principal investigators and project directors after an award is received. Services include: review and approval of all award documents, preparation and submission of financial reports, requests for reimbursement, budget revisions, amendments, etc. These services are a collaborative effort on the part of OSP staff and project staff. Services continue through the termination date, ending with the submission of the final program and final financial reports.

Increasingly, governmental agencies are turning to OSP to provide management and approval for post-award modifications. In many cases, such requests can be approved and processed by OSP with proper notification to the sponsor.

Additional information is available online at http://usm.maine.edu/osp.
Campus Safety and Security

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act of 1998 requires universities to disclose three years of statistics regarding campus crime. The USM report includes policies for campus security, such as those concerning alcohol and drug use, crime prevention, the reporting of crimes, and other related matters. A copy may be obtained by accessing the following Web address: http://usm.maine.edu/deanofstudents/annual-safety-reports and clicking the Safety and Security Report link under Resources or by calling the Dean of Students Office at (207) 780-5242 to request a paper copy.
Administration of the University of Southern Maine

Administrative Organization as of May 1, 2014

President: Theodora Kalikow, 707 Law Building, Portland, tel: 780-4480
Provost and Vice President for Academic Affairs: Michael Stevenson, 711 Law Building, Portland, tel: 780-4485
Associate Provost for Undergraduate Education: Dahlia Lynn, Mitchell Center, Gorham, tel: 780-4544
Associate Provost for Graduate Studies and Research, Scholarship and Creative Activity: Samantha Langley-Turnbaugh, 106 Science Building, Portland, tel: 780-5084
Chief Financial Officer: Richard R. Campbell, 724 Law Building, Portland, tel: 780-4484
Chief Student Affairs Officer: Susan Campbell, 100 Payson Smith, Portland, tel: 780-4547
Vice President for University Advancement: Cecile Aitchinson, 722 Law Building, Portland, tel: 780-4708
Chief Human Resources Officer: Martha Freeman, 209 Deering Avenue, Portland, tel: 228-8304
Executive Director of Public Affairs: Robert Caswell, 601 Law Building, Portland, tel: 780-4200

Administrative Offices Serving Students

Academic Assessment
Susan King, director

Admission, Undergraduate
Rachel Morales, interim director

Admission, Graduate
Mary Sloan, director

ARAMARK Dining Services
Chris Kinney, senior food service director

Arts, Humanities and Social Sciences, College of
Lynn Kuzma, dean

Athletics
Al Bean, director

Bookstores
Nicole Piaget, director

Community-Based Learning
Joseph Austin, director

Disability Services Center
Joanne Benica, director

Facilities Management
Robert Bertram, executive director

Financial Aid, Student
Keith DuBois, director

Financial Resources
Cynthia S. Quinn, executive director

Law, University of Maine School of
Peter Pitegoff, dean

Law Library, University of Maine School of Law
Christine I. Hepler, interim director

Learning Support
Paul Dexter, coordinator

Lewiston–Auburn College
Joyce Gibson, dean

Libraries
David Nutty, director

Management and Human Service, College of
Joseph McDonnell, dean

Multicultural Student Affairs
Susan Evans, coordinator
Reza Jalali, coordinator

Osher Lifelong Learning Institute
Kali Lightfoot, executive director of national resource center, OLLI

Professional and Continuing Education
Monique LaRocque, executive director

Registrar's Office
Steven G. Rand, registrar

Student and University Life
Joy Pufhal, executive director/dean of students

Science, Technology and Health, College of
Andrew Anderson, dean

Student Billing
Virginia Johnson, bursar

Student Conduct
Joy Pufhal, dean of students

Student Information Systems
Marthina S. Berry, director

Student Involvement and Activities
Christopher O'Connor, director of student life: Portland
Jason Saucier, director of student life: Gorham

