1990

University of Southern Maine Undergraduate Catalog 1990-1991

University of Southern Maine

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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 shall not discriminate and shall comply with applicable laws prohibiting discrimination on the grounds of race, color, religion, sex, sexual orientation, national origin or citizenship status, age, handicap, or veterans status in employment, education, and all other areas of the University. The University of Southern Maine does not discriminate on the basis of handicap in admission or access to, or treatment or employment in, its programs and activities, in compliance with Section 504 of the Rehabilitation Act of 1973 and its implementing regulations. In addition, the University of Southern Maine does not discriminate on the basis of sex in its educational programs or activities, in compliance with Title IX of the Education Amendments of 1972 and its implementing regulations. Inquiries about the application of Section 504 or Title IX should be directed to EEO Director, 7 College Avenue, Gorham, Maine 04038. Telephone number: 780-5171. Inquiries about both areas may also be referred to the Office of Civil Rights, U.S. Department of Education, Region I, John W. McCormack Post Office and Courthouse Building, Boston, MA 02109.

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.
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Academic Calendar
1990—1991

Fall Semester

Classes Begin
Convocation
Veterans' Day — No Classes
Thanksgiving Vacation Begins
Classes Resume
Last Day of Classes
Final Exams Begin
Final Exams End

Spring Semester

Classes Begin
M.L. King, Jr. Day — No Classes
Winter Vacation Begins
Classes Resume
Spring Vacation Begins
Classes Resume
Last Day of Classes
Final Exams Begin
Final Exams End
Commencement

Tuesday, September 4
Thursday, October 4
No Classes:
Portland, 1:00 p.m.-4:00 p.m.
Gorham, 12:30 p.m.-4:00 p.m.
Monday, November 12
After all classes on Tuesday,
November 20
Monday, November 26
Saturday, December 15
Monday, December 17
Friday, December 21

Monday, January 14
Monday, January 21
After all classes on Saturday,
February 16
Monday, February 25
After all classes on Saturday,
March 30
Monday, April 8
Saturday, May 4
Monday, May 6
Friday, May 10
Saturday, May 11
The University

One aspect of the Maine spirit, as naturalist Henry Beston has described it, "... is a positive enjoyment of adventure, character, and circumstance." This same spirit has also helped guide the development of higher education in the state of Maine. For over 100 years, the predecessors of what today is known as the University of Southern Maine have shared a continuing concern to provide an education appropriate to changing circumstances and responsive to the character and sense of adventure of their students.

In 1878, the Western Maine Normal School was founded at Gorham. Its mission broadened and its student body grew, and in 1945 it became Gorham State Teachers College. Similarly, Portland Junior College, developed in 1933 to bring higher education within commuting distance of a growing population, became the University of Maine at Portland in 1957. The two institutions were joined in 1970 as the University of Maine at Portland-Gorham, and in 1978 became known as the University of Southern Maine.

Not surprisingly, each college and university in the country likes to think of itself as unique, as offering experiences unavailable at other institutions of higher learning. To be sure, the University of Southern Maine has many characteristics typical of medium-sized, public universities elsewhere in the United States. It comprises seven academic units (Applied Science, Arts and Sciences, Business, Education, Law, Lewiston-Auburn College, and Nursing); it enrolls over 10,000 students, and is the second largest of the seven campuses making up the University of Maine System; it offers three associate and thirty-seven baccalaureate degree programs, as well as graduate and professional degrees in law, nursing, business, applied immunology, computer science, education, engineering, New England studies, statistics, public policy and management, and school psychology.

But the University has many unique features, too. It is both large and small. With 1,400 students in residence on the Gorham campus and in Portland Hall located in downtown Portland, the University has many of the characteristics of a rural, New England college. At the same time, located in Portland, the state's largest city and the center of financial, business, and cultural activities, the University makes available resources, opportunities, and experiences usually found only in much larger institutions. In addition to its two campuses, three off-campus learning centers and the Lewiston-Auburn College serve students throughout southern Maine. All of these sites have been linked via computer and an interactive, color, instructional television system.

The student body of the University is the most diverse in the state of Maine. Over one-half are full-time students; more than 57 percent are women, and the average age of an undergraduate student is 26. This diversity of age provides a lively and challenging environment for learning: a context in which scholarship and the experience gained from living complement one another.

The University is also the most cosmopolitan of Maine institutions of higher education. There is easy access to the cultural and social resources of Boston and New York, as well as those of Portland. The City of Portland and the University cooperate to provide internships for students in political science, law, sociology, nursing, and related areas. There is heavy use by the University of community resources including art institutions, museums, television, and skilled professionals who serve as part-time faculty. The University engages in a broad range of ventures with municipal, county, state, and federal agencies, as well as with private foundations and industry. These all serve to provide the student with formal and informal learning opportunities in the areas of the arts, humanities, politics, business, mass communication, and high technology. The University maintains a strong faculty and student exchange program with colleges and universities in Britain, Sweden, Ireland, the Netherlands, the U.S.S.R., and Brazil and is developing new programs with the People's Republic of China and with Japan.

Most important, however, the University continues to grow and develop. At a time when many colleges and universities in the country are struggling with declining enrollments, drastically curtailed resources, and a need to
redefine their mission, this University, by virtue of its location, range of student body, quality of faculty, and level of support, is responding creatively to its particular circumstances and the challenges of its students. Within the past few years, a new Core curriculum has been established: a curriculum which attempts to define the types of skills and the kinds of learning experiences our graduates should have in today's world. A new University Honors Program provides an enriched undergraduate education to a selected group of students who are outstanding in their ability, curiosity, creativity, and motivation. University Convocation, first begun in 1981 and repeated yearly, seeks to address an issue of interest to the times and to engage students, faculty, and citizens in a common discussion across academic disciplines and between the University and the community. The University continually attempts to strengthen its commitment to serve the needs of off-campus students, in-service teachers, and professionals on-site in business and industry. As an urban comprehensive institution, the University is thus a major educational force in the overall growth and improvement of southern Maine: an area often described as the northern part of that business, industrial, and cultural corridor stretching from Washington, D.C., through New York and Boston.

But ultimately, a university must be judged on the basis of its impact upon its students and in terms of the value it imparts to those who join its community. Students at the University of Southern Maine find themselves challenged by a talented and dedicated faculty, stimulated by a diverse and involved student body, and enriched by the type of environment that Portland, one of the country's "most livable cities," affords.

The University of Southern Maine is accredited by the New England Association of Schools and Colleges, indicating the University meets or exceeds Association standards; the School of Nursing is accredited by the National League for Nursing; the College of Education by the National Council for Accreditation of Teacher Education; and several departments within the College of Arts and Sciences by specialized accrediting bodies. The University of Maine School of Law is approved by the American Bar Association and the Association of American Law Schools.

In short, the University's challenging academic program encourages students to seek leadership roles in our always changing society. So it was in 1878; so it remains today.
Programs of Study

The University of Southern Maine offers three associate and thirty-seven baccalaureate degree programs as well as graduate and professional degrees in law, nursing, applied immunology, business, computer science, statistics, New England studies, school psychology, education, and public policy and management. For further information regarding graduate programs, please refer to the Graduate Catalog.

**Baccalaureate Degree Programs**

*College of Arts and Sciences*
- Applied Chemistry (B.S. degree)
- Art (B.A. degree or B.F.A. degree)
- Biology (including pre-med, pre-dental and pre-vet)
- Chemistry
- Communication
- Criminology
- English
- French
- Geology
- Geography-Anthropology
- History
- Mathematics
- Music (B.A. degree or B.M. degrees in Performance or Music Education)
- Philosophy
- Physics
- Political Science
- Psychology
- Self-Designed Major**
- Social Work
- Sociology
- Theatre

**Self-Designed Major:** Approval of the program must be given by the Self-Designed Major Committee after students have enrolled at the University. Potential programs include:
- Biotechnology
- Classical Studies
- Foreign Languages
- French Studies
- German Studies
- Hispanic Studies
- International Studies
- Russian Studies
- Social Science
- Women's Studies

*Lewiston-Auburn College*
- Management and Organizational Studies (B.S.)
- Social and Behavioral Sciences (B.A.)

*School of Applied Science*
- Computer Science (B.S.)
- Industrial Technology (B.S.)
- Technology Education (B.S.)
- Vocational/Occupational Education (B.S.)
- Vocational Technology (B.S.)
- Electrical Engineering (B.S.)
  This University also offers the first year of the four-year program common to other engineering majors and the first and second years in engineering physics. These offerings meet the general requirements of the corresponding programs at the University of Maine in Orono. The University of Maine extends preferred transfer consideration to Maine residents.

*School of Nursing*
- Nursing (B.S.)
- Therapeutic Recreation (B.S.)

*School of Business, Economics and Management*
- Business Administration (B.S.)
  (with majors in business administration, accounting, and economics)
- Economics (B.A.)
**Associate Degree Programs**

**College of Arts and Sciences**
- Liberal Arts (A.A.)

**School of Nursing**
- Therapeutic Recreation (A.S.)

**School of Business, Economics and Management**
- Business Administration (A.S.)
  (with concentrations in accounting; business computer programming; business management; business marketing; hotel, motel, and restaurant management; and real estate)

For further information regarding baccalaureate and associate degree programs, please refer to the appropriate school or college section of this catalog.
Undergraduate Admissions

The University of Southern Maine is an academic community that welcomes applications for admission from qualified women and men regardless of race, color, creed, national origin, handicap, or age. The University seeks candidates whose academic achievement and motivation indicate success in an undergraduate program. The Admissions Office invites prospective students to visit the campus and to discuss their educational interests. The Office will provide information about academic programs, discuss admission requirements and procedures, and arrange campus tours. Prospective students are encouraged to telephone or visit the Admissions Office (207-780-4970) located in Payson Smith Hall on the Portland campus.

With the exception of early admission applicants, a high school diploma or General Equivalency Development (GED) certificate is required for admission to the University. Although secondary school preparation may vary, the following subjects are required for regular admission to the University. In addition to these, further requirements are imposed by individual schools and colleges. (A unit is equivalent to one year of study.)

General subject requirements (University-wide)
English 4 units
Mathematics 3 units (Algebra I, II, and Geometry)

Applicants to the College of Arts and Sciences must also have:
Science 2 units (with lab)
History/Social Science 2 units
Foreign Language 2 units (one language)
Science majors must have three lab units of science. Foreign language majors must have three units of a foreign language. Mathematics majors are required to have four units of mathematics. An official Declaration of Major form must be completed upon entering the College of Arts and Sciences.

Applicants to the School of Nursing must also have:
Science 2 units (with lab)
History/Social Science 2 units
Nursing candidates must have biology and chemistry. Each student 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 University of Southern Maine School of Nursing section of this catalog.

Applicants to the School of Business, Economics and Management
Baccalaureate Degree Candidates must also have:
Science 2 units (with lab)
History/Social Science 2 units
Mathematics 4 units
Associate degree candidates should refer to the appropriate section of the catalog for further information on admission requirements.

Applicants to the School of Applied Science
Candidates for admission should refer to the catalog sections on majors for further information about unit requirements.

Special Note: For specific admissions requirements of the degree program in music education, please refer to the Music Department section of the catalog. For specific admissions requirements of the degree programs in technology education and vocational/occupational education, please refer to the School of Applied Science section of the catalog.
Admission to degree programs at the University is on a selective basis. The University admits women and men to its baccalaureate and associate degree programs whose academic credentials and life experiences indicate potential for success in higher education.

Each applicant for admission is required to submit a completed University of Maine Application Form and a nonrefundable $15 application fee. The Application Form calls upon the applicant to detail his/her academic, personal, and recreational background. In addition, the candidate is asked to describe in narrative form his/her interest in the University and the specific degree program for which application is being made.

The University will consider applications for the fall semester at any time beginning in the September of the year prior to the fall semester in which the applicant intends to commence academic study. 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 also be made to enter the University in the spring semester. These, too, should be submitted early so as to receive full consideration.

Offers of admission may be revoked because of unsatisfactory performance in the final semester of high school or college work.

Completed applications, including all supporting documentation, must be received in the Admissions Office by November 15 in order to be considered for spring enrollment and July 15 for fall enrollment. Completed international applications must be received by October 15 and April 15 in order to be evaluated for the spring and fall semesters. Candidates for early admission need to submit completed applications by April 15.

Admission to the University is offered for a specific semester. Anyone choosing not to attend for the semester for which an offer of admission was extended must reapply if they wish to be enrolled in a degree program. Because there is insufficient time to provide necessary student services, applications which remain incomplete beyond the specified deadline cannot be approved. Applicants who are in this situation may request reactivation of their application for the following semester.

The University recognizes that its prospective students may come with differing academic backgrounds and some with significant time having elapsed since completion of secondary school. The following categories of admission exist to accommodate such students.

**Regular Admission**  Applicants whose academic backgrounds demonstrate the ability to pursue regular, entry-level coursework may be granted regular acceptance to the University. This admissions 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.

**Admission with Conditions**  Applicants whose academic backgrounds are not complete in some way (e.g., missing academic units), but who show significant promise, may be granted acceptance with conditions. Such students are fully admitted to the University and pursue their first year of study under the direction of the Advising Center. Normally, students who are admitted with conditions take a reduced course load for the first few semesters. These students should expect to take longer to complete a degree program at the University than students granted regular admission. Students admitted to associate or baccalaureate degree programs with conditions have up to five and six semesters, respectively, to remove their conditions.

To achieve transition to regular status, the student must complete the minimum proficiency requirements of the University as well as a minimum of 15 credit hours of graded, non-remedial coursework with a grade point average placing the student in good academic standing. Transition to regular status prior to completion of 15 credit hours may be approved if the student earns an exceptional grade point average. The student's assigned academic counselor will assist in completing the transition.
All applications are considered for regular admission to the University. As part of the review process, the Admissions Office will determine which applicants are to be offered admission with conditions.

**Readmission** Matriculated degree candidates maintain their matriculation status for ten calendar years from the first semester of attendance at the University of Southern Maine. If, for any reason other than dismissal from the University, a student does not register for any length of time during that ten-year period and then resumes registration, no readmission is required. If, however, a student wishes to resume studies as a degree candidate after the ten-year period has elapsed, an application for readmission must be filed with the Admissions Office.

**Early Admission** Students who have completed their junior year of high school may apply for consideration for admission as fully matriculated freshmen within the College of Arts and Sciences. The Early Admission Program seeks to accommodate those students who display both the intellectual ability and the social maturity to succeed in a university course of study.

Students who wish to receive their secondary school diploma after the completion of one year in the Early Admission Program must obtain the prior approval of their secondary school guidance counselor or principal. Students expecting to receive their secondary school diploma must arrange with the University Registrar to have an official transcript of grades forwarded to the secondary school at the completion of the academic year.

To be eligible for admission, the applicant should have at least a B average and/or rank in the top 20 percent of his or her secondary school class at the end of the junior year. Coursework normally expected to be completed by the end of the junior year includes: three years of English; three years of mathematics beginning at the introductory algebra level; one year of social science/history; one year of biology, chemistry, or physics; and two years of a foreign language. In addition, the applicant should register for and take the Scholastic Aptitude Test (SAT) at the earliest possible date and arrange to have the scores forwarded to the Director of Admissions at the University. The American College Test (ACT) may be submitted in lieu of the SAT for admissions purposes.

Interested applicants should confer with their secondary school guidance counselor or principal regarding eligibility to participate in the Early Admission Program. The student and the principal/counselor should complete the University application, and along with an official transcript, submit it to the Admissions Office, University of Southern Maine, Portland, Maine 04103.

Students admitted under this program are accorded all the rights and privileges of entering freshmen. Academic advising may be arranged upon request through the College of Arts and Sciences Dean's Office prior to and during the first year of the program.

It is expected that Early Admission Program applicants will apply for the fall semester. Application forms must be submitted as early as possible. For fall semester, all Early Admission applications need to be completed by April 15.

**Admission of International Students** Due to limitations on available financial aid, applications are encouraged only from international students who are able to fund fully their educational expenses from their own resources. To certify this, a Certification of Finances statement must be filed as part of the application process. This form must be fully documented and certified and should accompany the completed application. Applicants whose native language is not English are required to submit scores of the Test of English as a Foreign Language (TOEFL). In addition international students must submit test results of the Scholastic Aptitude Test (SAT). SAT scores are not required of applicants who have completed at least 30 credits of university or college study at an English-speaking institution of higher education. For September admission, all international student admission credentials must be filed with the Admissions Office no later than April 15. The deadline for completing applications for spring semester admission is October 15.
Enrollment as an Undeclared Major Student

Applicants who are undecided regarding their major field of study may request admission as an "Undeclared Major." Undeclared students are assigned an academic counselor in the Advising Center to assist with appropriate course selection and academic planning while selecting 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.

Enrollment as a Special Student

The University encourages members of the local community to take advantage of its diverse course offerings. Special Students (those not enrolled in a degree program of study) may take regular credit courses for self-interest and enrichment. Special Students are enrolled each semester on a space-available basis and are not eligible for student financial aid awards, guaranteed student loans, veterans' benefits, or participation in athletics. Interested persons are invited to contact the Advising Center, Payson Smith Hall, on the Portland campus or the USM off-campus center nearest them for further information.

Special students hold non-matriculant status. In order to apply credits earned at the University of Southern Maine to a degree, the student must be admitted into a degree program. A maximum of 30 credits earned as a non-matriculated University of Southern Maine student can be applied to a University degree.

Undergraduate students whose applications for admission are denied are not permitted to enroll in University courses.

Because admission to the University is competitive, the academic profile required for acceptance may vary from one semester to the next.

In addition to the requirements noted in the following sections, the Admissions Office may require applicants to supply additional documentation if it is determined that this information will contribute to assessing an applicant's candidacy.

All applicants whose native language is not English are required to submit official scores on the Test of English as a Foreign Language (TOEFL).

Admission from Secondary School

Applicants applying to the University during their senior year in secondary school, or who have been graduated for less than three years and have had no collegiate attendance, must arrange for an official copy of their secondary school transcript to be sent to the Office of Admissions. Final official high school transcripts are required after completion of the applicant's senior year. Scores from the Scholastic Aptitude Test (SAT) of the College Board must also be submitted. Achievement tests of the College Board are not required. The American College Test (ACT) may be substituted for the SAT for admission purposes.

Admission of Adult Candidates

Adult candidates must arrange for their secondary school transcript to be sent to the Office of Admissions. Although Scholastic Aptitude Test (SAT) scores are not required for admission of adult candidates, they may be submitted for placement purposes as such scores may be used to declare minimum academic proficiencies. An interview with an admissions officer is highly recommended.

From Outside the University of Maine System

Applicants who have attempted 12 semester hours of credit or more beyond the secondary school level are classified as transfer students and must submit official copies of collegiate and secondary school records. SAT test results are required for students who have been graduated for less than three years. Those transfer candidates who have earned 60 or more semester hours of collegiate credit must submit their collegiate transcripts for evaluation, but may forego submitting secondary school transcripts and SAT scores. Quality points do not transfer.

Students applying for transfer from regionally accredited institutions of higher education must have a grade point average which places them in good academic standing at USM. Transfer credit may be given for coursework completed at a regionally accredited institution of higher education only if a grade of C- or better has been achieved in those courses.
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 school or college for consideration of coursework earned from institutions that were candidates for accreditation.

From Within the University of Maine System Applicants who have completed coursework at other campuses of the University of Maine System should procure an Application Form from the Admissions Office of any University of Maine System campus. Students should request that their transcripts be sent to the USM Admissions Office. This will be done at no cost to the student. Official high school transcripts and SAT test results are required in accordance with the specifications noted in the previous section.

Students must have a grade point average which places them in good academic standing at USM to be eligible for consideration as a transfer candidate. Students from within the University of Maine System are given preference over all other transfer applicants, but are subject to the same requirements and policies described in this catalog. Coursework completed with a passing grade within the University of Maine System will be granted transfer credit in accordance with Board of Trustee policy. Quality points do not transfer.

Note: Trustee policy is to provide the maximum opportunity for transfer within the System. When a student is accepted for transfer within the University of Maine System, all undergraduate degree credits obtained at any unit of the University will be transferable to any other unit 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 effected, and appropriate application of that credit is to be the responsibility of the particular academic unit.

Evaluation of Transfer Credits 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; grades achieved in previous coursework; comparability of courses taken with courses at the University. Credit is not transferred for courses in which the lowest passing grade was earned (exception: courses in which a grade of D was earned are transferable if earned at another campus of the University of Maine System). 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 Transfer Advising Center 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 Transfer Advising Center within one year of the completion of the evaluation. At that time the evaluation becomes permanent and will not be changed.

Placement Exams All newly admitted baccalaureate and associate degree students with a SAT Mathematics score below 450 or a Test of Standard Written English (TSWE) score below 43 must take the Placement Examinations. Transfer and readmitted students with more than 30 earned credits are not required to take the English placement examination. The mathematics placement examination is required of these students unless they have successfully completed at least one semester of collegiate level work in mathematics. Special students are encouraged to take the Placement Examinations and should contact the Advising Center for
Prior Learning Evaluation

Details. Copies of the publication, *Placement Examination Program*, are available at the Testing and Assessment Center, Portland campus, Advising Center, and all off-campus centers.

The University recognizes several procedures for the assessment of learning acquired outside a sponsored collegiate setting. This may include standardized examinations (e.g., CLEP), or credit for learning gained through paid or unpaid employment, self-directed study, or through avocational talents and skills. For further details regarding the following options, students should contact the Office for Prior Learning Assessment, 122 Payson Smith Hall, Portland campus.

**Advanced Placement** The University participates in the Advanced Placement Program of the College Entrance Examination Board. Applicants interested in advanced placement with credit should make arrangements to take the Advanced Placement Tests given by the C.E.E.B. in May of each year. The tests may be taken in the junior and senior years of secondary school. Students who score a 3 or better on this test may in certain circumstances be granted credit for an introductory course in an appropriate subject area.

**College Level Examination Program** In certain cases, credit may be given a student who receives a satisfactory score on a CLEP examination, either the General Examinations or the Subject Examinations. These are as follows:

**General Examination** The University will grant credit in the following areas for a score of 500 (400 on English Composition/1986 scale) or higher on these CLEP general examinations: English (3 credits, will satisfy ENG 100C); Humanities (6 elective credits); Social Science/History (6 elective credits); Mathematics (6 credits, will satisfy Core curriculum Area D) and Natural Science (6 elective credits).

The five general examinations are designed primarily for students with no previous credits in these areas rather than for upperclass students with advanced standing credit at the introductory level.

**Subject Examinations** Any subject area CLEP examination which is equivalent to a USM course approved to satisfy a requirement of the Core curriculum may be applied to satisfy the Core curriculum requirement in that subject area.

The following departments, schools, and colleges have established policies relative to the acceptance of CLEP subject credit: College of Arts and Sciences (Biological Sciences, Chemistry, History, Mathematics, Political Science, Psychology, and Sociology); School of Business, Economics and Management; and the College of Education, (Educational Psychology, and Human Growth and Development). Interested candidates should contact the Office for Prior Learning Assessment for further information and testing schedules.

**Challenge Examinations** Students in the School of Nursing's RN Studies Program may challenge selected upper-division courses.

Students may challenge courses in other schools/colleges, with some restrictions.

**Portfolio Assessment** The University has established a program for assessing learning based on an individual student's portfolio. This program involves a detailed and comprehensive documentation of prior learning, an interview with a faculty assessor, and specific performance or demonstration as appropriate. Details may be obtained from the Office for Prior Learning Assessment.

**Armed Services Experience** The University recognizes credit based on the American Council on Education's Guide to the Evaluation of Educational Experiences in the Armed Services. Interested students must provide a DD 214 form, a DD 295, and/or other appropriate credentials for evaluation.
Employer Training Programs  Students who have participated in training programs and courses offered by employers may qualify for credit evaluations through the Program on Non-Collegiate Sponsored Instruction (PONSI). Details may be obtained from the Office for Prior Learning Assessment.

New England Regional Program

In cooperation with the New England Board of Higher Education the University offers undergraduate programs of study to qualified candidates from the New England states. Tuition rates for regional candidates approved by the Board of Trustees will be that of in-state tuition plus a surcharge of 25 percent. 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 for 1990-91. The 1991-92 listing will be available from the New England Board of Higher Education during the fall of 1990. Check with your guidance counselor or the Board at 45 Temple Place, Boston, Massachusetts 02111.

<table>
<thead>
<tr>
<th>Associate Degree Programs</th>
<th>CT</th>
<th>MA</th>
<th>NH</th>
<th>RI</th>
<th>VT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapeutic Recreation</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bachelor Degree Programs</th>
<th>CT</th>
<th>MA</th>
<th>NH</th>
<th>RI</th>
<th>VT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criminal Justice/Criminology</td>
<td>X</td>
<td>X</td>
<td>O</td>
<td>O</td>
<td>X</td>
</tr>
<tr>
<td>Industrial Technology</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Therapeutic Recreation</td>
<td>C</td>
<td>O</td>
<td>C</td>
<td>O</td>
<td>X</td>
</tr>
</tbody>
</table>

X = state offers program under the RSP
C = state offers a comparable program, but not under the RSP
O = state does not offer a comparable program; open to its residents

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 12 or more credits, to show proof of immunity against measles, rubella, diphtheria, and tetanus before registering for classes. Immunization records must be on file with Student Health Services before students will be allowed to register for classes.

Specific information about immunization requirements is sent with admissions packets, and is also available in most departments and at Student Health Services.
Financial Information

Tuition rates are established by the University of Maine System Board of Trustees. The University reserves the right to adjust these charges to respond to changing costs, state and/or federal legislative action, and other matters. Such adjustment may be made any time prior to the date of final registration for a given academic term. A student acknowledges this reservation by applying for admission or registering for courses.

There are three types of tuition charged: undergraduate, graduate, and law. Tuition charges are calculated by multiplying the number of credit hours attempted by a rate established by the University. Courses being audited are included in this calculation.

The rates below apply to students admitted to a USM undergraduate degree program or registering for undergraduate courses only. Students who have not been admitted into a USM undergraduate degree program and who are registering for graduate and/or law courses in addition to undergraduate course(s) are charged a higher rate for all courses.

<table>
<thead>
<tr>
<th>Undergraduate Tuition Charges Per Credit Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maine Resident</td>
</tr>
<tr>
<td>Non-Maine Resident</td>
</tr>
<tr>
<td>New England Regional Program</td>
</tr>
<tr>
<td>$ 69.00</td>
</tr>
<tr>
<td>$195.00</td>
</tr>
<tr>
<td>$103.50</td>
</tr>
</tbody>
</table>

**Fees**

- **Application Fee** A mandatory $20.00 fee is charged to an applicant who has not previously matriculated at the University of Southern Maine. This fee is only charged once.
- **Matriculation Fee** A mandatory one-time $15 fee is charged to create a student record when a student begins pursuing a degree within the University of Maine System.
- **Advising and Orientation Fee** A mandatory $37.00 fee is charged to newly admitted undergraduate students. This fee is only charged once.
- **Activity Fee** A mandatory fee charged each semester. Undergraduate students registered for at least one but not more than 5.5 credits are charged $10.00; students registered for at least 6 but not more than 11.5 credits are charged $21.00; students registered for 12 or more are charged $30.00.
- **Recreation Fee** A mandatory $1.00 per credit charge assessed to all students. The maximum charge is $12.00.
- **Course Fees** A mandatory fee is assessed for some courses. These fees cover costs associated with specialized instruction. Additional information is provided in University course listings.
- **Health Service Fee** The University provides on-campus health services. Students may use these facilities on a fee-for-service basis. By paying the health service fee, students may reduce or eliminate some service charges. Students planning to register for both fall and spring semesters are charged $82.00; students registering for one semester are charged $31.00. Additional information is available from Health Services. A student must be registered for three or more credits to qualify for this optional service. Resident students receive health service fee benefits at no additional charge.
- **Health Service and Insurance Package** This is an optional package that includes the health service fee and health insurance. Students planning to register for both fall and spring semesters are charged $252.00; students registering for one semester are charged $158.00. A student must be registered for three or more credits to be eligible to participate. Additional information is available from Health Services.
- **Commencement Fee** A mandatory $25.00 fee charged to a student who completes degree requirements. This fee must be paid at least six weeks prior to Commencement.
- **Late Fee** A mandatory $25.00 fee is charged to students who do not pay University bills when due.
- **Insufficient Funds Fee** A $5.00 fee is charged when a student's check is returned or a bank card payment is declined for insufficient funds.
- **Technology Fee** A mandatory $2.00 per credit charge assessed all students.
- **Testing and Assessment Fee** A $10.00 per test fee is assessed students taking the English or math placement exam.
**Room and Board**

*Board*  The University offers a variety of meal plans. Information about the meal plans is available from the Department of Residence Life, Room 100, Upton Hall, Gorham (780-5240).

*Resident and Commuter Meal Plans*

- 19 meal plan with $15.00 in points
- 17 meal plan with $50.00 in points
- 5 meal plan with $430.00 in points  $987.00 per semester
- 13 meal plan with $90.00 in points
- 10 meal plan with $130.00 in points  $897.00 per semester

*Commuter Only Meal Plans*

- 107 points  $100.00
- 168 points  $150.00
- 220 points  $200.00
- 250 points  $225.00
- 280 points  $250.00
- 310 points  $275.00
- 345 points  $300.00

Both resident and commuter students may purchase additional points during the semester.

*Room*  University residence halls are located on the Gorham campus and at 645 Congress Street, Portland. Information about housing is available from the Department of Residence Life, Room 100, Upton Hall, Gorham (780-5240). Limited parking may be rented for $100.00 per semester at the Portland Residence Hall.

- Gorham Double  $985.00 per semester
- Gorham Single  $1,135.00 per semester
- Portland, B-Wing  $1,057.00 per semester
- Portland, A-Wing  $1,110.00 per semester
- Portland, YC-Wing  $1,195.00 per semester
- Portland Double Rooms  $1,110.00 per semester
- Portland Suites  $1,375.00 per semester

All rates are based on full occupancy.

*Telephone Fee*  Students living in University housing may obtain limited telephone service for $60.00 per semester. Information about restrictions is available from Residence Life.

**Other Expenses**

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

*Installment Payment*  The University offers two optional installment payment plans administered by the Academic Management Service (AMS). The University does not assess any additional fee for either plan. AMS charges a $45.00 fee to enroll in the ten-payment plan and a $15.00 fee to enroll in the three-payment plan.

*Deposits*  When a student is notified of acceptance into a University degree program, a $25.00 admission deposit is due within two weeks. Newly admitted students who are approved for on-campus housing must also pay a $75.00 room deposit.

After a student registers, these deposits are applied to his or her account. These deposits are forfeited if an applicant for September admission withdraws after May 1, or if an applicant for January admission withdraws after January 1. Applicants who provide the Admissions Office with written notification of withdrawal before the previously mentioned dates will have the deposit refunded.

The Department of Residence Life establishes and publicizes dates for room selection each spring. Students who are registered for spring semester and request on-campus housing for fall are required to pay a $75.00 room deposit. Usually, this deposit is applied to the fall bill. If a student notifies Residence Life that housing is not desired before May 1, this deposit will be refunded. If notification is received after May 1, the deposit is forfeited.
Billing  Each semester, the University establishes specific dates for charging students and mailing bills. It is the student’s responsibility to maintain accurate home and local addresses at the Registrar’s Office. Students who register during some Orientation sessions, the open registration period, and after classes start are billed at the time of registration. The University is not obligated to mail a bill.

How To Make Payment  The University offers a variety of payment options.

Cash  Cash payment may be made at the Student Billing Office or at an off-campus center. Cash should not be mailed.

Checks  Checks should be made payable to the University of Southern Maine. The student’s name and Social Security number should be shown on the check.

Credit Cards  The University accepts both MasterCard and Visa for payment of tuition and mandatory fees. No more than $1,000 can be charged each semester and the minimum allowable transaction is $25.00. Room and board charges cannot be paid by credit card.

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 payment plans administered by the Academic Management Service (AMS). A student must be registering for at least six credit hours to participate in either AMS plan. Additional information about these plans and enrollment deadlines is available from Student Billing. The ten-payment plan is recommended for students planning to attend both semesters. A three-payment plan is also available. AMS charges a $45.00 fee to enroll in the ten-payment plan and a $15.00 fee to enroll in the three-payment plan.

Outside Scholarships  Students must notify Student Billing 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 Billing written authorization from the agency or employer prior to the payment due date. No conditional payment offers will be accepted.

When Payment Is Due  Each semester, the University establishes specific dates payment is due and notifies students of these dates on bills and through University publications.

Adding Courses  Costs associated with credit hours added after the semester begins must be paid at the time of registration.

Other Charges  After the semester starts, additional charges must be paid as they occur.

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 accepted. The University also 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 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, unpaid charges or fines owed due to violation of University motor vehicle regulations, and library fines.

Students may add and/or drop courses during the first week of the semester without incurring a financial obligation. When a student drops a course after the end of the first week, a tuition refund will be calculated in accordance with the refund schedule shown in the following section. University fees are not refunded after the first week. The schedule adjustment period begins with the first day of scheduled University classes and includes weekends and holidays. The date the Registrar receives written notification that a student is dropping a course is used to determine the amount of refund, if any.
Refund Policy

The charges assessed students who withdraw from the University are adjusted in accordance with the schedules shown below: The date the Registrar receives written notification of withdrawal is used when calculating refunds. A semester begins with the first day of scheduled University classes and includes weekends and holidays.

Failure to notify the Registrar promptly will increase financial liability. A student who feels the withdrawal was caused by reasons beyond his or her control (extended illness or military service obligations, for example) may petition for special consideration. Charges will not be reduced for voluntary absence from classes. Contact the Student Billing Office for additional information about this procedure.

Tuition and Room Refunds The following schedule applies when a student withdraws from the University. University fees are not refunded after the 100% refund period. Students who vacate University housing, but remain enrolled, will be charged in accordance with the terms and conditions of the Residence Hall contract.

<table>
<thead>
<tr>
<th>Fall and Spring Semester</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal prior to the end of the first week</td>
<td>100%</td>
</tr>
<tr>
<td>Withdrawal prior to the end of the second week</td>
<td>75%</td>
</tr>
<tr>
<td>Withdrawal prior to the end of the third week</td>
<td>50%</td>
</tr>
<tr>
<td>Withdrawal prior to the end of the fourth week</td>
<td>25%</td>
</tr>
<tr>
<td>Withdrawal after the fourth week</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special and Summer Sessions more than three weeks</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal prior to the first day of class</td>
<td>100%</td>
</tr>
<tr>
<td>Withdrawal prior to the end of the first week</td>
<td>75%</td>
</tr>
<tr>
<td>Withdrawal prior to the end of the second week</td>
<td>50%</td>
</tr>
<tr>
<td>Withdrawal prior to the end of the third week</td>
<td>25%</td>
</tr>
<tr>
<td>Withdrawal after the third week</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special and Summer Sessions that are three weeks or less</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal prior to the first day of class</td>
<td>100%</td>
</tr>
<tr>
<td>Withdrawal prior to the end of the first week</td>
<td>50%</td>
</tr>
<tr>
<td>Withdrawal after the first week</td>
<td>0%</td>
</tr>
</tbody>
</table>

Board Refunds Students who withdraw from the University are charged for meals at an established daily rate. Additional information is available from Residence Life.

A student is classified as eligible, or not eligible, for in-state tuition at the time of acceptance to the University. The decision, made by the campus associate executive director for Financial Resources, or other official designated by the campus, shall be made in accordance with these rules upon information furnished by the student’s application and any other relevant information. No student, having once been registered as an out-of-state student, is eligible for in-state tuition classification unless he or she has been a resident of the State of Maine for at least one year immediately prior to registration for the term for which in-state tuition eligibility is claimed, and also has become legally domiciled in Maine before such registration. If the student is enrolled for a full 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 and the burden will be on the student to prove that he or she has established a Maine domicile by the time of such registration.

In general, members of the Armed Forces and their dependents will be granted in-state tuition rates during such periods of time as they are on active duty within the State of Maine.

The domicile of a student who is an unmarried minor follows that of the parents or legally appointed guardian of the student. In such cases, the domicile of the parent with whom the student lives or to whom custody has been granted by court order, or of the student's legally appointed guardian, shall be the domicile of the student.
If a student classified as an out-of-state marries a person who is domiciled in the State of Maine and asserts the establishment of a domicile in Maine, that student shall be presumed to be eligible for in-state tuition status at such student's next registration.

To change tuition status, the following procedures are to be followed:

A. Submit Request for Change of Tuition Status form to the associate executive director for Financial Resources, or other designated official. If the associate executive director for Financial Resources' decision is considered incorrect by the student:

B. The student may appeal that decision in the following order:
   1. To the vice president for Administration.
   2. To the president of the campus.
   3. To the treasurer of the University System, whose decision shall be final.

In the event that the associate executive director for Financial Resources possesses facts or information indicating a 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 associate executive director for Financial Resources, or other designated official, as set forth in the preceding paragraph.

No request for change in tuition status will be considered unless filed on or before September 1 for the fall semester, or on or before January 1 for the spring semester. All applications shall be prospective.
Eligibility for Aid

To acquire a higher education a student must invest a significant amount of money, as well as time and talent. For many, college costs represent the single largest and most important expenditure they will ever make. For some, these costs are a serious obstacle. The University assists students by offering various forms of financial aid. During the 1989-90 academic year, more than $8,000,000 was available from aid programs. The average student aid award was $3,900. In addition, the University helped 1,325 students borrow more than $875,000 in low interest loans from commercial lenders. Over 360 students found jobs with the assistance of the Job Locator Program and earned more than $1,000,000. Students may also choose to participate in the Reserve Officer Training (ROTC) program and receive $100 per month during their junior and senior year.

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 certain non-citizens. Non-citizens are encouraged to contact the Office of Student Financial Aid for more information.

The deciding factor in the establishment of a student's eligibility for financial aid is that of documented financial "need." That is, when an applicant has been determined to have insufficient family resources to meet the costs 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 approved by the U.S. Department of Education.

Students receiving assistance must submit a Statement of Registration Compliance. This form certifies that the student has either registered with the Selective Service Administration (all males born after 1959 are required to register) or is exempt from registration.

Students must also submit a statement certifying that they have never defaulted on repaying a student loan and do not owe a repayment of federal grant funds. This statement is provided by the Student Financial Aid Office. Students who have defulted or owe a repayment are not eligible for assistance.

In addition, students receiving a Pell Grant must, as a condition of that award, sign a statement certifying that they will not engage in the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance during the period covered by that award.

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/her family are expected to contribute, when able, from income and assets to meet college costs.

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

Application Procedures

Students are encouraged to apply for assistance as early as possible. To ensure a fair distribution of funds, the following deadlines have been established for fall semester aid applicants:

- New Freshmen: March 1
- Continuing Students: March 31
- Transfer Students: May 1

Students interested in the Summer College Work-Study Program must apply by March 1. Students applying for assistance for the spring semester only should have application materials submitted no later than November 15.
Late applications are accepted, although the type and amount of aid offered may be reduced subject to funding limitations.

All students must complete a College Scholarship Service Financial Aid Form (FAF). The FAF is available from most high school guidance offices or the Student Financial Aid Office. The FAF includes detailed instructions for completion. If these instructions are insufficient, please contact the Student Financial Aid Office for help.

When completing the FAF all undergraduate students who do not have a bachelor's degree must apply for a Pell Grant. Students may also use the FAF to apply for state scholarships.

Students and the parents of dependent students are required to submit copies of tax returns directly to the Office of Student Financial Aid. Tax returns must be received by May 1 (fall applicants) or November 15 (spring applicants) to meet deadlines. Additional financial records required to verify information reported on the FAF may be requested under separate cover.

Any student who attended any vocational school or college, other than the University of Southern Maine, must also submit a Financial Aid Transcript (FAT) form. This form, available from the Office of Student Financial Aid, is completed by the student and sent to the school(s) previously attended. The FAT must be completed even if the student did not receive aid from other school(s) attended.

Refer to the 1990-91 Financial Aid Update available from the Student Financial Aid Office for additional information about the financial aid application process.

The University begins reviewing student aid applications in early spring. Once a student is accepted by the Admissions Office, the FAF and appropriate tax returns are received, and the University is told how much federal aid it will have for students, a notice of eligibility is sent.

The amount a student receives is determined by subtracting the student's resources from a budget computed by the Office of Student Financial Aid. This budget is based on typical living and educational costs for a student in a given situation. It 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. Students who have a bachelor's degree usually receive only loan and work-study funds.

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 Student Financial Aid Office: a change in income; a change in marital status; a change in the number of dependents; a change in residence; a change in the number of credit hours attempted; and the receipt of financial aid from sources other than the University. If a student receives outside scholarship funds, the amount of aid from the University may have to be reduced.

Pell Grants This is a federally funded program to help needy students. Grants vary between $200 and $2,300 per academic year.

Supplemental Educational Opportunity Grants This is a federally funded program to help needy students. Grants range from $100 to $3,300 per academic year.

University and Miscellaneous Scholarships These are funded by the University and private donors. Awards range from $100 to $3,300 and are given on the basis of financial need.

Work-Study Employment This is a program funded by the University and the federal government. Eligible students may earn between $400 and $3,000 per year. A student's financial need governs the amount that can be earned.

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/her education. 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 $30 must be repaid each month. Loans vary between $200 and $2,250 annually.

**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 $200 to $2,500 for first- and second-year students and from $200 to $4,000 for third- and fourth-year students annually.