Student Success
Elizabeth M. Higgins, executive director

Telecommunications
Nancy Austin, director

University Health and Counseling Centers
Robert Small, director

USM Public Safety
Kevin Conger, director

EMERITI

- **Amoroso, Henry C., Jr.** (1982-2010) St. Michael’s College, B.A., 1966; Goucher College, M.Ed., 1966; University of Wisconsin, Ph.D., 1978; Associate Professor Emeritus of Education*
• Andrews, Samuel G. (1966-2007) Babson College, B.S., 1964; University of Maine, M.S., 1966; Chief Financial Officer Emeritus; Associate Professor of Business Administration
• Armentrout, Charles E. (1960-1997) University of Maine, B.A., 1955; Wesleyan University, M.A., 1958; Columbia University, M.S., 1970; Associate Professor Emeritus of Physics
• Ayers, George H. (1959-1991) University of Maine, B.A., 1951; The Ohio State University, M.A., 1959; Associate Professor Emeritus of Geosciences
• Barringer, Richard E. (1988-2011) Harvard University, A.B., 1959; University of Massachusetts, M.A., 1963; Massachusetts Institute of Technology, Ph.D., 1968; Professor Emeritus of Community Planning and Development, Muskie School of Public Service
• Burson, Janet Z. (1978-2005) Syracuse University, B.S., 1964; Oregon State University, M.S., 1975; Vanderbilt University, Ed.D., 1990; Associate Professor Emerita of Nutrition
• Caffentzis, Constantine G. (1987-2013) City College of the University of New York, B.A., 1966; Princeton University, Ph.D., 1978; Professor Emeritus of Philosophy
• Chabot, Maurice J. (1965-2011) University of Maine, B.A., 1961; Bowdoin College, M.A., 1965; Associate Professor Emeritus of Mathematics
• Chandler, Joseph (1968) Bowdoin College, A.B., 1942; University of Maine, M.B.A., 1967; University of New Hampshire, M.A., 1971; Associate Professor Emeritus of Business Administration
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Potter, William, Lecturer in Extended Academic Programs
Poulin, Roger, Lecturer in Linguistics
Pride, Howard Douglas, Lecturer in Chemistry
Prince, Sanford, Lecturer in Teacher Education
Qazi, Shaukatullah, Lecturer in Mathematics
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Quinn, Conor, Lecturer in Linguistics
Rad, Tiffany, Instructor in Computer Science
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Redlon, Rebecca, Lecturer in the Professional Development Center
Reim, Bernard, Lecturer in Physics
Reimer, Margaret, Lecturer in Honors Program
Rein, Anna, Lecturer in Modern & Classical Languages & Literature
Renschler, Emily, Lecturer in Geography & Anthropology
Revier, Paul, Lecturer in Social Work
Riiska, Scott, Lecturer in Criminology
Riley, Patricia, Associate Professor in the Muskie School
Ritchie, Sheryl, Lecturer in English
Ritter, Sharon, Lecturer in Learning Foundations and Mathematics
Roderick, Jonathan, Lecturer in Extended Academic Programs
Roland, Catherine, Lecturer in the School of Nursing
Rootes, Minor, Professor in Extended Academic Programs
Roscoe, Gregory, Instructor in Recreation & Leisure Studies
Rouleau, Paul, Instructor in the School of Nursing
Rudai, Bethany, Lecturer in Extended Academic Programs
Ryle, Matthew, Lecturer in Chemistry
Sakash, Michael, Associate Professor in Music
Sanborn, Mary, Lecturer in Teacher Education
Sarton, Edward, Lecturer in Physics
Savage, Amanda, Instructor in the School of Nursing
Sax, Alexandra, Lecturer in Art
Sharbella, Rocco, Instructor in Engineering
Schmidt, Jessamyn, Lecturer in English as a Second Language
Schneider, David, Assistant Professor in Art
Schofield, Debora, Lecturer at Lewiston Auburn College
Schott, Glorianne, Lecturer in Extended Academic Programs
Schubert, Frederic, Lecturer in Chemistry
Scott, Kathleen, Lecturer in Music
Scott, Stanley, Professor in the Honors Program
Searls, Timothy, Lecturer in Chemistry
Sears, John, Lecturer in Business Administration
Sedenka, Susan, Lecturer in Professional Education
Seitz, Bradley, Lecturer in Business Administration
Senese, Gail, Lecturer in Human Resource Development
Senko, Lena, Lecturer at Lewiston Auburn College
Sholl, Elizabeth, Assistant Professor in English
Shuster, Mary, Lecturer in Professional Education
Simmons, Kimberly, Lecturer in Women's Studies
Simons, Rachel, Lecturer at Lewiston Auburn College
Sizemore, Josephine, Lecturer in Professional Education
Skibek, Adam, Lecturer in Business Administration
Skupsky, Ron, Lecturer in Mathematics
Slack, Katharine, Lecturer in Extended Academic Programs
Smith, Nancy, Lecturer in Music
Smith, Polly, Associate Professor in Criminology
Solomon, Howard, Professor in History
Somers, Ardane, Lecturer in Business Administration
Spitz, Romy, Lecturer in Extended Academic Programs
Sruoginis, Laima, Assistant Professor in English
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Stelk, Virginia, Lecturer in Education
Stewart, Holly, Lecturer in the School of Nursing
Stewart, Kellie, Lecturer in Linguistics
Stone-R-King, Shirley, Lecturer in Teacher Education
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Sullivan, Jennifer, Lecturer in the School of Nursing
Swope, Ann, Lecturer in Linguistics
Thayer, Katharine, Lecturer in the School of Nursing
Thibodeau, Maxine, Lecturer in the School of Nursing
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Tiedeken, Lois, Lecturer in Extended Academic Programs
Tortorella, Donna, Lecturer in English as a Second Language
Towle, Shawn, Lecturer in Mathematics
Townsend, Brenda, Lecturer in Mathematics
Townsend, Tiffany, Lecturer in the School of Nursing
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Trombley, Linda, Lecturer in Off Campus Programs
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Tully, Lori, Lecturer in Human Resource Development
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Turner, Kathryn, Lecturer in Dean's Office Education
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Tuttle, Howard, Lecturer in the Professional Development Center
Tzianabos, Maria, Lecturer in Theatre
Urban, Nola, Lecturer in Mathematics
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Wilkinson, Anne, Lecturer in Music
Williams, Edward, Lecturer in English
Williamson, Craig, Lecturer in Extended Academic Programs
Willis, Theodore, Assistant Professor in Environmental Science
Wilson, Jed, Lecturer in Music
Wilson, Richard, Lecturer in Extended Academic Programs
Wittner, Gary, Lecturer in Extended Academic Programs
Wood-Masteka, Meredith, Lecturer in Extended Academic Programs
Wooten, Timothy, Lecturer in the Russell Scholars Program
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