**Stafford (formerly Guaranteed) Student Loans** This program, sponsored by the federal and state governments, allows students to secure low-cost loans. Eligibility for Stafford Loans is based on demonstrated financial need. Applications are available through your local lending institution.

**Parent Loans/Supplemental Loans for Students** These programs, sponsored by the federal and state governments, allow parents and some students to secure relatively low-cost loans. Contact your local bank, credit union, or savings and loan institution for more information.

**Alternative Loans (such as MELA, TERI and ALPS)** These alternative, credit-based loan programs provide longterm financing options for qualified families. Additional information about these programs may be obtained from the Office of Student Financial Aid.

**Indian Scholarships/Tuition Waivers** This is a program funded by the University that pays tuition, mandatory fees, and on-campus room and/or board. All one-quarter blood North American Indians who have lived in Maine for at least one year are eligible. The residency requirement may be waived for members of the Passamaquoddy, Penobscot, Malecite, or Micmac Tribes. Certification of tribal status is required.

**Presidential Scholarships** The Presidential Scholarship Program recognizes superior academic accomplishment by assisting in their course of study those undergraduates who demonstrate exceptional academic merit and potential. The scholarships encourage those students who contribute significantly to the life of the University through their academic excellence and intellectual activity.

The Presidential Scholarship Program is competitive. New and currently enrolled students are invited to apply or may be nominated. Candidates will be evaluated on the basis of their academic record and their scholarly promise.

Presidential Scholars will receive a yearly stipend of $1,000, for a total of $4,000. Scholars are required to maintain a cumulative grade point average of 3.50. Presidential Scholarships are announced at the beginning of each academic year. During the course of the year, scholars participate in special seminars with the President and visitors to the University. For more information, contact the Admissions Office.

For more information, contact the Office of Financial Aid, University of Southern Maine, Corthell Hall, College Avenue, Gorham, Maine 04038 or telephone 207-780-5250.

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 regulation and/or procedures mandated by University, state, or federal authorities.
Academic Policies

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

I. minimum proficiency requirements
II. Core curriculum requirements
III. 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 Students and the Core Curriculum.")

Minimum Proficiency Requirements

Every baccalaureate degree student who is admitted to the University must produce evidence (no credit granted) of both a minimum writing proficiency and a minimum mathematics proficiency. All newly admitted baccalaureate and associate degree students with a SAT Mathematics score below 450 or a Test of Standard Written English (TSWE) score below 43 must take the Placement Examinations. Transfer and readmitted students with more than 30 earned credits are not required to take the English placement examination. The mathematics placement examination is required of these students unless they have successfully completed at least one semester of collegiate level work in mathematics. (Details of these examinations may be obtained from the Testing and Assessment Center.) Methods of satisfying the Minimum Proficiency Requirements are summarized as follows:

A. Evidence of Minimum Writing Proficiency
   Do One
   1. Score 43 or above on the Test of Standard Written English (TSWE)
   2. Pass the English Placement Examination
   3. Successfully complete ENG 009A or its equivalent (Developmental English) (no degree credit)

B. Evidence of Minimum Mathematics Proficiency
   Do One
   1. Score 450 or above on the quantitative subtest of the Scholastic Aptitude Test (SAT)
   2. Score 500 or above on the General Mathematics Test of the College Level Examination Program (CLEP). (This will also satisfy the Core curriculum Quantitative Decision Making requirement.)
   3. Pass the Mathematics Placement Examination
   4. Successfully complete MAT 011B (Intermediate Algebra). (Credit for this course may apply only toward associate degrees.)

For information regarding the Core curriculum, including a list of courses approved to satisfy the Core, please refer to the chapter on the Core curriculum.

Course Numbering

<table>
<thead>
<tr>
<th>Course Numbering</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-009</td>
<td>No Degree Credit</td>
</tr>
<tr>
<td>010-099</td>
<td>Associate Degree Program Credit Only</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>600-699</td>
<td>Graduate and Professional Students Only</td>
</tr>
</tbody>
</table>

Note:

1. All courses carrying number 010-099 carry credit and quality points toward an associate degree.
2. All courses with number 100 or greater carry credit and quality points toward both associate degrees (A.A. and A.S.) and baccalaureate degrees (B.S., B.A., B.F.A. and B.M.).
3. Matriculated baccalaureate students should not register for courses with numbers less than 100 unless meeting minimum proficiency requirements.
4. Associate degree students who wish to transfer to a baccalaureate program should see their prospective dean for a transcript evalu-
atation and complete a Change of Major form. Some programs require a minimum grade point average (GPA) for transfer into a baccalaureate program. Generally up to 60 credits (but not quality points) of courses numbered 010-099 with grades C or better may be included toward a baccalaureate degree at the discretion of the dean.

**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 the Advising Center of their orientation, advising, and registration schedule. The Advising Center 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 class level. Advance registration is conducted near the end of each semester for the following semester. Eligible students who fail to advance register must then wait until the open registration period which immediately precedes each semester. Non-matriculated students (special) may register only during the open registration period. Degree students must 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. No registration is complete unless all related financial obligations to the University are satisfied. No registration will be accepted after the second week of classes.

**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
- **B**: Honors
- **C**: Satisfactory, successful, and respectable 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; given only for certain courses open to the pass-fail option
- **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; the Registrar shall notify faculty members involved, and their department chair, of students who have carried unresolved incompletes on their transcript for one semester. If the incomplete is not resolved by the instructor, an I grade will be automatically counted as an F in the grade point average and so indicated on the student's permanent record. Under special circumstances, the instructor may request that the dean extend the time limit for a specific period.
- **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.
- **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. Occasionally, faculty assign students invalid grades for a course, or 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 instead of a grade for the course. Missing Grades must be resolved by the end of each subsequent semester. The Registrar shall notify faculty members involved, and their department chair of students who have carried unresolved MGs on their transcript for one semester. If the missing grade is not resolved by the instructor, an MG grade will be automatically counted as an F in the grade point average and so indicated on the student's permanent record. Under special circumstances, the instructor may request that the dean extend the time limit for a specific period.

W Withdrawal after the first week through the eighth week of a semester. If a student has not officially withdrawn by the end of the eighth week of the course, one of the above regular grades, normally F will be assigned. The W notation may be obtained after the eighth week under unusual circumstances if so determined by the instructor and the dean. A threat of failure is not considered to be an unusual circumstance.

Y 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.  

Note: grades of A+ and D– are not valid.

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 per Credit Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A−</td>
<td>3.67</td>
</tr>
<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>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>C−</td>
<td>1.67</td>
</tr>
<tr>
<td>D+</td>
<td>1.33</td>
</tr>
<tr>
<td>D</td>
<td>1.00</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. The result is carried out to four 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.

Dean's List

At the end of each semester, full-time, undergraduate degree students (12 semester hours or more) with grade point averages of 3.2 or above will be placed on the Dean's List. Those students on the list, whose names appear in the Public Directory of the University, will have their names released to the news media. Part-time students who attend both the fall and spring semesters and complete 12 credit hours are eligible for the Dean's List at the end of the spring semester. The eligibility requirements are the same as for full-time students except that the coursework for the entire year is considered.
Minimum Grade and Academic Suspension

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

<table>
<thead>
<tr>
<th></th>
<th>For Good Standing</th>
<th>For Probationary Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Associate Degree Students</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-15 credit hours</td>
<td>1.60</td>
<td>1.35</td>
</tr>
<tr>
<td>16-30 credit hours</td>
<td>1.80</td>
<td>1.60</td>
</tr>
<tr>
<td>31-45 credit hours</td>
<td>2.00</td>
<td>1.80</td>
</tr>
<tr>
<td><strong>Baccalaureate Degree Students</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-30 credit hours</td>
<td>1.70</td>
<td>1.50</td>
</tr>
<tr>
<td>31-60 credit hours</td>
<td>1.80</td>
<td>1.60</td>
</tr>
<tr>
<td>61-90 credit hours</td>
<td>1.90</td>
<td>1.70</td>
</tr>
<tr>
<td>91 or more credit hours</td>
<td>2.00</td>
<td>1.80</td>
</tr>
<tr>
<td><strong>Non-Matriculated Students</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-15 credit hours</td>
<td>1.60</td>
<td>1.35</td>
</tr>
<tr>
<td>16-30 credit hours</td>
<td>1.80</td>
<td>1.60</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 to be applied for credit at the University either at the University of Southern Maine or at other institutions 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 Disciplinary Code.

Students with majors or minors in English, history, political science, or psychology in the baccalaureate program of the College of Arts and Sciences must achieve at least six credits with grades of B or better in their major or minor requirements. No grades of D will count toward fulfillment of the major or minor requirements in these programs.

Industrial arts education majors must maintain a 2.5 cumulative index prior to and throughout the professional sequence, i.e., IEA 380, IEA 381, and IET 324. No more than one D grade will be accepted in the technical and professional courses required of industrial arts majors.

Re-enrollment after Academic Suspension

Matriculated degree candidates may apply 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 is eligible 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 are 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 Disciplinary Code.

Non-Matriculated (Special) Students

Non-matriculated (special) students may register on a space-available basis for undergraduate courses providing the student meets the prerequisites for the course. Non-matriculated students are limited to 30 credits that can be applied to a USM degree. Students who have been denied admission are not permitted to register for courses at USM.
A minimum of 120 credit hours is required for graduation in most baccalaureate-level programs and 60 credit hours in associate-level programs. At least 30 credits should be earned each year. To progress satisfactorily through the University, a full-time student would carry 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.

For standing as a sophomore, a student shall have completed at least 19 percent of the hours required for graduation, for junior standing 44 percent, and for senior standing 69 percent.

The required number of credit hours by classes, schools, and colleges are:

<table>
<thead>
<tr>
<th>School or College</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Science</td>
<td>23</td>
<td>53</td>
<td>83</td>
</tr>
<tr>
<td>Arts and Sciences</td>
<td>23</td>
<td>53</td>
<td>83</td>
</tr>
<tr>
<td>Business, Economics and Management</td>
<td>23</td>
<td>53</td>
<td>83</td>
</tr>
<tr>
<td>Baccalaureate Programs</td>
<td>23</td>
<td>53</td>
<td>83</td>
</tr>
<tr>
<td>Two-Year Business</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Other Programs</td>
<td>23</td>
<td>53</td>
<td>83</td>
</tr>
</tbody>
</table>

Once a semester commences, a period of one week is permitted to add or drop courses. Adds require the signature of the instructor, but drops should be completed with the Registrar without signature. Drops processed during the first week do not have financial penalty. Drops completed after the first week may result in a partial refund in accordance with the refund schedule given in the Financial Information section of this catalog. This procedure enables the student to make the necessary changes in the planned curriculum. A student dropping a course after the first week through the eighth week of classes will receive the grade notation of W. If a student has not officially withdrawn by the end of the eighth week of the course, he or she will be assigned a regular grade, normally E. The W notation may be assigned after the eighth week under unusual circumstances if so determined by the instructor and the dean. All students who register for a course and neither complete the course objectives nor officially withdraw in any one of the procedures described above will be graded F in the course and must assume all financial obligations associated with it.

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

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 student's choice is kept confidential and the instructor grades the student in the same manner as the rest of the class. The Registrar will retain the instructor's submitted grade on file. If the grade is A, B, C, or D it will be converted to a P and any other grade will be handled as described in the Grading System section of this catalog. Please note that F grades will be included in grade point average computation.

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 only during a registration period or during the add period each semester. The pass-fail option, once contracted, may be reversed only during the add period.

When a student repeats a course and earns a grade of A, B, C, D, F, or P, 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.
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 at registration.

Independent Study

Junior and senior students may elect independent study in their major for one to six credits. Normally, no more than three credits may be earned in a semester. The student submits an independent study application which includes a detailed description of the proposed program of study. Permission of the instructor and approval by the department chair are required. The approved independent study form is filed with the Registrar during the registration period.

Variable Credit Courses

A student should complete the necessary form during registration at the Registrar's Office. Variable credits may be obtained only for those courses so designated.

Grade Report

Grade reports are mailed to all students at their home address of record approximately two weeks after the end of each semester. Final grades cannot be secured in advance from the Registrar.

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 the grade report is the unofficial notification to the student, academic dean, and advisor of the student's academic achievements for a given semester, 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. There is a charge of three dollars for each transcript. Other types of transcripts are: Unofficial—Issued Directly to Student, available at no charge to an active student, but limited to one per semester and only after grades are posted for that semester; Placement Transcript provided for the student's placement folder. This is unofficial, but may be reproduced by the Counseling and Career Development Office for prospective employers at no additional cost.

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 Advising Center.

Graduation Requirements

In addition to the minimum requirements of 120 credits for a baccalaureate degree and 60 credits for an associate 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 of not less than 2.00; (d) meet the requirements of the major department; (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.
Residence Requirement

For all baccalaureate degrees at the University, a minimum of 30 credit hours including at least 9 hours in the major field, must be completed while registered in the school or college from which the degree is sought (15 credit hours for associate degree programs). A student may earn no more than 6 of these credit hours at another campus of the University of Maine System. Unless special permission is granted by the dean of the school or college concerned to pursue work elsewhere, the work of the senior or final year must be completed at this University.

Graduation with Distinction

Graduating seniors are cited for graduation honors on the diploma and on the transcript. Students who have achieved a cumulative index of 3.50 or higher graduate summa cum laude; those with a cumulative index of 3.25 to 3.49 inclusive graduate magna cum laude; and those with a cumulative index of 3.00 to 3.24 inclusive graduate cum laude. The cumulative index for the purpose of graduation with distinction is based on the student's total college record.

Transfer students (including those transferring within this University from a two-year to a four-year program) must maintain a cumulative average of 30 or above for coursework in the baccalaureate program, and must earn at least 30 credits, normally the final 30 credits, at the University.

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 and are undertaking work for a second baccalaureate degree are not required to satisfy Core curriculum requirements.

Withdrawal from the University

To withdraw from the University, a student must notify the Registrar's Office in writing. Official withdrawal forms are available from the Registrar's Office and the Advising Center and require a signature. The date of withdrawal will normally be the postmark date of the withdrawal letter or the date the official form is signed.

If a student withdraws from the University during the first week of the semester, there will be no courses or grades recorded. Students withdrawing after the first week through the eighth week will receive a W grade for each course in which the student was enrolled. Students withdrawing after the eighth week will receive regular grade designations as determined by the instructors. Under unusual circumstances, grades of W can be assigned after the eighth week if approved by both the instructor and the dean.

Students in good standing who have withdrawn from the University and who wish to return at a later date should follow the instructions given under Matriculation Status (Leave of Absence).

Information concerning financial obligations to the University relative to the withdrawal policy will be found in the Financial Information Chapter of this catalog.

Matriculation Status (Leave of Absence)

Matriculated degree candidates maintain their matriculation status for ten calendar years from the first semester of their attendance at the University of Southern Maine. If, for any reason other than dismissal from the University, a student does not register for any length of time during that ten-year period and then resumes registration, no readmission process will be required. In such cases the student should simply contact the Registrar's Office for registration instructions. If, however, a student wishes to resume studies as a degree candidate after the ten-year period has elapsed, an application for readmission must be filed with the Admissions Office.
Freshmen and new transfer students (including transfers from other campuses of the University of Maine System) must satisfy the graduation requirements set out in the catalog in effect for the first semester of their attendance as a matriculated student. Students whose matriculation at the University has expired forfeit the right to pursue a degree according to the provisions of the original catalog and are bound instead by the catalog in effect for the first semester of attendance as a readmitted student.

At the student's choice, a later catalog may be selected for graduation requirements; but a student may not select an earlier catalog. In some cases, academic units have specific time limits for completion of graduation requirements. If so, that time limit will be noted in the appropriate school/college/division section of this catalog.

Permission to change from one major to another is granted by the dean and head of the department in which the student expects to major. A form for the change may be obtained from the Registrar's Office. A change-of-major form must be filed with the Registrar's Office. Requests from undeclared students, and admitted-with-conditions students must be processed by the Advising Center.

Information on the procedure for change of college or school may be obtained from the Registrar's Office or Advising Center.

When a student completes the basic requirement for graduation from schools or colleges and the course requirements for two majors, the student should request the dean to notify the Registrar, who will record the double major on the student's transcript.

The development of original thinking and intellectual honesty are regarded as central to an undergraduate education. Although in the pursuit of these goals students will continually consult existing works, it is expected that they will acknowledge the debt owed to others by citing all sources.

Plagiarism, the use without attribution of language, ideas, or the organization of ideas not one's own, is a fundamental breach of basic academic principles and is prohibited in all courses. Unless group work is assigned, coursework is normally completed independently. If books, journals, magazines, or any other sources are reviewed and the ideas or language therein used, they must be cited. Where specific guidelines are not given, students should consult a reference source on proper notation.

Evidence of plagiarism will result in a grade of F for the assignment and may, at the discretion of the instructor, lead to an F in the course. In addition, further sanctions (i.e., censure, probation, suspension, or dismissal) may be imposed through the Student Conduct Code.

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.

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.
Information regarding an independent study term is provided in the section of the catalog describing the College of Arts and Sciences.

The University complies totally with the Family Rights and Privacy Act of 1974 (the Buckley Amendment). For the complete University Confidentiality Policy, consult the Office of the Registrar on either campus.

In order to guarantee a fair and equal adjudication of student grievances in the areas of academic affairs, the University of Southern Maine policy is as follows:

1. Academic grievances generally involve such matters as appeal of grades granted by individual members of the faculty, or student appeal of what he or she feels to be unfair or discriminatory treatment by a faculty member. The following steps are to be followed:
   a. The student first proceeds through the regular administrative appeal process which involves, in the order stated, student contacts with the following:
      (1) The faculty member involved.
      (2) The department chairperson.
      (3) The dean of the school or college involved.
      (4) The provost and the vice president for academic affairs.
   b. If, after this administrative appeal process has been completely pursued, the student continues to feel the grievance has not been satisfactorily resolved, he or she may request that the University of Southern Maine Student Senate convene the Student Grievance Committee. The Student Grievance Committee shall report its findings to the president.
   c. The final decision on any student academic grievance, after it has progressed through (a) and (b) above rests with the president, after receipt of recommendations from involved parties in (a) and (b) above.

2. It is the prerogative of the president to modify this policy. Modification will normally only take place after any requested change has been reviewed by both Faculty and Student Senates.

In order to guarantee a fair and equal adjudication of student grievances in the areas of administrative decisions, the University of Southern Maine policy is as follows:

1. Administrative decision appeals generally involve all matters affecting a student while at USM other than matters affecting grades. (Grading matters are appealed through the Student Academic Appeals Policy.) The following steps are to be followed:
   a. The student first proceeds through the regular administrative appeal process which involves, in the order stated, student contacts with the following:
      (1) The administrator or staff person involved.
      (2) The department superior.
      (3) The department or division director if other than (2) above.
      (4) The appropriate vice president for the area involved.
   b. If, after this administrative appeal process has been completely pursued, the student continues to feel the grievance has not been satisfactorily resolved, he or she may request that the University of Southern Maine Student Senate convene the Student Grievance Committee. The Student Grievance Committee shall report its findings to the president.
   c. The final decision on any student administrative decision grievance after it has progressed through (a) and (b) above rests with the president, after receipt of recommendations from the involved parties in (a) and (b) above.

2. It is the prerogative of the president to modify this policy. Modification will normally only take place after any requested change has been reviewed by both Faculty and Student Senates.
Student Life and Services

The University offers a wide range of academic and extracurricular services to enhance and support students as they progress toward their educational goals. The breadth of these services is designed to accommodate the needs of a diverse student population.

Enrollment Services Center

An Enrollment Services Center is located in Payson Smith Hall on the Portland campus. The Center functions as a one-stop location for registration services, financial aid assistance, admissions counseling and advising for non-matriculated (special) students.

Academic Advising

The University provides academic advising throughout a student's educational career. With assistance of faculty from the schools and colleges of the University, the Advising Center conducts a New Student Program for all newly admitted degree students. Upon declaring a major and being accepted, students are assigned a faculty advisor. Students are strongly encouraged to maintain regular contact with their academic advisors throughout their career at the University.

First Enrollment Advising and Registration

All newly admitted students are invited to participate in a New Student Program conducted during the summer prior to the student’s first fall semester. This program is repeated in December for those students entering the University for the first time in January. The program allows a new student to register for his or her first semester of coursework with the benefit of an interview with an academic advisor. During that interview, such issues as the Core curriculum requirements and requirements of the major may be fully discussed.

Continuing Academic Advising

Following initial advising and registration, students, during their first semester at the University, are assigned for permanent advising to the department of their declared academic major. Students are encouraged to maintain close contact with their department advisor once this assignment has been made.

For certain students, however, the assignment of a permanent department advisor may be delayed. For such students the following arrangements are made.

Students who have not declared a major are provided academic advising by the Advising Center. An academic counselor assists the student in the development of educational goals and 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 with conditions" are assigned to the Advising Center staff for academic advising during the period they complete required coursework. Upon completion of these requirements, the student is assigned an advisor in his/her major department.

Non-Matriculated (Special) students are enrolled in courses at the University on a space-available basis and who have not applied for admission are advised by the Advising Center staff.

Students having questions regarding general academic policies and procedures, as well as about other aspects of University programs, are encouraged to contact the Advising Center in Payson Smith Hall on the Portland campus (780-4040) and in Corbett Hall on the Gorham campus (780-5340).

Off-Campus Advising and Student Services

Students attending one of the University of Southern Maine off-campus centers (Bath-Brunswick, Saco-Biddeford, Sanford) may take advantage of the range of advising and support services listed on these pages. Each center is staffed by an academic advisor who provides services in cooperation with the appropriate on-campus department to ensure consistency and
smooth transition. Services include academic advising, new student programs, placement testing, financial aid assistance, veterans' counseling, registration, billing assistance, and admissions information. Also offered are a variety of social, general interest, and student government-related activities. A more in-depth description of off-campus programs and services is available in the Division of Off-Campus Instruction and Academic Support section of this Catalog.

**Student Testing and Assessment Center**

The Student Testing and Assessment Center is responsible for evaluating entry-level skills of students and the development of measures to assess student needs and interests. The Center administers national examinations and the locally developed placement tests.

Students are encouraged to contact the Testing and Assessment Center (780-4383) for general information regarding the various assessment programs available.

**University Library**

The University Library provides a full range of services on both campuses. In Portland the library is located in Luther Bonney Hall and in Gorham it is located in Bailey Hall. During regular semesters these libraries are open seven days a week for a total of 108 hours. Among the services available are: circulation and reserves, informational and research reference, bibliographic instruction, electronic database searching, and interlibrary borrowing.

The collection represents over a million items including: nearly 3,000 current subscriptions to journals, magazines, newspapers, and yearbooks; over 740,000 microforms; 37,000 international, U.S., and state documents; the Smith Collection of antique maps, globes, atlases, and geographical representations over 15,000 individual maps; University Archives; and other special collections. These collections are supplemented by the nearly 1 million titles held in the other libraries of the University of Maine System which are presented on the URSUS online catalog, and also by the 17 million titles to which we have access through the OCLC online interlibrary loan network.

The Library staff is dedicated to its primary responsibility of supporting the educational, scholarly, and public service activities of the University community. It also recognizes a responsibility to serve the information needs of the citizens of Maine.

**Off-Campus Site Libraries**

The University contracts with public libraries in Bath-Brunswick and Saco to provide books, journals, reference assistance, and interlibrary loan services to off-campus students and faculty. Off-campus students and faculty are also encouraged to use the library facilities in Portland and Gorham.

**Academic Computer Services**

The University has available the following academic computer facilities: MS/DOS microcomputers, Apple II, Macintosh (on both the Portland and Gorham campuses and at the off-campus centers); an IBM 4341 mainframe (located on the Portland campus and linked to three other IBM mainframes in the University of Maine System); an ATT 3B15, a network of DEC workstations, and a NEXT workstation (on the Portland campus and for use by students in upper-level computer science courses). The mainframe computer is linked to the BITNET and the INTERNET network, allowing communication with mainframe computers all over the United States, Canada, and Europe. Many faculty and student access terminals located on both the Portland and Gorham campuses are available to connect with any of these systems.

Student Microlab Centers are located on the Portland and Gorham campuses and are open extended hours during the semester. The MS/DOS microcomputers offer a unique, menu-driven selection system with such general purpose software as word processing and electronic spreadsheets and more course-specific software.

Most residence halls on the Gorham campus have computer rooms with terminals connected to the Portland mainframe. Students who live in dormitory rooms on the Gorham campus and have IBM or compatible micro-
computers may connect to a local area network for access to the same selection of software that is available to the general access clusters.

**Educational Media Services**

Educational Media Services provides audiovisual services that support the academic program of the University. These services include the maintenance and delivery of audiovisual equipment for classroom use on both campuses.

There are film and videotape catalogs available in both offices that are sources for renting instructional materials for classroom use. There is also a collection of nonprint instructional materials available for USM classroom use.

Instructional materials for classroom use may be produced on the Gorham campus. Examples of these materials include overhead transparencies, slides, black and white photographic prints, audio and video tape recording, and duplication and laminations.

**Personal and Psychological Counseling Services**

The Counseling and Career Services Department, through a staff of professional psychologists and counselors, assists students with personal counseling services on an appointment basis. As a part of this service, the office provides appropriate psychological testing, referral services, and maintains an effective liaison with community medical and mental health agencies. (780-4050)

**Substance Abuse Prevention Program**

This program offers students, faculty, and staff a variety of educational and experiential programs to address the problem of alcohol and drug abuse.

The program also offers prevention and intervention services for high-risk and/or identified abusers. Personal counseling is also available. Please contact 780-5166 for further information.

**Career Counseling, Placement, and Internship Services**

The Counseling and Career Services Department offers career counseling, interest testing, part-time and full-time job placement, and a computerized career exploration service for University students. The office provides information on careers, majors, internships, and effective career decision-making. Students also have access to Portland area professionals who can be interviewed in order to obtain accurate information on careers of interest to them (780-4050).

**Academic Support for Students with Disabilities**

The Academic Support for Students with Disabilities Office works with students to overcome obstacles they may face and to develop strategies and support services for achieving academic success at the University of Southern Maine.

Any USM student with a physical, hearing, medical, emotional, or learning disability who is taking a credit-bearing course is eligible for services. Students may be asked to provide documentation.

Academic services may include: tutors; notetakers; taped readings; test proctoring; extra time on tests; interpreters (when appropriate). Students are advised to contact the office before each semester to plan their programs so that appropriate accommodations can be made. A lift-operated van is available upon request to provide transportation between campuses for students with wheelchairs.

The Office is located in Room 122 of Payson Smith Hall on the Portland campus. Call 780-4706 (voice) or 780-4395 (T.D.D.) to schedule an appointment.

**Student Health Services**

Student Health Services includes two health centers, plus health education and substance abuse prevention programs. Services are available in Portland and in Gorham, and are for all students with three or more credits.

The health centers provide primary care for illness and injury through a staff of registered nurses, physicians, and nurse practitioners. Students who live in the residence halls receive most services free and some at reduced rates. Students who commute may receive most services free or at reduced rates by paying a small annual health fee. Commuter students who do not pay the health fee will be charged on a fee-for-service basis.
The health center in Portland is located off the main lobby of the Gymnasium (780-4211). The Gorham health center is located at 110 Upton Hall (780-5411).

Health education specialists coordinate programs to increase students' knowledge of their own health and the health care system. Student interest and need guide the program planning. Substance abuse counselors offer a variety of educational and experiential programs to address the problem of alcohol and drug abuse. These programs also offer prevention and intervention services for high-risk and/or identified abusers. Personal counseling is also available (780-5166).

An inexpensive accident and illness insurance plan is available to those students who pay the health fee or who live in the residence halls.

**Immunization Law**

Maine State law requires all individuals born after December 31, 1956, who plan to enroll in a degree program or plan to take 12 or more credits, to show proof of immunity against measles, rubella, diphtheria, and tetanus before registering for classes.

Immunization records must be on file with Student Health Services before students will be allowed to register for classes.

Specific information about immunization requirements is sent with admissions packets, and is also available in most departments and at Student Health Services. The Immunization Hotline number is 780-4504.

**International Students**

International students are served for immigration documentation as well as academic and personal counseling by the Office of International Student Development (780-4959).

Information on a limited number of tuition waivers for international students is available through the office located at 39 Exeter Street, Portland.

The University offers a variety of opportunities for students to spend a semester or full year at another university while enrolled in a degree program at USM. Through National Student Exchange, the University is affiliated with over 50 universities in the U.S. For further information regarding the National Student Exchange programs, contact the Registrar's Office, 780-5236.

International Study is facilitated through the Office of International Student Development, which maintains links to and information on programs offered throughout the world. Established exchange programs to England, France, Austria, Holland, and Ireland are offered each year. For information regarding International Study Programs contact the Office of International Student Development at 780-4959, 39 Exeter Street, Portland.

**Veterans**

Services to veterans are provided through the Registrar's Office and include certification, liaison with the Veterans' Administration, counseling, and academic policy interpretation.

A variety of cocurricular activities at USM provide a chance for students to develop their talents, interests, and leadership capabilities.

Centers on both campuses provide meeting areas for social and extracurricular activities.

Portland's Campus Center is a large, open building with many smaller areas for meetings and conversations. It has a cafeteria, lounge, study space, art gallery, a variety of student-sponsored activities, a microcomputer room, and the college bookstore. Gorham's Student Center is currently undergoing renovations. It will offer a snack bar, night club, student organization offices, bookstore, and student mailboxes.

Each center includes a Student Activities Office, which acts as a clearinghouse for information about organizations and activities.

A 21-member Student Senate elected by undergraduates is the principal governing body for student life. Students having problems in any aspect of university life have recourse through the Senate and the Student Grievance Committee.

A Student Activity Fee, collected from each student enrolled for six or more credit hours, is used by the Senate to pay for undergraduate activities.
Students interested in journalism, literature, or broadcasting may join the staffs of the University Free Press, a weekly student newspaper; the Portland Review of the Arts, a magazine forum for creative expression; and WMPG-FM, the student radio station. There is also opportunity for students interested in TV production to become involved in USM's own TV station located on the Gorham campus.

The Commuter Life Student Board of the Student Senate serves the nontraditional and commuter student population. This vital organization exists as an advocate for commuter students. It offers support and a network of resources. It is actively involved with USM Child Care, Commuter Student Welcome Program, support groups, and social activities.

A wide range of cultural activities, speakers, and special events are available to USM students throughout the year. Regular performances are given by student groups such as the national award-winning Russell Square Players, the University Chorale, and the Chamber Orchestra. The Southworth Planetarium, the Art Gallery, the Area Gallery in the Campus Center, and the Museum of Cultural Change also hold programs year round.

In addition, many student organizations bring noted artists, performers, and speakers to USM.

For further information on student activities and involvement call 780-4090 or 780-5470.

Fraternities and Sororities

Eight social fraternities and sororities are active on the Gorham campus of the University. Four of the fraternities maintain off-campus houses and all organizations are involved in philanthropic and social activities (780-5470).

Scholarships and Awards Program

The Scholarships and Awards program rewards and recognizes student achievement and commitment both inside and outside the classroom. It represents a rich history of USM alumni and friends who have given to the University and by their gifts have encouraged our finest students.

Each academic year the University Scholarships and Awards program makes applications for scholarships and awards available at the end of October. There are about 60 scholarships and awards given out at USM's Recognition Day Ceremony at the end of the spring semester. The total amount of money awarded to our students each year is approximately $25,000 and growing annually.

For more information concerning the Scholarships and Awards program, please contact the Department of Student Activities at 780-4631 or 780-4090.

Residence Halls

The University provides student housing for approximately 1,450 students in 10 residential units on the Gorham campus and in the city of Portland. Accommodations are coeducational residence halls, with a variety of living options that are selected by residents themselves. The residential units have their own organizations, and numerous programs are offered within each individual residence hall throughout the year. Each residence hall has professional live-in resident director/counselors and a number of student assistants. For further information contact 780-5240.

Food Services

Dining facilities may be found at four separate locations on the two campuses. In Gorham, the main University dining facility is glass enclosed, providing vistas toward the Sebago Lake region, and accommodates approximately 650 diners. Also on the Gorham campus, the University snack bar offers short-order fare through late evening.

In Portland, Portland Hall offers regular board meal service. The Campus Center offers a variety of dining facilities for large or small groups, and operates from breakfast until the evening hours. Special meals and events are held once per week in both locations, and students may use their meal program cards on either campus. For more information contact the Department of Residence Life (780-5240).
USM offers a variety of recreational activities and intramural athletic opportunities. With gymnasiums on both campuses, students can take part in organized programs or work out on their own on either site.

Both gymnasiums have weight training facilities and offer Lifeline and exercise programs. Independent workout programs may be arranged with staff, and racquetball and squash courts are available. Some skating time is available at the Portland Ice Arena, home of USM's hockey team. Cross country skiing is available on the Gorham campus. Swimming is available at the Portland YMCA.

Team competition through the Department of Intramurals is held in basketball, volleyball, softball, flag football, soccer, and wallyball. Individual competition is offered in tennis, golf, racquetball, biking, and running.

Activities are scheduled in the Hill Gym (Gorham campus) and the Portland Gym. Outdoor activities occur on the Gorham campus on Towers Field and Bailey Field.

The University maintains lists of available rooms and apartments off campus for the benefit of students. The lists are available in the Department of Residence Life on the Gorham campus or the Advising Center on the Portland campus (780-5240 and 780-4040).

The University Child Care Services serves over 400 children, from infancy to teens, in its three facilities—Portland campus, downtown Portland center, and Gorham—through a variety of programs: full-day child care (7:30 a.m.-5:30 p.m.); evenings (3:00 p.m.-midnight); after and before school; flex-care, (child care services on a block basis); infant, toddler, and pre-school care; summer and school vacation camps; and sick-child care. All programs are “child-centered,” stressing learning and self-discovery, conducted by professional staff with early childhood education experience. Reservations are encouraged. For further information please contact USM Child Care, 96 Falmouth Street, Portland (780-4125), or the office of the Child Care director (780-5451).

The University offers the following sports for men: cross country, soccer, basketball, ice hockey, and baseball. Sports offered for women include: field hockey, soccer, basketball, cross country, and softball. Golf and tennis are open to both men and women. The University is a member of the National Collegiate Athletic Association, Eastern College Athletic Conference, the Little East Conference, and the Maine Association of Intercollegiate Athletics for Women. As members of these organizations, student athletes have an opportunity to qualify for and participate in state, regional and national tournaments. Contact 780-5430.

The University Department of Military Science offers an opportunity for full-time undergraduate students to receive a commission in various branches of the U.S. Army. Commissions as a second lieutenant may be offered in the Reserves, National Guard, or active duty considering the preference and qualifications of the individual and the needs of the Army. Consider the leadership skills and management training you can obtain through Army ROTC. Contact 780-5255.
Convocation

Each year the University of Southern Maine sponsors a year-long series of lectures, conferences, and cultural events focused on an important contemporary theme. Previous themes have included "The Age of the Computer," "Peace and War in the Nuclear Age," "The Changing Roles of Women and Men," "The Aging of America," "The Arts in Our Lives," "The Constitution: Roots, Rights and Responsibilities," and, for a three-year period, "Worlds in Flux: The Soviet Union, Latin America and East Asia." During 1990-91, the University community will focus on East Asia.

The Convocation scholar for 1990-91, Professor Craig Dietrich of the History Department, views Convocation as an opportunity to focus attention on China, Japan, Korea, Taiwan, and neighboring areas; their political, social, and economic conditions; their culture and history; and their place in today's world.

Convocation events planned for 1990-91 include a Chinese scholar-in-residence, a faculty-staff-student study tour of Japan, an alumni tour of China (tentative), increased cooperation with Chinese and Japanese universities, performances, exhibits, a film series, visits by scholars, journalists, business persons, and political activists, and conferences on U.S.-Japanese economic relationships and on Asian minorities in America.

All students, faculty, and staff are encouraged to participate in Convocation by offering ideas and by supporting and sponsoring events in collaboration with the Convocation Committee, by sharing in the organization and planning tasks, and by teaching or enrolling in courses related to the theme. It is hoped that every member of the University community and many members of the Greater Portland community will find this shared enterprise intellectually rewarding. Students are encouraged to engage in independent study and research within the framework of the Convocation theme.
The Core Curriculum

Director, Core Council: 228 Deering Ave., Portland
Core Council: Amoroso, Boyle, Paltrow, Rootes, Shedletsky, Smith

Rationale and Structure of the Core Curriculum

The Core curriculum at USM has been designed to provide undergraduates with a general education, a core of skills and knowledge that educated persons need in order to excel in their professional and personal lives.

The Core curriculum includes three components:

A. The basic competence component aims to develop academic skills in writing, using quantitative information, and critical thinking. The student must take (1) English composition or its equivalent, (2) an approved mathematics course, and (3) an approved philosophy or "skills of analysis" course. (In the case of English and mathematics, the University requires inadequately prepared students to meet minimum proficiency levels through developmental coursework.)

B. The methods of inquiry/ways of knowing component introduces the student to the range of different academic disciplines: their subject matter, their methods, and their broader purposes. This part of the Core curriculum is subdivided into four areas: fine arts, humanities, social sciences, and natural sciences.

   (1) Fine arts courses seek to explore the aesthetic dimension through personal performance and through historical study of the arts. The student must take one approved performance-centered and one approved history-centered art course, but may not take both in the same department.

   (2) Through the humanities, the Core curriculum seeks to foster knowledge of literature and of the diversity of our historical and cultural heritage. What links these studies together is their focus on the meaning and values of human acts. Under this two-fold division of the humanities, the student develops the critical and aesthetic skills needed to interpret literature and studies the methods through which we attempt to make sense of the past and/or understand alien cultures. The student must take one approved literature course and one approved course dealing with other times or other cultures.

   (3) The social sciences aim to acquaint the student with the methods and theories used to study the social, political, and/or economic behavior of groups or individuals. The student must take two approved social science courses.

   (4) Through lecture-laboratory courses, the natural science offerings seek to develop an understanding of scientific methods, theories, and the contribution of a particular science, and of natural science in general, to our understanding of the world. The student must take one approved science course with a laboratory section.

C. The interdisciplinary component seeks to counteract the fragmentation that can result from compartmentalizing knowledge in academic specialties. These courses aim to show the student that the assumptions and methods of different disciplines may be conjoined in the study of a single issue or topic to achieve insight and understanding that is not merely the sum of the component disciplines. Interdisciplinary courses, which are always taught by two or more instructors, are developed under the guidance of the Core Council, a body with representation from all the schools and colleges. These courses are introduced and discontinued on a regular and periodic schedule. The student must take one interdisciplinary course after having completed his or her English composition and "skills and analysis/philosophy" requirements.
Core Curriculum Requirements

Basic Competence

English Composition  **Do one** (3 credits)

*Writing proficiency must be met before registering for an English Composition course. See Academic Policies section of the catalog for information on proficiency requirement.

Successfully complete ENG 100C or ENG 101C
Score 59 or above on the TSWE (no credit)
Score 500 or above on the CLEP General or English Composition Test
Satisfy composition standards in ENG 100C or ENG 101C by the second week of the term (no credit)

Quantitative Decision Making  **Do one** (3 credits)

*Mathematics proficiency must be met before registering for a Quantitative Decision Making course. See Academic Policies section of the catalog for information on proficiency requirement.

Successfully complete an approved MAT 100-level course
Successfully complete an approved statistics course (MAT 120D, PSY 201D, or SOC 207D)
Pass a locally administered examination (no credit)
(Students in departments that do not specify mathematics requirements should consult their advisors or the Advising Center for guidance in selecting a course in this area.)

Skills of Analysis/Philosophy  **Do one** (3 credits)

Successfully complete an approved PHI 100-level course

*Note: Any 100-level Philosophy (PHI) course can be repeated by taking any other 100-level Philosophy (PHI) course in accordance with the University Repeat Course Policy.

Successfully complete an approved Skills of Analysis course

Methods of Inquiry/Ways of Knowing

Fine Arts  **Do one each** (6 credits)

Successfully complete an approved performance-centered arts course
Successfully complete an approved history-centered arts course

The fine arts courses must be selected from different departments.

Humanities  **Do one each** (6 credits)

Successfully complete an approved literature course
Successfully complete an approved other times/other cultures course

The humanities courses must have different course prefixes.

Social Sciences  **Do two** (6 credits)

Successfully complete two approved social science courses

The social science courses must be selected from different departments.

Natural Science  **Do one** (4 credits)

Successfully complete one approved natural science course

The natural science course must include a laboratory.

Interdisciplinary

Successfully complete one approved COR interdisciplinary course

The prerequisite for COR courses is the successful completion of both the basic competence English composition and the skills of analysis/philosophy requirements.
Core Curriculum Regulations

1. The student has primary responsibility for ensuring that she or he completes the minimum proficiency requirements and the Core curriculum requirements. Undeclared majors should seek advice from the Advising Center. Declared majors should consult their school, college, or department advisors.

2. One Core-designated course in a student's major may be used to satisfy a Core curriculum requirement.

3. The student should satisfy the basic competence requirements before the completion of 60 credits.

4. The student should successfully complete the COR interdisciplinary course before the completion of 90 credits.

5. Courses taken to satisfy the Core curriculum requirements may not be taken on a pass-fail basis.

6. A COR interdisciplinary course may be used to satisfy the Methods of Inquiry/Ways of Knowing requirement of the Core curriculum.

Transfer Students and the Core Curriculum

All transfer students in a baccalaureate degree program are expected to meet the Core curriculum requirements as outlined above. The following guidelines should be noted:

Basic Competence

Transfer students should complete the Basic Competence requirements as early as possible after admission to the University. The English Composition requirement can normally be satisfied by transfer credit for an English composition course. If no such course is available for transfer credit, the student should refer to the other options noted under the Core curriculum requirements.

The Quantitative Decision Making requirement can normally be satisfied by transfer credit for an equivalent mathematics or statistics course. If no such course is available for transfer credit, the student should refer to the other options noted under the Core curriculum requirements.

The Skills of Analysis/Philosophy requirement can normally be satisfied by transfer credit for a course that deals with logic, reasoning, or analytical thinking. If no such course is available for transfer credit, the student should refer to the other options noted under the Core curriculum requirements.

Methods of Inquiry/Ways of Knowing

These requirements can normally be satisfied by transfer credit for courses in each of the areas of the Methods of Inquiry/Ways of Knowing component. That is: one performance-centered art course, one history-centered art course, one literature course, one other times and/or other cultures course, two social science courses from different departments, and one natural science course with a lab. Any CLEP examination that satisfies coursework in an area of the Core curriculum will satisfy Core requirements for that area. When a specific requirement cannot be satisfied by transfer credit, upon initial transfer evaluation at matriculation, the student is expected to take the appropriate course(s) from the list below.

Interdisciplinary

All transfer students granted less than 60 credits at the time of admission to the University are required to take the COR 100 level interdisciplinary course. Students granted 60 or more transfer credits are exempt from this Core curriculum requirement.

Courses Approved to Satisfy Core Curriculum Requirements

In course registration schedules and other publications, courses approved to satisfy Core curriculum requirements are flagged by a letter following the course number. Additional Core-designated courses may appear in the course schedule or on-line schedule for any given semester. Please consult with your advisor regarding the availability of these additional courses.

Note: Any course with a COR prefix can be repeated by taking any other course with a COR prefix in accordance with the University Repeat Course Policy.
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| PSY 201D | Statistics in Psychology |
| SOC 207D | Statistical Methods for Social Research |
| COS 101D | Quantitative Decision Making Using Computers |

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COR 110J Old and in the Way?: Aging in America
Aging is a process that is common to all of us, yet many misconceptions and debates exist regarding growing old in American society. This course introduces students to the study of aging, its utility and ubiquity. We will examine the ways in which three different disciplines—biology, sociology, and the developmental view—conceptualize and discuss issues and questions about aging. Prerequisite: ENG 100C and Skills of Analysis/Philosophy Cr 3.

COR 112H/J Conflict in the Nuclear Age
Conflict is integral to human interaction and therefore recurs as a central theme in the humanities as well as the social sciences. This course focuses on how conflict throughout history, and specifically in our nuclear age, is treated in literature and politics. How do the dilemmas shaped by Sophocles, Tolstoy, and Atwood, for example, illuminate the conflicts rife both in our domestic lives and in international politics? What theories of human aggression and political behavior help us to understand the causes of conflict and war in our world? Through lectures and discussion, this course fosters interdisciplinary critical thinking about the ways in which literature and international politics represent, explain, and evaluate conflict in the nuclear age. Cr 3.

COR 113H Metaphor and Myth in Science and Literature
A comparative study of science and literature, focusing on their aims, methods, and values, and on the nature of truth and creativity in each discipline. Readings in fiction, poetry, and modern physical and biological science will provide a basis for discussion of the metaphoric and mythic nature of scientific and literary discourse. Our goal is to demonstrate that both science and literature are useful, full of insight, and wondrous. This team-taught course will consist primarily of readings, small-group discussions, and position papers. No college science background is required. Prerequisite: ENG 100C and Skills of Analysis/Philosophy Cr 3.

COR 115H/I Modern Ireland in History and Literature
An introduction, through history and literature, to the evolution of modern Ireland, from the Great Famine of the mid-19th century to the troubles in the North today. Prerequisite: ENG 100C and Skills of Analysis/Philosophy. Cr 3.

COR 117J Learning and the Brain
Behavior studies and brain studies have coexisted separately for many years. Though behavior reflects neurological activity, no one was certain which brain areas were involved in which behaviors. Now technological advances enable us to study activity in the normally functioning brain. In this course, which assumes no background in science, we will explore anatomy, physiology, and chemistry of the brain in an effort to develop an understanding of how the brain influences what and how we learn. Issues to be discussed include brain development, learning, and learning disabilities, mental disease, language, reading, spelling, attention, emotion, perception, and memory. Prerequisite: ENG 100C and Skills of Analysis/Philosophy. Cr 3.

COR 118G New Directions in the Arts and Music
Focuses on art and music from ca. 1920 to the present. Topically arranged classes relate contemporary culture to new developments in the arts such as electronics, computers, and multimedia productions. Students will also acquire a vocabulary for interpreting art and music. Prerequisite: ENG 100C and Skills of Analysis/Philosophy. Cr 3.

COR 119F The Illuminated Autobiography
An introduction to two creative processes—the visual and the literary. The course will explore 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: ENG 100C and Skills of Analysis/Philosophy. Cr 3.

COR 120I Aids in America: Thinking Beyond the Apocalypse
The aim of this course is to explore the phenomenon of AIDS in American culture. In order to think beyond the apocalypse, we can view our culture's response to AIDS as a paradigm for living in the twentieth century; no phenomenon, no matter how unprecedented it may seem, occurs in a vacuum. The factors that have led to the crises in health care, research funding, and human response have been implicit and explicit in American culture to varying degrees throughout the twentieth century. Responses to AIDS take shape within
and will influence a range of interlocking cultural structures: medicine, law, politics, ethics, the aesthetic, psychology, and economics. Our objective will be to address these issues as they create the phenomenon of AIDS in America, and to enable students to think beyond apocalyptic sensationalism.

COR 121 J U.S. Social Issues
The goal of this course is to identify conflicts between basic American values—economics, social, and historical—and the actual functioning of American institutions. The course will use popular films which portray these conflicts as the central vehicle for examining and evaluating inconsistencies between traditional and prevailing moral norms and the realities of American life.

The course uses three recent films: *Matewan*, *Silkwood*, and *Wall Street*. It draws upon information and analysis from several disciplines to show that these films portray issues central to an understanding of contemporary American society. As a foundation for identifying and considering these issues, recent work in sociology and economics is used to develop an overview of American values and institutions. The course considers the traditional American values of freedom, justice, and success, examining the dominant individualistic interpretation of them while presenting alternative, social definitions of these values. In turn, the domination of 20th-century U.S. society by large, bureaucratic political and economic institutions is contrasted to the Jeffersonian world of small, independent producers upon which the individualist tradition is premised.

COR 122 I Introduction to Islamic Civilization
This is a survey course with an interdisciplinary epistemology encompassing a wide range of academic fields and cultural contexts. It focuses on Islam as a universal religion embracing diverse cultural areas representing some 45 nations. The course will deal with Islam from religious-doctrinal, cultural-artistic, and socio-political perspectives. It begins with a historical survey of the rise and spread of Islam as a religion, examines its basic doctrine, beliefs, and institutions, highlights the cultural manifestations of Islam in art and literature, and deals with its impact on socio-political thought and action. The course ends with an analysis of the phenomenon of Islamic revivalism and fundamentalism in the context of global recovery of Islamic identity, and ongoing crises and conflicts in the Middle East and the Gulf Area.

COR 123 H Life and Literature after Darwin
A study of biological evolution, and its reflections in literature. Readings on Darwin's theory of evolution in its original and modern forms, followed by the study of literature that depicts our attempts to understand, cope with, and transcend our biological nature. Discussions and writing assignments are aimed at helping students understand how science influences literature, and conversely, how literature translates science into human dimensions. No college biology background required. Pre-requisite: ENG 100C and Skills of Analysis/Philosophy.

COR 124 J Poverty in the United States of America
This course will examine social, economic, and historical dimensions of poverty. It will introduce students to concepts and ideas from various disciplines to promote their understanding about this controversial and widely misunderstood topic. We take it as axiomatic that poverty must be understood in the broader contexts of inequalities of class, status, power, ethnicity, gender, and race which typify advanced capitalist societies. Far from being restricted to a small minority, poverty affects a large segment of the population.

COR 126 J Global Enlightenment
This course is designed to familiarize students with the major problems confronting civilization as we approach the 21st century. Emphasis will be placed upon a variety of critical global issues dealing with such themes as energy/power generation, housing, pollution, waste disposal, effective resource utilization, transportation, communications, food production, water, ecological/environmental problems, world population, cultural co-existence, education, and technological literacy. Solutions to such problems will be analyzed and discussed and the importance of interdependence among nations will be stressed throughout the course.
University Honors Program

Director: Jeremiah P. Conway, Honors House, 102 Bedford Street, Portland
Honors Faculty: Ashley (English), Caffentzis (Philosophy), Callender (Education), Duclos (Foreign Languages and Classics), Gavin (Philosophy), E. McGrath (English), Owens (Foreign Languages and Classics)
Honors Council: Bazinet (Applied Science), Burson (Nursing), Crochet (Foreign Languages and Classics), Franklin (Art), Friedman (Law), Monsen (Sociology), Neveu (Business, Economics, and Management), O'Donnell (Education), Pollock (Geosciences)

The Honors Program provides an enriched undergraduate education to a selected group of students who are outstanding in their ability, curiosity, creativity, and motivation. Approximately 30 students are admitted to the Honors Program each year. Students entering the fall semester of their freshman or sophomore year, whether full-time or part-time and regardless of intended major, are eligible to apply. Students selected for the program work closely with faculty in a series of small seminar-type courses specially designed for Honors Program students. These courses integrate knowledge from various disciplines and examine more fully than is possible in the general curriculum the ways of knowing, Western culture, and the contemporary situation. Later, Honors Program students take an advanced seminar and do a major independent research project under the direction of a faculty member in their department. All Honors Program work stresses independent learning, original thinking, and the development of skills in research, writing, and oral expression.

The Honors Program is more than a series of courses. Students in the Honors Program are part of a special social and intellectual community that extends beyond the classroom. This community has its physical location at Honors House, 102 Bedford Street, on the Portland campus. Honors House contains a seminar room, a lounge and reading room for the use of Honors Program students and faculty, and the program's faculty and administrative offices. Students come to Honors House to attend classes, to study, to meet with professors, and to socialize. In addition, speakers, seminars, discussion groups, artistic presentations, and social events are scheduled regularly at Honors House.

Honors Program work is rewarding and beneficial for all high-achieving students regardless of their academic interests or career goals. Honors Program courses provide a core of general knowledge and a sensitivity to important contemporary issues. The skills acquired through Honors study are applicable in any setting. In upper-level courses, Honors students may pursue in depth their particular interests. Honors Program work provides a superb background for further study and will assist students in gaining admission to graduate or professional school. Honors work is also excellent preparation for any career requiring demonstrated achievement and discipline.

To graduate with General University Honors, a student must successfully complete the following sequence:

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<th>Course Code</th>
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<tr>
<td>HON 101</td>
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<td>HON 102</td>
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<td>HON 311</td>
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<td>HON 312</td>
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Honors students may also choose from the following elective Honors courses:

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<td>HON 321</td>
<td>Honors Directed Research</td>
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<tr>
<td>HON 331</td>
<td>Honors Directed Study</td>
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Courses taken in the Honors Program may not be taken on a pass-fail basis.

**Core Curriculum Requirements**

Successful completion of the Honors Colloquia (HON 101, HON 102, HON 201, and HON 202) will satisfy the following Core curriculum requirements: English Composition, Skills of Analysis/Philosophy, History-centered Fine Arts, Humanities Literature and Other Times/Other Cultures. Students who do not successfully complete all the Honors Colloquia should consult with the director concerning the use of Honors Colloquia to satisfy Core curriculum requirements.

**Departmental Major Requirements**

Required and elective upper-level Honors courses (HON 301, HON 311, HON 312, HON 321, and HON 331) may be counted toward the number of credits departments require for graduation as a major. Students enrolled in the Honors Program should consult with the director concerning the use of Honors Program courses to satisfy departmental major requirements.

**Admission to the Honors Program**

*Standards.* The Honors Program is designed for highly motivated, intellectually curious students who would benefit from working closely with faculty in a challenging and enriched course of study. Admission to the Honors Program is based primarily on criteria designed to identify such students. The applicant's entire record is reviewed. Many factors are considered: the applicant's overall academic record; SAT and other test scores; extracurricular activities; recommendations; work experience; application essay; and an interview with the Honors director. The Honors Program seeks a diverse group of students to provide a stimulating environment for all participants.

*Application Procedures and Deadlines.* Application to the Honors Program is separate from and in addition to application to the University. Students interested in applying for admission to the Honors Program should write or call University Honors Program, University of Southern Maine, Honors House, 102 Bedford Street, Portland, Maine 04103, (207) 780-4330, for an Honors Application Form. To be considered for September, a completed application should be received at Honors House by June 1. Later applications will be considered if there is space available in the program. As soon as a completed application is received, the applicant will be contacted to schedule an interview with the Honors director. Applicants are notified of admissions decisions as soon as they are made or by August 1. Early application is advised.

**Retention in the Honors Program**

To remain in good standing in the Honors Program, a student must successfully complete all Honors courses taken and also maintain an overall 3.0 grade point average during his or her first two years at USM and a 3.25 grade point average during his or her last two years. Before a student is dropped from the Honors Program for failure to maintain the required grade point average, he or she will have one probationary semester in which to regain the required grade point average.

**Graduating with General University Honors**

Honors students who successfully complete all required Honors courses (HON 101, HON 102, HON 201, HON 202, HON 301, HON 311, and HON 312) and have attained a 3.25 grade point average in all University work including Honors courses, will graduate with General University Honors. The Honors Council may award the designations High General University Honors and Highest General University Honors to those Honors students who have specially distinguished themselves in Honors coursework. General University Honors designations are in addition to *cum laude*, *magna cum laude*, and *summa cum laude*, which are awarded solely on the basis of cumulative grade point average.
HON 101 Honors Colloquium IA: The Ancient World
Understanding an event requires an exploration or origins, of how, when, and why something happened. To understand the events of modern western civilization we turn to the ancient world in search of origins. Specifically, this course examines the ways in which Greek, Judaic, Christian, and Roman cultures structured their worlds.

Central to this course and these cultures are the founding stories that tell students who they are, stories from Homer, Genesis, Matthew, and Virgil. The founding story we moderns tell is the story of the ancient world. What this story may mean to us personally and collectively is a central question of this course and our times.

Cr 4.

HON 102 Honors Colloquium IB: The Medieval World
This course examines not one, but many, worlds between 200 and 1500 A.D.—a period usually called The Middle Ages. Geographically, events take place in North Africa, the Near East, Italy, Spain, Germany, France, and England. The texts to be read are similarly diverse. They include not only written works we consider poetry or philosophy or anthropology but also the visual arts and music, city architecture, rituals and historical documents. As we discuss this wide range of materials, we will not attempt to discover one unifying "medieval world view," rather we will pose recurring questions, chief among them, how medieval people gave meaning to their lives and interpreted the world around them.

Cr 4.

HON 201 Honors Colloquium IIA: Renaissance, Reformation, and Enlightenment
This course will confront the student with original texts, typical experiences and the material context of the Great Transformation from feudal Christendom to the world society at the dawn of the Industrial Revolution. The core of the course will be the reading and discussion of some of the great literary, religious, and scientific texts of the period, for example, Bacon's New Atlantis, Shakespeare's The Tempest, Kepler's Harmonies of the World, and Harriot's A brief and the true report of the newfoundland of Virginia, in an attempt to show the interrelationship of scientific, social and literary production of the period. Other voices will be heard, from native American views of the Europeans, to African slave narratives, to testimonies of witches on trial, to the ranks of those who wished to "turn the world upside down" in the English Civil War. Out of this montage of thoughts, experiences, and words characteristic of the Great Transformation, the student should be better able to understand and judge the value of the modern world society this Transformation resulted in.

Cr 4.

HON 202 Honors Colloquium IIB: The Modern Age
The Modern Age begins with a specific and difficult text, namely The Trial, by Joseph Kafka. Kafka's text raises the difficult issues of whether "progress" can be made in modernity, or whether all is just "process." The course deals with a series of texts and authors who believe that they clearly know what the "problematic" is, and how to go about solving it. These authors include Marx, Nietzsche, Freud, Woolf and Beauvoir. All these are studied in comparison with Kafka's text, with a view to ascertain whether Kafka can be reduced to any one of these interpretations.

In the second half of the course, a switch is made from the European to the American context. The focal text for this section is William Carlos Williams's poem, "Patterson." A third, non-Western context, the Russian, is looked at through the work of Dostoevsky. An ongoing comparison of the three contexts, European, American and Russian permeates the semester.

The Modern Age ends with a text by Samuel Beckett, Waiting for Godot. In so doing, it returns to the opening question of Kafka's The Trial, namely, can any form of "progress" be made?

Cr 4.

HON 301 Honors Seminar
In this seminar students undertake the critical examination of a topic or problem of contemporary relevance and write a paper based on independent research.

Cr 3.

HON 311 Honors Independent Tutorial I
During the senior year, each Honors student works directly with a faculty member in the student's major department in a year-long, in-depth study of a particular area of interest. The student engages in readings under the direction of the faculty tutor and writes a major research paper.

Cr 3.

HON 312 Honors Independent Tutorial II
This course is a continuation of Honors Independent Tutorial I.

Cr 3.

HON 321 Honors Directed Research
This optional course allows an Honors student with a particular research interest to write a research paper under the direction of a faculty member who is willing to supervise the project. Approval of the director is required.

Cr 3.

HON 331 Honors Directed Study
This optional Honors course allows an Honors student with an interest in a particular area to design a course of reading in collaboration with a faculty member who is willing to tutor the student. This course affords an Honors student an additional opportunity to pursue his or her individual interests. Approval of the director is required.

Cr 3.
Women's Studies Program

*Director:* Diana E. Long, 94 Bedford St., Portland  
*Women's Studies Council:* Benedict, Cameron, Cole, Crader, Eagan, Franklin, Gilmore, Gish, Goldstein, Holden, Kingsland, MacPherson, Messerschmidt, Murphy, Padula, Thompson, Tizon, Woshinsky

Women's Studies offers students the opportunity to study the lives, words, ideas, and cultural contributions of women as well as feminist theoretical approaches to interdisciplinary studies. Women's Studies courses focus both on recovering women's lost or neglected past and on analyzing and rethinking contemporary society. Subject matter may include, for example, the philosophy of Mary Wollstonecraft, the poetry of Phyllis Wheatley, or the history of the women's health movement. Courses may also focus on such issues as the social construction of gender, the effect of gender-biased language, inequities in work and pay, or the nature of the family. Although women are central to the subject matter of Women's Studies, feminist analysis goes beyond specific issues of gender to re-examine such topics as peace, humanity's relation to the physical world, and the role of science in society.

The Women's Studies Program introduces students to new ways of thinking about women and about the world. The program offers a major leading to a bachelor of arts degree through the Self-Designed Program in the College of Arts and Sciences. Students may also minor in Women's Studies.

Women's Studies includes both a core curriculum offered by the program and electives offered within departments, such as Feminist Philosophy, Sociology of Gender, or Anthropology of Sex and Gender. Courses offered by the program are interdisciplinary and focus on the major texts, ideas, theories, and methods common to Women's Studies. Department courses examine the role of women and women's ideas in specific disciplines. In addition to a broad, integrated vision of society and culture, Women's Studies students develop skills in analysis, critical thought, writing, and practical application of theoretical understanding.

Graduates with a self-designed major in Women's Studies are prepared for graduate and professional schools in a variety of disciplines. They are also prepared for careers in social science, affirmative action and equal employment programs, education, personnel or career advising, women's agencies and programs, human services agencies, and public service.

The Women's Studies major is offered through the College of Arts and Sciences Self-Designed Major: Please see Interdepartmental Major Programs section.

**Self-Designed Major in Women's Studies**

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

The Women's Studies self-designed major consists of a minimum of 21 hours of required courses and 18 hours of Women's Studies elective or related courses.

**Required Courses (select at least 21 hours)**

- WST 130 Introduction to Women's Studies
- H1Y 364 History of Women in The United States
- WST 260 Thinking About Women and Gender
- WST 330 Sex, Gender, and Inquiry
- WST 440 Field Experience/Internship in Women's Studies

**One of the following:**

- ANT 2321 Anthropology of Sex and Gender
- SOC 316 Sociology of Gender
- SOC 358 Sociology of Women's Work

**and a choice of/or both**

- PHI 265 Feminist Philosophy
- WST 360 Advanced Feminist Readings

**Women's Studies Elective and Related Courses (select at least 18 hours)**

- WST 220 Topics in Women's Studies
- WST 230 Psycho-Social Development of Women
Minor in Women's Studies

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 18 hours of Women's Studies courses and 6 hours of related courses.

For students interested in the minor in Women's Studies, the program offers the following concentration:

Required (15 hours)

- WST 130 Introduction to Women's Studies
- WST 260 Thinking About Women and Gender
- WST 330 Sex, Gender, and Inquiry
- HTY 328 History of Women in the United States

One of the following:

- ANT 232I Anthropology of Sex and Gender
- SOC 316 Sociology of Gender
- SOC 358 Sociology of Women's Work

and a choice of/or both (at least 3 hours)

- PHI 265 Feminist Philosophy
- WST 360 Advanced Feminist Readings

and Women's Studies elective courses or related courses (at least 6 hours)

- WST 230 Psycho-social Development of Women
- WST 320 Advanced Topics in Women's Studies
- WST 350 Feminist Ethics
- WST 450 Women's Studies Independent Study
- ENG 387 Contemporary Women Writers
- ENG 379 Earlier Women Writers
- BUS 349 Women and Management
- ANT 232I Anthropology of Sex and Gender
- COM 495 Sex-related Differences in Communication
- ARH 218 Women in Art
- POS 201 Women and Politics
- SOC 316 Sociology of Gender
- HTY 339 European Women's History
- SOC 358 Sociology of Women's Work
- HTY 364 History of Women in the United States
- HTY 399 Women in Latin America
- PHI 265 Feminist Philosophy
- PSY 235 Psychology of Women

Major Credit and Grade Policy

There are prerequisites for many of the Women's Studies courses. See departmental course listings for specific information. Certain courses may require the instructor's or director's permission. Others will accept permission of the instructor in lieu of the prerequisite. In some cases, waivers or equivalents for required courses will be accepted. No grade of D will count toward fulfillment of the Women's Studies self-designed major. Courses taken pass/fail are not acceptable.
Curriculum Summary and Guide

The curriculum core in Women's Studies is structured to offer introductory, intermediate, and advanced level courses providing comprehensive knowledge of the history, theories, research, methodology, and applications of Women's Studies. The first-year student is encouraged to complete Core curriculum requirements. In the second year, students should take Introduction to Women's Studies (an interdisciplinary examination of major issues in the field), Feminist Philosophy, and electives in Women's Studies. Students who plan to minor in another discipline should also begin the suggested sequence for that year. Third-year courses should include History of Women in the United States, Advanced Feminist Readings, and Women's Studies electives. These courses provide a further grounding in major feminist texts and in the contributions, ideas, and experience of women. Fourth-year courses should include Sex, Gender, and Inquiry, and Field Experience/Internship in Women's Studies. These courses offer advanced experience in feminist theory, research and practical application. Students must also complete elective requirements and any minor requirements in their fourth year.

Summary

Year I
Core curriculum requirements

Year II
Complete Core curriculum requirements
Introduction to Women's Studies (fall)
Feminist Philosophy (fall)
Women's Studies electives (fall and spring)
Begin any minor requirements

Year III
History of Women in the United States (fall)
Advanced Feminist Readings (fall)
one of the following:
  Anthropology of Sex and Gender
  Sociology of Gender
  Sociology of Women's Work
  Feminist Ethics
Women's Studies electives (fall and spring)
Continue minor requirements

Year IV
Sex, Gender, and Inquiry (fall)
Field Experience/Internship (fall and/or spring)
Women's Studies electives (fall and spring)
Complete minor and elective requirements

Declaration of Major

Students are encouraged to explore a variety of disciplines and courses before declaring a self-designed major in Women's Studies. A minimum of 30 hours of arts and sciences courses, including at least one Women's Studies course, should be completed before application is made. Consistent with Interdepartmental Major Board policy, students should declare a major prior to completion of 53 credits and prior to completion of 30 percent of the proposed major.

WST 130 Introduction to Women's Studies

This course introduces students to the study of women as a diverse social group with a history, culture, and experience of their own; it examines the creative, intellectual, and social contributions of women as well as their roles in society. We will critique the suppression and denial of women's thought and action and consider ideas for transforming social structures. Our objective is to understand women in society from a historical and cultural perspective. Readings will include interdisciplinary background studies as well as contemporary women's writings such as Sonia Johnson's experience with traditional religion, Alice Walker's short story about quilting, and Adrienne Rich's analysis of heterosexuality as a compulsory institution. Cr 3.
WST 230 Psycho-social Development of Women
This course is designed to introduce, investigate, and critique traditional developmental theory as well as the current research which seeks to expand the basic knowledge of women's development and the ways in which women learn. Emphasis will be placed on the study of psychological, cognitive, moral, and sociological development of women from conception through the life span. The interaction of biological and environmental factors will be considered as new theories and research related to women's development over the life span are explored. Prerequisite: WST 130 or permission of the instructor. Cr 3.

WST 260 Thinking About Women and Gender
What are feminist theories? How do they differ from other forms of theorizing? What roles do feminist theories play within academic disciplines, and what are their roles in the ongoing feminist work for social change? Feminist theories exist within traditional disciplines and shape the way we currently understand the production of knowledge. Feminist theories comprise a vital and available critique that offers a number of ways to work toward transforming the structures of oppression. In this course we will examine how oppression and power are linked to gender, race, and class. The aim of this course is to familiarize students with the historical, political, and intellectual traditions of feminist theories; to study their representative texts; and to explore key issues such as sexuality, work, and race within that context. Because feminist theory is itself a dynamic and expanding practice, students will explore the interactions among, as well as distinctions between, feminist theories. Cr. 3.

WST 320 Advanced Topics in Women's Studies
Each semester topic areas not already covered by regular course offerings in women's studies will be offered. The course may be repeated for credit when different topics are considered. Cr 3.

WST 330 Sex, Gender, and Inquiry
This seminar will explore feminist research and methodology from an interdisciplinary perspective. Similarities and differences between feminist and traditional research, sex biases and the role of values in research, and new research paradigms will be examined. Emphasis will be on applying critical and scholarly feminist approaches to selected issues and topics related to women through involvement in a major research project. Prerequisites: WST 130, 230 or permission of instructor. Cr 3-6.

WST 350 Feminist Ethics
This course is an introduction to feminist ethics. The first part of the course explores some of the diverse approaches to feminist ethics, examines both the distinctiveness of each approach and similarities among them, and investigates why such diversity exists and to what extent it is necessary. The second part of the course explores specific issues and areas of ethical reflection, such as power, sexuality, dualism, nonviolence, and means of social change. Prerequisite: WST 130 or permission of the instructor. Cr 3.

WST 360 Advanced Feminist Readings
Advanced Feminist Readings is an in-depth study of selected great books by women. Although it is not a summary and cannot be inclusive, it draws on texts from the 16th to the 20th century and represents many strands of feminist thought. Diverse texts will be linked by a specific theme such as the centrality of language to the definitions and creative potential of women or the development of a women's tradition. Readings include Wollstonecraft, deBeauvoir, Friedan, Woolf, Daly, Rich and others. Cr 3.

WST 440 Field Experience/Internship in Women's Studies
This course is designed to provide an opportunity for students to relate feminist theory and philosophy to practice. The links between community and campus, social action and research will be emphasized through experiential learning. Requirements include 120-240 hours of work in a community or government agency or private organization, in addition to meeting with other interns in seminars and scheduled meetings with a supervisor. Prerequisite: self-designed major in Women's Studies, senior standing, and permission of the director. Cr 3-6.

WST 450 Independent Study in Women's Studies
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. Prerequisite: advanced standing and permission of the director. Cr 3.
College of Arts and Sciences

Dean: Dave D. Davis

The College of Arts and 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 and Sciences is composed of the following departments:

Art
Biological Sciences
Chemistry
Communication
English
Foreign Languages and Classics
Geography-Anthropology
Geosciences
History

Mathematics and Statistics
Music
Philosophy
Physics
Political Science
Psychology
Social Work
Sociology and Criminology
Theatre

Baccalaureate Degree Programs

Programs of study leading to a bachelor of arts (B.A.) degree are available in the areas listed below. In addition, bachelor of fine arts (B.F.A.) is offered by the Art Department; bachelor of science (B.S.) is offered by the Department of Chemistry; and bachelor of music in performance (B.M.) and bachelor of music in music education (B.M.) is offered by the Music Department.

Art
Biology
Chemistry
Communication
Criminology
English
French
Geography-Anthropology
Geology
History

Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Self-Designed
Social Science
Sociology
Social Work
Theatre

Requirements for all Baccalaureate Degree Candidates

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

I. minimum proficiency requirements
II. Core curriculum requirements
III. departmental or program requirements
IV. minimum of 120 credits of accepted courses
V. minimum of 2.0 cumulative grade point average

Minimum Proficiency Requirements

Every baccalaureate degree student who is admitted to the University must produce evidence (no credit granted) of both a minimum writing proficiency and a minimum mathematics proficiency. These requirements are described in the Academic Policies section of this catalog.

Core Curriculum Requirements

Every baccalaureate degree student who is admitted to the University is required to meet the Core curriculum requirements. These are set out in the chapter on Core curriculum.
The College requires that every baccalaureate degree student fulfill the requirements of a major program. Students normally declare a major program prior to completing 53 credits. Students who wish to declare a major must obtain a Declaration of Major form from the Dean's Office.

Fine arts students, especially in the Departments of Art and Music, usually must begin their program earlier owing to portfolio and audition requirements. Students planning to major in a science are urged to obtain an advisor in the appropriate department and begin the required course sequence as early as possible.

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. Undecided students are encouraged to consult the Advising Center as well as those departments that interest them prior to declaring a major.

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.

The College of Arts and Sciences offers a two-year degree program leading to the associate of arts (A.A.) degree in liberal arts. This program is also offered off-campus in conjunction with the Division of Off-Campus Instruction and Academic Support. Graduates of this program may transfer into a baccalaureate degree program.

To be eligible for the associate of arts degree in liberal arts from the University, a student must meet the following:

I. minimum proficiency requirements
II. Core curriculum requirements
III. electives from the College of Arts and Sciences. The degree candidate may take up to two courses at the 100 level or above outside the College of Arts and Sciences. Taking additional courses in this category requires permission of the Dean.

A list of courses approved for satisfying the requirements of the Core curriculum may be found in the Chapter on the Core.

Students who wish to transfer into a baccalaureate degree program should ensure that their electives are from courses carrying a number of 100 or higher. They may also wish to consult the major requirements of baccalaureate programs in which they are interested.

Independent Study Term

Students who have an academic project which 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 or the Office of the Dean of the College of Arts and Sciences.

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 and Sciences Minors

Minors are available in the following departments: art history, biology, chemistry, communication, criminology, English, foreign language, geography/anthropology, geology, history, mathematics, music, physics, political science, and sociology.

School of Business Minor

The School of Business, Economics and Management 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 busi-
ness theory and practice. For more information, see the School of Business, Economics and Management section of this catalog.

*Graduate Programs in the College of Arts and Sciences*

The College of Arts and Sciences offers two programs leading to the master's degree. These are the master of arts in New England Studies and the master of science in statistics. Consult the University's graduate catalog for further information.

*College of Arts and Sciences Courses*

The College also offers courses on a variety of topics and themes which are not sponsored by individual departments. The courses currently offered are the following.

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**ARS 122 Career Development**

This course is designed for upper-level students to investigate the world of work in terms of their own personal-professional goals. Emphasis is placed upon the career-planning process in relation to current opportunities. Activities will assist students to formulate and clarify realistic job objectives as well as plan appropriate strategies to achieve employment. Experiences will include inventory-awareness exercises, career exploration with field visits, and preparation with resume construction and interviewing procedures. **Cr 1.**

**ARS 123 Topics of Human Sexuality**

The purpose of this course is to provide individuals with a thorough understanding and accurate information concerning their sexuality. The course will show the subtle complex interrelationship among sociology, biology, philosophy, psychology, theology, behavior, and interpersonal relationships as they pertain to sexuality. Topics to be discussed include sexual growth and development, sexual attitudes, sexual anatomy and physiology of males and females, human sexual response cycle, sexual attraction, love and relationships, contraception, homosexuality and bisexuality, alternative forms of sexual behavior, sexual fantasies, sexual dysfunctions and problems, sexual history and research. **Cr 3.**
Interdepartmental Major Programs

Self-Designed Major Committee: Professors Erickson, Fithian, Jaques, Novak, M. Ubans; Mr. Higgins

Students may enroll in interdepartmental major programs that lead to a bachelor of arts degree in a self-designed major. The self-designed major 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 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 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. Application forms and guidelines may be obtained from the Office of the Dean of the College of Arts and Sciences.

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 CAS curriculum. USM currently offers the following group contract programs:

- Biotechnology
- Classical Studies
- Foreign Languages
- French Studies
- German Studies
- Hispanic Studies
- International Studies
- Russian Studies
- Social Science
- Women's Studies

Biotechnology

Coordinator: Lou Gainey, 306 Science Building, Portland

Steering Committee: Gainey, Holmes, Knight, O'Mahoney-Damon, Rhodes, Ricci, Stebbins

The biotechnology self-designed major is an interdisciplinary degree program designed to provide students with a liberal arts education emphasizing cellular and molecular biology. An integral part of this program is a semester-long, full-time internship at one of several local biotechnology firms which will provide students with practical experience in biotechnology.

Students may apply for admission to the program at the end of their freshman year (after completion of one year of chemistry and one year of biology coursework). The committee will recommend the most qualified students for admission to the program. Minimum requirements are a "B" average in all coursework required for the program. The number of students admitted to the program will be determined by the committee; however, students will not be admitted unless there is a reasonable expectation of their being placed in an internship.

Students will be required to maintain a 2.5 GPA in required coursework to remain in the program. Students who do not maintain this average will be placed on probation for one semester; if no improvement is noted, they will
be dismissed from the program. Required coursework with a grade of "D" will not be counted toward fulfilling the program requirement.

Complete details and guidelines may be obtained from the program coordinator.

Program and Requirements

The minimum number of credits (exclusive of the University's Core curriculum) required for the self-designed major in biotechnology: 76.5 or 77.5.

Biology (21.5 credit hours)
- 2 semesters Freshman Biology (BIO 105K, 106K, 107, 108)
- Genetics (BIO 301)
- Microbiology (BIO 311, 312)

Chemistry (32 credit hours)
- 2 semesters Freshman Chemistry (CHY 113, 114, 115, 116)
- 2 semesters Organic Chemistry (CHY 251, 252, 253, 254)
- Analytical Chemistry (CHY 231, 232)
- Biochemistry (CHY 361, 362)
- CHY 363, 364, or BIO 406 or BIO 409, 410

Internship (12 credit hours)

Physics (9 or 10 credit hours)
- 2 semesters Introductory Physics
  (PHY 121K, 122K, 123, 124 or PHY 111K, 112)

Mathematics (7 credit hours)
- 1 semester Calculus (MAT 152D)
- 1 semester Statistics (MAT 120D)

Classical Studies
(Concentration in either Greek or Latin)

Coordinator: Gloria Duclos, 55 Exeter Street, Portland

The minimum number of credits (exclusive of the University's Core curriculum) for the self-designed major in Classical studies: 36.

For the concentration in Latin, the student takes three upper level (above 100) courses in Latin and two upper level courses in Greek; for the concentration in Greek, the student takes three upper level courses in Greek and two upper level courses in Latin.

In addition, the student takes the following courses in ancient civilization and literature in translation:
- CIA 283H Epic Hero
- CIA 284H Tragic Hero
- CIA 2851 Classical Mythology
- CIA 2911 Golden Age of Greece
- CIA 2921 Rome, from Republic to Empire

Also, the student chooses two courses from the following electives:
- ARH 111H History of Art I
- ARH 212 Classical Art
- HTY 303 History of the Ancient Near East and Greece
- HTY 304 History of Rome
- PHI 310 Ancient Philosophy
- POS 289 Political and Social Thought I

Foreign Languages

Coordinator: Mara Ubans, 55 Exeter Street, Portland

The minimum number of credits (exclusive of the University's Core curriculum) required for the self-designed major in foreign languages: 36.

For a major in foreign languages, students may choose any two of the following languages and take these courses in the languages of their choice:

Spanish: SPA 331*, 332*, 351H, 352H, 281H (*SPA 301, 302 are prerequisites)

German: GER 321, 322, 351H, 352H, 281H

French: FRE 321, 323, 291H, or 2921; any two of 361, 362H, or 363.

Classical Languages: GRE 251, 252, LAT 251, 252, and either GRE 470 or LAT 470
In addition, the student is required to take two language theory courses, one of which may be replaced by LAT 101 and 102. Total credits required: 36.

French Studies

Coordinator: Lucia di Benedetto, 55 Exeter Street, Portland

The minimum number of credits (exclusive of the University's Core curriculum) required for the self-designed major in French studies: 36.

One language theory course or two semesters of Latin.

French Language and Literature

Any two
FRE 321 Workshop in Writing French
FRE 323 Workshop in Speaking French
FRE 305 French Phonetics

Any two
FRE 361 The French Novel
FRE 362H French Poetry
FRE 363H The French Theatre

One French literature course from the 400 level.

French Civilization and Literature in Translation

FRE 291I French Civilization: A Historical Approach
FRE 292I French Civilization: Contemporary France

Select one
FRE 283H Contemporary French Thinkers
FRE 284 Avant-Garde Theatre in France
FRE 285 18th Century Literature in France and England

Electives (any three)
LAT 101- Beginning Latin
LAT 102
HTY 316 French Revolution and Napoleon
HTY 322 20th Century Europe
POS 235 Democratic Governments of Europe
ARH 316 Modern Art
MUS 203 Music in the 20th Century
SOC 361 Sociology of Franco-Americans

German Studies

Coordinator: Mara Ubans, 55 Exeter Street, Portland

The minimum number of credits (exclusive of the University's Core curriculum) required for the self-designed major in German studies: 36.

One language theory course or two semesters of Latin.

German Language and Literature

GER 321 Composition/Conversation
GER 351H Introduction to German Literature
GER 352H
GER 281H The German Novelle
GER 470 Independent Study

Social Sciences (any three)
HTY 320 Europe at the Turn of the Century (1871-1913)
HTY 322 20th-Century Europe
HTY 324 World Wars I and II: European War and Diplomacy
HTY 330 Germany: Bismarck to Hitler
HTY 334 The Holocaust: Policy, Practice, Response
HTY 336 Leaders of the 20th Century: Churchill, Roosevelt, Hitler

Humanities (any two)
CIA 283H The Epic Hero in Ancient Literature
CIA 284H The Tragic Hero in Ancient Literature
CIA 285H Classical Mythology
ENG 341 Contemporary Critical Theories
ENG 316 The Bible
PHI 275 Theories of Language
PHI 340 History of Late Modern Philosophy

Course substitutions can be made in the Social Sciences and Humanities categories upon prior approval.
**Hispanic Studies**

**Coordinator:** Charlene Suscavage, 55 Exeter Street, Portland

The minimum number of credits (exclusive of the University's Core curriculum) required for the self-designed major in Hispanic studies: 36.

**Required Courses**

**Spanish Language and Literature**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>SPA *301</td>
<td>Practice in Conversation</td>
</tr>
<tr>
<td>SPA 302</td>
<td>Practice in Writing</td>
</tr>
<tr>
<td>SPA *331</td>
<td>Advanced Conversation</td>
</tr>
<tr>
<td>SPA 332</td>
<td>Advanced Grammar and Stylistics</td>
</tr>
<tr>
<td>SPA 351H</td>
<td>Introduction to Hispanic Literature I</td>
</tr>
<tr>
<td>SPA 352H</td>
<td>Introduction to Hispanic Literature II</td>
</tr>
<tr>
<td>SPA 281H</td>
<td>Masterpieces of Spanish American and Brazilian Literature (in English Translation)</td>
</tr>
</tbody>
</table>

**History and Culture**

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>SPA 270</td>
<td>The Culture and Civilization of Spain (to be developed)</td>
</tr>
<tr>
<td>HTY 181I</td>
<td>History of Latin America I</td>
</tr>
<tr>
<td>HTY 182I</td>
<td>History of Latin America II</td>
</tr>
</tbody>
</table>

*Students who earn advanced placement for 301 and/or 331 must fulfill the requirements for the major with courses from the other areas of the major.*

**Electives (any two)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>HTY 381</td>
<td>Latin America and the United States</td>
</tr>
<tr>
<td>HTY 383</td>
<td>The Society and Culture of Latin America</td>
</tr>
<tr>
<td>ECO 370</td>
<td>International Economies</td>
</tr>
<tr>
<td>GEO 301</td>
<td>Political Geography</td>
</tr>
<tr>
<td>ANT 205</td>
<td>Latin American Cultural History</td>
</tr>
</tbody>
</table>

At least two semesters of another Romance language are strongly recommended.

Course substitutions can be made in the electives upon prior approval.

**International Studies**

**Director:** Karen Erickson, 126 Bedford St., Portland


The international studies program is a multidisciplinary curriculum that attempts to reconcile traditional subjects and approaches with emerging needs of the world community. The program is academically rigorous and meets the requirements of international studies at major universities. By offering three possible subfields for concentration, the program is adaptable to the many opportunities available in work related to international affairs. The international studies curriculum leads to a bachelor of arts degree through the self-designed major in the College of Arts and Sciences. The course of study includes:

I. **Fundamentals:** liberal arts courses that fulfill fundamental requirements for understanding international problems;

II. **Foreign Language:** three years' university competency in a modern foreign language;

III. **Concentration:** specialization in one of three subfields of International Studies; and

IV. **Senior Seminar and Thesis:** a seminar that explores major theoretical approaches in the field and a thesis that focuses on a critical international problem.

Specialization is a unique feature of USM's international studies program because it provides in-depth knowledge of problems that challenge global society. Students in international studies choose a concentration from one of three subject areas:

A. **FOREIGN POLICY ANALYSIS.** This concentration is directed toward state-centric perspectives on international politics as well as interstate relations. It includes courses on law and organization, history and diplomacy, security and strategy, war and peace. This concentra-
tion is appropriate for diplomatic and other governmental work in foreign affairs, and provides the classical preparation for graduate work in international studies and related disciplines.

B. INTERNATIONAL AFFAIRS MANAGEMENT. This concentration emphasizes a functional approach to international affairs. The courses deal with global issues primarily of a non-strategic nature, such as socioeconomic development, industry and commerce, trade, technology, energy and resources, food and nutrition, health, and the environment. This concentration offers a broad preparation for careers in international development and education, business, technology, communications, and social welfare.

C. REGIONAL AFFAIRS. This concentration gives attention to the importance of understanding the history, culture, politics, and language of a particular geographical region. USM offers courses of study in three regions: Europe, Latin America, and Russia/Soviet Union. A regional expertise is especially relevant for work in governmental and nongovernmental agencies, regional and international organizations, and private and volunteer groups.

The combination of theory and practical knowledge in the international studies program prepares students for a wide range of careers in government, business, intergovernmental organizations, and nonprofit institutions. In the broader perspective, international studies is a vital academic program that nurtures intelligent approaches to world problems and to America's leading, but difficult international role.

Number of credits required to complete the self-designed major in international studies: 66 (exclusive of the Core curriculum). Students should declare the major by the beginning of their second year.

I. Fundamentals
Preparation for the international studies major includes courses that are designed to provide a general background in liberal arts and also have particular relevance for the subject matter and study of international affairs.

Required (9 credits)
- POS 104 Introduction to International Relations
- ECO 201 Macroeconomics
- GEO 301 Political Geography

One of (3 credits)
- HTY 132 United States History Since 1877
- POS 101 Introduction to American Government

One of (3 credits)
- HTY 101 Western Civilization I
- CLA 291 The Golden Age of Greece
- CLA 292 Rome, from Republic to Empire
- PHI 310 History of Ancient Philosophy
- ENG 350 Chaucer and the Medieval World

In fulfilling Core curriculum requirements, students will take the following courses:
Other Times/Other Cultures
- HTY 102 Western Civilization II

Social Sciences
- ECO 202 Microeconomics

Quantitative Decision Making
- MAT 120D Introduction to Statistics

Note: Students with a concentration in International Affairs Management will satisfy this requirement by taking MAT 110D or MAT 152D.

Qualifying Requirement in Research and Writing: By the end of their fourth semester in the international studies program, students will submit to the director a research paper on a topic related to their course of study in the major. The paper should be 12-15 pages, typewritten, and double-spaced. The paper must conform stylistically to the standards set forth in a published manual of style, such as K. Turabian, *A Manual for Writers of Term Papers, Theses, and Dissertations*. Students may submit papers written as part of the requirements for any course. The paper will be evaluated by the director of
international studies and a faculty member of the International Studies Council. The paper must meet acceptable program standards. An acceptable research paper is required before students may begin the senior thesis.

II. Foreign Language

Third-year competency in a foreign language, usually 18 credit hours, is required for a major in International Studies. Those students who choose the Regional Affairs concentration will take the language of the selected region to fulfill the degree requirement.

III. Concentration

Students will specialize in one of three subfields of international studies: (a) foreign policy analysis; (b) international affairs management; or (c) regional affairs. The choice of concentration must be made no later than the beginning of the third semester of enrollment in the major. The requirements for each of the concentrations are listed below:

A. Foreign Policy Analysis

Required: (12 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>POS 275</td>
<td>U.S. Foreign Policy</td>
</tr>
<tr>
<td>POS 386</td>
<td>Arms and Negotiation</td>
</tr>
<tr>
<td>HTY 378</td>
<td>Diplomatic History of the United States I</td>
</tr>
<tr>
<td>HTY 379</td>
<td>Diplomatic History of the United States II</td>
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One of (3 credits)

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>POS 389</td>
<td>International Law and Organization</td>
</tr>
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<td>HTY 324</td>
<td>World Wars I and II: European War and Diplomacy</td>
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One of (3 credits)

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>POS 239</td>
<td>Soviet Foreign Policy</td>
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<td>POS 249</td>
<td>International Politics of the Middle East</td>
</tr>
<tr>
<td>HTY 381</td>
<td>Latin America and the U.S.</td>
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One of (3 credits)

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<th>Course</th>
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<tbody>
<tr>
<td>POS 238</td>
<td>Canadian Government and Politics</td>
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<td>POS 235</td>
<td>Democratic Governments of Europe</td>
</tr>
<tr>
<td>POS 236</td>
<td>Communist Governments</td>
</tr>
<tr>
<td>HTY 390</td>
<td>China and Cuba under Communism</td>
</tr>
<tr>
<td>POS 242</td>
<td>Government and Politics of the Middle East</td>
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<td>POS 247</td>
<td>The Politics of China</td>
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One of (3 credits)

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<tr>
<td>HTY 322</td>
<td>20th Century Europe</td>
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<td>HTY 336</td>
<td>Leaders of the 20th Century:</td>
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<td></td>
<td>Churchill, Roosevelt, Hitler</td>
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<tr>
<td>HYT 330</td>
<td>Germany: Bismarck to Hitler</td>
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<tr>
<td>HYT 334</td>
<td>The Holocaust: Policy, Practice, Response</td>
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<tr>
<td>HTY 328</td>
<td>Fascist Italy</td>
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<tr>
<td>HTY 318</td>
<td>Russia and the Soviet Union Since 1855</td>
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<td>HTY 388</td>
<td>History of Modern China</td>
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<td>HTY 389</td>
<td>History of Modern Japan</td>
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<tr>
<td>HTY 386</td>
<td>History of South Africa</td>
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<tr>
<td>HTY 384</td>
<td>Contemporary Africa</td>
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One of (3 credits)

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<th>Course</th>
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<tbody>
<tr>
<td>POS 385</td>
<td>Peace and National Security</td>
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<tr>
<td>POS 250</td>
<td>International Terrorism</td>
</tr>
<tr>
<td>HTY 375</td>
<td>CIA: U.S. Foreign Intelligence Since Pearl Harbor</td>
</tr>
<tr>
<td>SOC 385</td>
<td>The Sociology of Soviet Marxism</td>
</tr>
<tr>
<td>HTY 377E</td>
<td>Chinese Thought</td>
</tr>
</tbody>
</table>

Elective (3 credits)

In consultation with the advisor, students will choose one elective from the courses listed above.
B. International Affairs Management

Required (12 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 240</td>
<td>The Politics of Developing Nations</td>
</tr>
<tr>
<td>ECO 360</td>
<td>Economic Development</td>
</tr>
<tr>
<td>ECO 370</td>
<td>International Economics</td>
</tr>
<tr>
<td>ECO 385</td>
<td>U.S. Economic Policy</td>
</tr>
</tbody>
</table>

One of (3 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 350</td>
<td>Comparative Economic Systems</td>
</tr>
<tr>
<td>ECO 351</td>
<td>Economic System of the Soviet Union</td>
</tr>
<tr>
<td>ECO 361</td>
<td>Case Studies in Economic Development</td>
</tr>
</tbody>
</table>

One of (3 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 315</td>
<td>Political Economy</td>
</tr>
<tr>
<td>ECO 330</td>
<td>Urban Economics</td>
</tr>
</tbody>
</table>

Electives (12 credits)

In consultation with the advisor, student will select four courses from the list below.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 2021</td>
<td>Origins of Civilization</td>
</tr>
<tr>
<td>ANT 213</td>
<td>Cultural Ecology</td>
</tr>
<tr>
<td>ANT 2221</td>
<td>Peoples of the North</td>
</tr>
<tr>
<td>ANT 2321</td>
<td>Women in Cross-Cultural Perspective</td>
</tr>
<tr>
<td>ANT 302</td>
<td>Medical Anthropology</td>
</tr>
<tr>
<td>ANT 303</td>
<td>Food and Nutrition: An Anthropological Perspective</td>
</tr>
<tr>
<td>GEO 209</td>
<td>Introduction to Land Use Planning</td>
</tr>
<tr>
<td>GEO 303</td>
<td>Economic Geography</td>
</tr>
<tr>
<td>GEO 401</td>
<td>Food and Hunger</td>
</tr>
<tr>
<td>HTY 371</td>
<td>American Economic and Business History since 1860</td>
</tr>
<tr>
<td>ECO 340</td>
<td>History of Economic Thought</td>
</tr>
<tr>
<td>SWO 364</td>
<td>Comparative Social Welfare Systems</td>
</tr>
<tr>
<td>SOC 310</td>
<td>Social Change</td>
</tr>
<tr>
<td>SOC 353</td>
<td>Social Movements</td>
</tr>
<tr>
<td>SOC 355</td>
<td>Politics and Society</td>
</tr>
<tr>
<td>COM 275</td>
<td>Theories of Language</td>
</tr>
<tr>
<td>COM 280</td>
<td>Mass Media and Human Interaction</td>
</tr>
<tr>
<td>COM 320</td>
<td>Intercultural Communication</td>
</tr>
<tr>
<td>NUR 324</td>
<td>Cultural Diversity in Health</td>
</tr>
<tr>
<td>ITP 100</td>
<td>Modern Industry</td>
</tr>
<tr>
<td>MAT 211</td>
<td>Probability</td>
</tr>
<tr>
<td>MAT 212</td>
<td>Statistics</td>
</tr>
</tbody>
</table>

C. Regional Affairs

Students will select one of the following regions for this concentration: Europe, Latin America, or Russia/Soviet Union.

1. Europe

Required (15 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 235</td>
<td>Democratic Governments of Europe</td>
</tr>
<tr>
<td>HTY 324</td>
<td>World Wars I and II: European War and Diplomacy</td>
</tr>
<tr>
<td>HTY 322</td>
<td>20th Century Europe</td>
</tr>
<tr>
<td>HTY 320</td>
<td>Europe at the Turn of the Century</td>
</tr>
<tr>
<td>HTY 330</td>
<td>Germany: Bismarck to Hitler</td>
</tr>
</tbody>
</table>

One of (3 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 245</td>
<td>British Politics</td>
</tr>
<tr>
<td>HTY 326</td>
<td>History of England</td>
</tr>
</tbody>
</table>

One of (3 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 291</td>
<td>French Civilization: An Historical Approach</td>
</tr>
<tr>
<td>FRE 292</td>
<td>French Civilization: Contemporary France</td>
</tr>
<tr>
<td>HTY 316</td>
<td>French Revolution and Napoleon</td>
</tr>
</tbody>
</table>
2. Latin America

Required (15 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTY 181I</td>
<td>Latin America I</td>
</tr>
<tr>
<td>HTY 182I</td>
<td>Latin America II</td>
</tr>
<tr>
<td>HTY 383</td>
<td>Society and Culture of Latin America</td>
</tr>
<tr>
<td>HTY 381</td>
<td>Latin America and the U.S.</td>
</tr>
<tr>
<td>HTY 390</td>
<td>China and Cuba Under Communism</td>
</tr>
</tbody>
</table>

One of (3 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 240</td>
<td>Politics of Developing Nations</td>
</tr>
<tr>
<td>ECO 360</td>
<td>Economic Development</td>
</tr>
</tbody>
</table>

Electives (12 credits)

In consultation with the advisor, students will select four additional courses related to Latin American regional affairs.

Note that the requirements for a Regional Affairs Concentration in Latin America may also be fulfilled by completing the self-designed major in Hispanic studies.

3. Russia and the Soviet Union

Required (24 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTY 317</td>
<td>Early Russian History</td>
</tr>
<tr>
<td>HTY 318</td>
<td>Russia and the Soviet Union Since 1855</td>
</tr>
<tr>
<td>POS 237</td>
<td>Politics of the Soviet Union</td>
</tr>
<tr>
<td>POS 239</td>
<td>Soviet Foreign Policy</td>
</tr>
<tr>
<td>ECO 351</td>
<td>Economic System of the Soviet Union</td>
</tr>
<tr>
<td>SOC 385</td>
<td>The Sociology of Soviet Marxism</td>
</tr>
<tr>
<td>RUS 351</td>
<td>Seminar in Russian Literature</td>
</tr>
<tr>
<td>RUS 421</td>
<td>Reading and Translating Russian</td>
</tr>
</tbody>
</table>

Electives (6 credits)

In consultation with the advisor, students will select two additional courses. At least one of the two electives must be chosen from the list below.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUS 291</td>
<td>Russian and Soviet Culture and Civilization</td>
</tr>
<tr>
<td>POS 236</td>
<td>Communist Governments</td>
</tr>
<tr>
<td>HTY 390</td>
<td>China and Cuba Under Communism</td>
</tr>
<tr>
<td>POS 247</td>
<td>The Politics of China</td>
</tr>
<tr>
<td>HTY 388</td>
<td>History of Modern China</td>
</tr>
<tr>
<td>POS 249</td>
<td>International Politics of the Middle East</td>
</tr>
</tbody>
</table>
Note that the requirements for a Regional Affairs Concentration in Russia/Soviet Union may also be fulfilled by completing the self-designed major in Russian studies.

IV. Seminar and Thesis

Students in the International Studies major will be required to take a seminar in the first semester of their senior year and to write a thesis during the final semester. The thesis will be written under the supervision of a faculty advisor. The topic for the senior thesis must be approved at the time of enrollment in the seminar. The seminar and the thesis each count for three course credits.

Required (6) credits
INS 490 International Studies Seminar
INS 495 Senior Thesis

Note that the International Studies students with a Regional Affairs concentration in Russia/Soviet Union may take RUS 470 to fulfill the Senior Thesis requirement.

Study Abroad

It is strongly recommended that international studies students plan a semester of study abroad. See USM's brochure, "International Study Opportunities," for suggestions regarding programs of study in other countries. Students are urged to contact the campus Office of International Student Development for further information.

Internships

International Studies students gain valuable insight into their field through internships in international affairs. Information on internship opportunities can be obtained from the office of the director of international studies.

North American Student Seminar

Each spring a select group of students from USM meets with students from the University of Western Ontario for a week of intensive discussions in Washington. The annual seminar focuses on a central issue of mutual interest and concern to Americans and Canadians. Generally the focus has been international peace and security. The seminar meets with leading representatives from Congress and the administration, universities and other research organizations, and Washington's diplomatic community. During the spring semester, USM students prepare for the seminar by doing research and writing papers on assigned topics related to the seminar they will attend. The North American Student Seminar is organized and administered by the International Studies Program, and students should contact the office of the director of International Studies for further information.

International Studies Workshops

Students in International Studies have the opportunity to focus on current issues through study groups and organized discussions with distinguished experts. The International Studies Guest Lecture Series helps to inform and educate the broader community as well as members of the University who are concerned with international developments. Typical workshop themes include Superpower Negotiation, Ethics of Foreign Policy, and the Changing International Order.

INS 480 Independent Study I
This course is intended for advanced students in International Studies who want to develop further their research skills and knowledge of particular subject areas in international affairs. The student must work with a faculty advisor in outlining and pursuing the proposed course of study. All proposals for Independent Study must be approved by the director of International Studies. Prerequisite: advanced standing in International Studies Program. Cr 3.

INS 481 Independent Study II
Advanced students who wish to participate in international affairs programs at the local, national, or international level may develop a study plan that includes systematic analysis and writing on issues and problems with an international focus. A variety of programs is available to USM students, including the North American Student Seminar, International Studies Workshops, and other organized efforts that educate in the global dimension.
All courses of study must be carried out with a faculty advisor and have the approval of the director of International Studies. Prerequisite: POS 104 or HTY 102I, or permission of the instructor. Cr 3.

**INS 485 International Studies Internship**
Through internships in the International Studies Program, students achieve the experience and background for understanding problems and practices of international scope. There are various possibilities for work related to international affairs; for internship arrangements and course responsibilities, consult the director of International Studies. This course is open only to advanced students in International Studies, and requires the permission of the program director. Cr 3-6.

**INS 490 International Studies Seminar**
The seminar focuses on theories of international relations and current methodology in the field. In addition to intensive analysis of classical and current works, students will be asked to develop and present their research designs for the senior thesis. The seminar is restricted to first-semester seniors in the program. Cr 3.

**INS 495 Senior Thesis**
All students enrolled in the International Studies program are required to write a senior thesis. The topic of the thesis should be chosen in consultation with a faculty advisor well in advance, and no later than by the time of enrollment in the International Studies seminar. The thesis should be at least 50 typewritten pages in length. It will be bound and permanently held by the University Library. Students will give a public defense of the thesis, and it will be evaluated by a faculty committee consisting of the student's thesis advisor, one faculty member from the International Studies Council, and one faculty member chosen at large by the director of International Studies. The thesis is written in the student's final semester of the program. Cr 3.

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**Russian Studies**

*Coordinator:* Charlotte Rosenthal, 55 Exeter Street, Portland

The minimum number of credits required (exclusive of the University's Core curriculum) required for the self-designed major in Russian studies: 36.

One language theory course or two semesters of Greek.

**Humanities**
- RUS 301 Advanced Russian I
- RUS 302 Advanced Russian II
- RUS 351 Seminar in Russian Literature
- RUS 421 Reading and Translating Russian Expository Prose
- RUS 291 Russian Culture and Civilization (in English)
- RUS 470 Independent Study

**Social Sciences**
- ECO 351 Economic Systems of the Soviet Union
  (prerequisite of ECO 201 and ECO 202)
- HTY 317 Early Russian History
- HTY 318 Russia and the Soviet Union since 1855
  (prerequisite: HTY 101I and 102I or permission)
- POS 237 Politics of the Soviet Union
- POS 239 Soviet Foreign Policy
- SOC 385 The Sociology of Soviet Marxism

Other courses recommended, but not required, for the self-designed major in Russian studies:

- MAT 120D Introduction to Statistics
- POS 104J Introduction to International Relations
- POS 236 Communist Government
- HTY 101I Western Civilization I
- HTY 102I Western Civilization II
- HTY 172I Modern East Asia
- HTY 374 History of Modern China
- GEO 101J Principles of Geography
The self-designed major in social science is a multidisciplinary program offered by the Departments of Economics, Geography-Anthropology, History, Political Science, and Sociology. Each student must take a minimum of 51 credits, 21 of which must be in a particular subject area. Students must meet the following requirements within the discipline selected for concentration:

I. a. Geography-Anthropology to include GEO 101J, GEO 102K or GEO 201I, ANT 101J or ANT 103, and at least 3 courses in geography or anthropology at the 300 level or above. (21 credits)
   b. History to include at least 12 credit hours at the 200 level or above.
   c. Political Science to include 21 credit hours as arranged with advisor.
   d. Sociology to include SOC 100J, SOC 205, SOC 300, and SOC 312.
   e. Economics to include ECO 201J, ECO 202J, ECO 301, and ECO 302, and three advanced economics courses. (21 credits)

II. Remaining courses must include three each, in each of three of the remaining four disciplines. Nine of these credits must be upper division level (200 or above).

III. One course (3 credits) must be Independent Study to be supervised by two faculty, one of whom is in the discipline of concentration. This requirement may only be met during the senior year or during the second semester of the junior year.

Program descriptions and guidelines are available in the Office of the Dean of the College of Arts and Sciences.

Women's Studies

Director: Diana E. Long, 94 Bedford Street, Portland

Women's Studies Council: Benedict, Cameron, Crader, Eagan, Franklin, Gilmore, Gish, Goldstein, Holden, Kingsland, MacPherson, Messerschmidt, Murphy, Padula, Thompson, Tizon, Woshinsky

For information regarding the self-designed major in women's studies, please see the chapter on women's studies.
Admission

Requirements

Art

Chair of the Department: Michael G. Moore, 6 Robie Andrews Hall, Gorham

Professors: Bearce, Franklin, Ubans; Associate Professors: Burk, Hewitt, M.

Moore, Rakovan, Schiferl; Assistant Professors: Cassidy, Marasco, J. Moore,

Shaughnessy

The Department offers two bachelor's degrees: the bachelor of arts (B.A.),

and the bachelor of fine arts (B.F.A.). The B.A. is designed to provide a broad

liberal arts education and to prepare students for graduate study in allied

fields. The B.F.A. is designed to provide an intense studio education and to

prepare students for artmaking, graduate study, and teaching. Minor pro­
gams of study are offered in both art history and art education. In all of the

programs, the faculty strive to promote the student's creative abilities.

Specifically, the Department goals are a) to provide a broad and chal­
lenging foundations program, which will enable students to develop a self-

awareness, an historical perspective, and insight into the meaning and

application of creative media in the visual arts; b) to develop the capacity for

critical analysis, the ability to investigate and experiment, and to make

judgments within a framework of reason; c) to develop an art vocabulary

appropriate to the visual arts; d) to develop an overview and understanding

of literature on art; e) to develop an open attitude for viewing and creating

art; f) to develop basic proficiencies in a variety of art media, as well as an

in-depth competency in selected art areas; g) to develop understanding of

nonverbal communication skills; and h) to provide an enriching gallery

program for students, faculty and staff, and the greater Portland community.

Above all, the faculty helps students develop an intelligent and cosmo­

politan attitude about art, and encourages self-reliance in developing their

own artwork and other creative endeavors.

Students wishing to apply for admission to the Department of Art should

observe the following procedure. Formal application should be made to the

Director of Admissions, Admissions Office. Current degree candidates

enrolled at the University, wishing to transfer into the Department of Art

from another discipline, must obtain a change of major form and submit

this form with an up-to-date transcript to the chair of the Department

of Art.

By following these procedures a student is identified as a candidate for

matriculation in the Department of Art. All candidates must complete the

art foundation (consisting of Fundamental Design I & II, Fundamental

Drawing I & II, and History of Art I & II) before matriculating as an art

major in the Department of Art.

In order to become a full-time matriculated art major in one of the two

degree programs, a portfolio of original works must be submitted to the

Department for evaluation. This must be done subsequent to or during the

semester in which art foundation requirements are being completed. The

portfolio should consist of 12 works in varying media, including one self­

portrait drawn from life. The entire portfolio may indicate the applicant's

current interest and should include examples of designs and drawings typi­
cal of those completed at the art foundation level. The portfolio may also

include prints, paintings, posters, and photographs, but 35mm slides or

photographs of three-dimensional work should be submitted rather than

the work itself. In addition to the quality of the works, presentation should

be considered for the purposes of appearance and protection. The Depart­
ment cannot accept responsibility for damage or loss and asks that no glass,

three-dimensional work or item larger than 35" × 36" be submitted.

Portfolio deadlines and application forms may be obtained from the

Admissions Office or the Department of Art. 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 also must follow the departmental admission procedures con­
cerning submission of portfolio, as described above.
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.

**Bachelor of Arts (B.A.)**

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

Art Foundation (18 credits)
- ART 141F Fundamental Design I
- ART 142 Fundamental Design II
- ART 151F Fundamental Drawing I
- ART 152 Fundamental Drawing II
- ARH 111G History of Art I
- ARH 112G History of Art II

Art History Requirements (9 credits)
- ARH 411 Philosophy of Art (may substitute PHI 220)
- ARH Elective
- ARH Elective

Studio Art Requirement (18 credits, all electives)

Electives (41 credits)
- No more than 60 credit hours with ART designation may be used to fulfill 120 credit-hours degree requirement.

**Minor in Art History**

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

The minor consists of ARH 111G; ARH 112G; and ARH 411, and 12 credits of art history courses (noted by ARH prefix) above the 100 level including:

a.) at least one of the following areas: Classical, Medieval, Renaissance; and

b.) at least one in either of the following areas: 19th-Century Western Art, 20th-Century Western Art.

**Bachelor of Fine Arts (B.F.A.)**

The minimum number of credits (exclusive of the University's Core curriculum and electives) required for the major: 72.

Art Foundation (18 credits)
- ART 141F Fundamental Design I
- ART 142 Fundamental Design II
- ART 151F Fundamental Drawing I
- ART 152 Fundamental Drawing II
- ARH 111G History of Art I
- ARH 112G History of Art II

Art History Requirements (9 credits)
- ARH 411 Philosophy of Art (may substitute PHI 220)
- ARH Elective
- ARH Elective

Studio Art Requirement (45 credits)
- 9 credits in Drawing above the 152 level
- 3 credits from each of the following disciplines: painting, printmaking, photography, ceramics, and sculpture.
- 21 credits ART electives

Studio Concentration Requirement
- A 12-credit concentration in painting, sculpture, printmaking, photography, ceramics, or drawing is required. In addition, B.F.A. candidates are required to have an exhibit of their work during their senior year. The student's advisor and department chairperson must be notified about the place and time of the exhibit at least two weeks prior to the opening of the exhibition.

Electives (14 credits)
- All B.F.A. matriculants are required by the end of their sophomore year to take the beginning level courses in ceramics, drawing, painting, photography, printmaking, and sculpture.
In order to receive a B.F.A. degree in art from USM, a student transferring to USM must complete at least two 3-credit studio courses and one 3-credit art history course at USM.

**Minor in Art Education**

The minimum number of professional education credits required for the minor: 15.

In addition to the requirements listed above for the B.F.A. degree, students may earn this minor by successfully completing the following courses:

- EDU 200 Education in the United States
- HRD 333J Human Growth and Development
- AED 221 Practicum in Art Education
- AED 321 Principles and Procedures in Art Education
- AED 421 Seminar in Art Education

**Minimum Grade Point Average**

A 2.5 minimum G.P.A. must be maintained in order to register for AED 321, AED 421, and in order to graduate from the program.

Students interested in graduate study leading to Maine State certification in art education, K-12, or obtaining a master's degree in education, should apply to the graduate program of the College of Education.

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**ART 101G Approaches to Art**

Selected experiences using original works, lecture, panel discussion, slides, films, and other means to confront the student with the significance of the visual arts in human history. The aim of the course is to involve students in direct experiences affecting their own perception of visual form. **Cr 3.**

**ART 416 Exhibitions & Gallery Management**

Problems in the operation of an art gallery. Various exhibition, installation and handling techniques; design and distribution of promotional material. Practical experience in connection with the operation of the USM Art Gallery. Prerequisite: art foundation courses. **Cr 3.**

**ARH 111G Art History: Prehistoric to 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: none, but preference given candidates for matriculation in the Department of Art, or those with permission of the instructor. **Cr 3.**

**ARH 112G Art History: Renaissance to Modern**

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: none, but preference given candidates for matriculation in the Department of Art, or those with permission of the instructor. **Cr 3.**

**ARH 213 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 111G. **Cr 3.**

**ARH 214 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 112G. **Cr 3.**

**ARH 215 Seventeenth and Eighteenth Century Art**

The course will survey the Baroque and Rococo movements in painting, sculpture, and architecture. The impact of the Academies and academic art and the Enlightenment will be given special attention. Prerequisite: ARH 112G. **Cr 3.**

**ARH 216 American Art**

(17th through 19th Centuries)

Survey of painting, sculpture, and architecture from Colonial times to 1900 in the United States with a focus on works from the New England area. These works will be examined in relation to historical events and cultural ideals.
Field trips to local museums and architectural sites. Prerequisite: none. Cr 3.

ARH 217 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 218 Women in Art
A focus on women in the arts; their images, ideals, dialogues, politics, and history through contemporary trends. The course will be enhanced with slides, films, video, tapes, papers, panels and discussions. Prerequisite: permission of instructor. Cr 3.

ARH 273 Film as Image and Idea
An approach to the appreciation of motion pictures and allied arts through the understanding and analysis of the context, range, and resources of film. Course includes the development of motion pictures and principles of film evaluation. Prerequisite: permission of the instructor. Cr 3.

ARH 315 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. Cr 3.

ARH 316 Modern Art
A continuation of ARH 315 covering the period from 1880-1950 and including the growth and development of the modern "isms." Prerequisite: ARH 112G. Cr 3.

ARH 317 Contemporary Art (1950-Present)
An examination and discussion of development in the visual arts since 1950. Prerequisite: ARH 112G. Cr 3.

ARH 411 Philosophy of Art
An investigation into the theories of art and beauty found in the writings of philosophers, painters, writers, and critics which form the basis of understanding of the fine arts. Readings and discussion of writers from ancient to modern times. Prerequisite: ARH 112G. 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. Prerequisite: permission of instructor and Art Department chairman. Cr 1 to 6.

ART 141F Fundamental Design I
A studio introduction to the basic elements of two-dimensional and color relationships. Cr 3.

ART 142 Fundamental Design II
A studio introduction to the basic elements of three-dimensional relationships and "the aggregate," an extended project interrelating the two- and three-dimensional. Prerequisite: ART 141E Cr 3.

ART 151F Fundamental Drawing I
A studio introduction to drawing, including the basic elements of line, tone, design, and representation. Cr 3.

ART 152 Fundamental Drawing II
A continued introduction to drawing, using the basic graphic elements studied in Drawing I. Cr 3.

ART 231 Ceramics
An introduction to methods and processes of clay forming, including modeling, pressing, handbuilding, and the potter's wheel. Emphasis on form and texture, with aspects of glaze composition and firing procedures. Prerequisite: art core courses. Cr 3.

ART 251 Drawing
Extensive combining of media. Stress on role of images, both object and model. Prerequisite: ART 152. Cr 3.

ART 261 Painting
An introduction to basic aspects of the painting process as related to visual perception and technique. Prerequisite: art core courses. Cr 3.

ART 271 Photography
Photography as a creative medium. Introduction to basic skills in the use of the camera and darkroom equipment. Investigation and practice in the fundamental techniques and processes of black and white photography as an art form. Prerequisite: art core courses. Cr 3.

ART 281 Printmaking
Introduction to the rudimentary materials and methods of basic printmaking media such as intaglio, lithography, relief, and serigraphy. Prerequisite: art core courses. Cr 3.

ART 291 Sculpture
A foundation course directed towards the developing awareness of basic elements of sculptural form and the discipline of making objects. Prerequisite: art core courses. Cr 3.

ART 331/332 Intermediate Ceramics
Application of design principles in production of ceramicware with a concentration on advanced problems in wheel-thrown forms and hand-building sculptures. Prerequisite: ART 231. Cr 3/3.
ART 351/352 Intermediate Drawing
Continued drawing with emphasis on independent direction. Prerequisite: ART 251.
Cr 3/3.

ART 361/362 Intermediate Painting
Continued investigation of the painting process using both assigned problems and arrangements of the student's own invention. Use of a variety of media. Prerequisite: ART 261. Cr 3/3.

ART 363 Painting/Watercolor
Watercolor, wash, dry-brush, ink and wash, gouache, and other techniques in watermedia. Emphasis on individual concepts and personal expression. Prerequisite: ART 261. Cr 3.

ART 365/366 Intermediate Watercolor
Continuation of Painting/Watercolor with emphasis on personal expression. Prerequisite: ART 363. Cr 3/3.

ART 371/372 Intermediate Photography
Exploration of concepts and techniques of photography with emphasis on individual forms of expression. Prerequisite: ART 271. Cr 3/3.

ART 381/382 Intermediate Printmaking
Application of the basic knowledge of printmaking as it concerns image making, with an emphasis on at least two of the media studied in ART 281. Prerequisite: ART 281. Cr 3/3.

ART 391/392 Intermediate Sculpture
The theory and practice of sculptural composition using a variety of techniques with traditional and new materials. Prerequisite: ART 291. Cr 3/3.

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 chairman. 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 the Department of Art and the Dean of the College. Cr 12-15.

AED 221 Practicum in Art Education
An introduction to art education theories and processes through readings, writings, discussion, observation, and clinical experiences with children. The examination of the relationship between art-making and learning is relevant to prospective art and classroom teachers. Prerequisite: sophomore standing or above. 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, interview, and field experiences. Intended for the art education major. Prerequisites: AED 221 and art core courses. 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 permis-
AED 412 Topics in Art Education
A course on a selected topic in art education to be offered at least once a year. Prerequisite: permission of the instructor. 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, writing, and readings. This course is to be taken while student teaching. Prerequisite: AED 321. Cr 3.

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 instructor and Art Department chair. Cr 1 to 6.

Biological Sciences

Chair of the Department: Patricia M. O'Mahoney-Damon, 206 Science Building, Portland

Health Education Advisor: Patricia M. O'Mahoney-Damon, 206 Science Building, Portland. Professors: Gainey, Mazurkiewicz, Najarian; Associate Professors: Greenwood, Holmes, O'Mahoney-Damon, Riciputi; Assistant Professors: Derby, Dorsey, Knight

A four-year program leading to a B.A. in biology is offered. The program provides students with a liberal arts education emphasizing the sciences. The required biology courses expose the student to an examination of life from the molecular level to the biotic community. Other biology courses may be elected to suit individual interests and needs. The required courses in chemistry and physics reflect the interdisciplinary status of biology today. Graduates of this program have found careers in biological and medical research laboratories, field biology and pharmaceutical sales, or have furthered their education by entering graduate medical, dental, optometry, veterinary, and law schools, as well as schools for allied health professions.

Biotechnology
The department also offers a self-designed major in biotechnology in conjunction with the Department of Chemistry. For further information see the Interdepartmental Major Programs section of this catalog.

Pre-medical 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 is comprised of faculty from the Departments of Biology, Chemistry, and Physics and is responsible for evaluating, comparing, and recommending students. For further information contact Patricia O'Mahoney-Damon, 206 Science Building, Portland.

Bachelor of Arts
The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 68. A grade of C or higher in courses with a BIO prefix is required for the major, and a GPA of 2.0 in all other courses required for the major.

All of the following are required:

BIO 105K, 106K Biological Principles and Laboratory Biology I
BIO 107, 108 Biological Principles II and Laboratory Biology II
BIO 301 Genetics

Programs and Requirements
One course (lecture and laboratory combination) from each of the following areas:

**AREA 1: Organismal Biology**
- BIO 205 Comparative Vertebrate Anatomy
- BIO 231 Botany
- BIO 304 Embryological Development
- BIO 351, 352 Invertebrate Zoology and Survey of Invertebrates

**AREA 2: Community-Ecosystems**
- BIO 331, 332 Ecological Principles and Field Ecology
- BIO 341, 342 Limnology and Field Limnology

**AREA 3: Functional Biology**
- BIO 381 Plant Physiology
- BIO 401, 402 General Physiology and Laboratory
- BIO 403, 404 Comparative Physiology and Laboratory

**AREA 4: Cellular Biology**
- BIO 311, 312 Microbiology and Laboratory
- BIO 409 Cell and Molecular Biology
- OR
- BIO 406 Molecular Biology and Genetics

The biology major must also satisfactorily complete all of the following:

- CHY 113, 114 Principles of Chemistry I and II and 115, 116 Laboratory
- CHY 251, 252 Organic Chemistry I and II and Laboratory
- MAT 120, 220 Statistics
- MAT 152 Calculus A
- PHY 111K, 112K Elements of Physics I and II
- OR
- PHY 121K, 122K General Physics I and II and Laboratory 123, 124

In addition, students must fulfill the University Core curriculum requirements.

**Minor in Biology**

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

The minor consists of BIO 105K, BIO 106K, BIO 107, BIO 108; or BIO 105K, BIO 106K, BIO 211, BIO 212; plus electives numbered 200 or above to equal 18 hours in biology coursework. Students must complete at least 6 hours of this coursework at USM.

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**BIO 100K Biological Basis of Human Activity**
A course designed to elucidate the basic biological constraints of human performance. This course does not serve as a prerequisite for BIO 107 or BIO 211.  
Cr 3.

**BIO 101K 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 102K Biological Experiences**
Laboratory studies to complement and illustrate the concepts presented in BIO 101K and BIO 100K. Prerequisite: BIO 101K or BIO 100K.  
Cr 1.

**BIO 105K 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.

**BIO 106K Laboratory Biology I**
Laboratory experiences illustrating concepts and principles introduced in BIO 105K. Must be taken concurrently with BIO 105K. Three hours.  
Cr 1.5.
BIO 107 Biological Principles II
An introduction to the structure, function, and ecological relationships of living organisms. Prerequisites: grades of C or higher in BIO 105K and BIO 106K. Cr 3.

BIO 108 Laboratory Biology II
Laboratory experiences illustrating topics introduced in BIO 107. Must be taken concurrently with BIO 107. Three hours. Cr 1.5.

BIO 169 Introduction to Marine Biology
A course intended for the non-science major. 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. Cr 3.

BIO 170 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 169. Cr 1.

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 105K and BIO 106K. Cr 5.

BIO 207 Human Heredity and Embryology
This course presents the fundamental principles of genetics and embryology as they apply to humans. The influence of nutrition, drugs, viruses, and physical agents on development will be discussed. Prerequisite: grade of C or higher in BIO 105K. Cr 3.

BIO 211 Human Anatomy and Physiology
The study of functional anatomy and physiology of the human. Prerequisite: grade of C or higher in BIO 105K. Cr 4.

BIO 212 Practical Human Anatomy and Physiology
Laboratory studies of the structure and functions of the human body including histology and physiological experiments. NOT open to those who have completed BIO 205. Prerequisite: grade of C or higher in BIO 106K; BIO 211 or concurrently. Cr 1.5.

BIO 217 Evolution
A study of the processes of biological evolution. Prerequisite: grade of C or higher in BIO 105K. 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. Prerequisites: grade of C or higher in BIO 105K and BIO 106K. 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 105K. Cr 3.

BIO 281 Microbiology and Human Disease
Fundamentals of microbiology with emphasis on infectious diseases of people, including bacteria, rickettsia, fungi, viruses, protozoa and helminths. Prerequisites: grade of C or higher in BIO 105K, and college chemistry. Cr 3.

BIO 282 Microbiology and Human Disease Laboratory
Laboratory techniques in the cultivation, identification, and control of microorganisms. Prerequisite: BIO 281 or concurrently. Cr 2.

BIO 291 Ornithology
The basic biology of birds: life histories, migration, behavior, and economic importance, with emphasis on species found in Eastern North America. (Students supply their own binoculars or spotting scopes.) Prerequisite: grade of C or higher in BIO 105K. Cr 3.

BIO 301 Genetics
A study of the molecular basis of heredity and methods of genetic analysis. Lecture: 3 hours/week; discussion 1 hour/week. Prerequisites: grade of C or higher in BIO 107, 108 or BIO 211, 212; one year of college chemistry; or permission of instructor. Cr 3.

BIO 304 Embryological Development
An integrated lecture-laboratory course covering embryological development from fertilization through organogenesis. Prerequisite: a grade of C or better in BIO 301, or permission of the instructor. Cr 3.

BIO 305 Developmental Biology
An analysis of the cellular and molecular interactions leading to normal development. Prerequisite: grade of C or higher in BIO 301 and prior or concurrent registration in BIO 304, or permission of the instructor. Cr 3.

BIO 311 Microbiology
A consideration of protozoa, fungi, bacteria, and viruses of medical and biological importance. Prerequisites: grade of C or higher in BIO 105K, one year of college chemistry. Cr 3.

BIO 312 Microbiological Laboratory
The laboratory isolation and examination of microorganisms by various techniques. Prerequisites: grade of C or higher in BIO 105K, BIO 311 or concurrently. Cr 2.

BIO 331 Ecological Principles
The interrelationships of living organisms and their environments, including humanity's impact on ecosystems. Prerequisites: grade of C or higher in BIO 107, and BIO 108. Cr 3.
BIO 332 Field Ecology
Field and laboratory studies demonstrating basic concepts of ecology. Numerous field trips. Prerequisite: BIO 331 or concurrently. Cr 2.

BIO 333 Ichthyology
The systematics, structure, natural histories, and economic importance of fishes, with emphasis on species of the northeastern U.S. Prerequisite: grade of C or higher in BIO 107. Cr 3.

BIO 334 Ichthyology Laboratory
Laboratory and field methods for collecting, identifying, and studying aspects of the natural history of fishes. Field work at a variety of habitats. Prerequisite: BIO 333 or concurrently. Cr 2.

BIO 335 Entomology
Integrated lecture-laboratory course on the biology of insects and their impact on humanity. Prerequisites: grade of C or higher in BIO 107 and BIO 108. Cr 3.

BIO 341 Limnology
The study of inland waters with special concern for the factors that influence the living populations within these waters. Prerequisites: grade of C or higher in BIO 107 and BIO 108. Cr 3.

BIO 342 Field Limnology
Practical application of the methods and materials used to study inland waters and their associated living populations. Prerequisite: BIO 341 or concurrently. Cr 2.

BIO 345 Pathophysiology
A study of the physiological, genetic, biochemical and environmental basis of noninfectious diseases. Prerequisite: grade of C or higher in BIO 211 or permission of instructor. Cr 3.

BIO 351 Invertebrate Zoology
The morphology, physiology, and phylogenetic relationship of non-backboned animals. Prerequisite: grade of C or higher in BIO 105K. Cr 2.

BIO 352 Survey of Invertebrates
Laboratory experience on the anatomy, physiology, and behavior of invertebrate animals. Prerequisite: BIO 351, or concurrently. Cr 2.

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 105K. 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: BIO 107 or BIO 231 and 1 year college chemistry or permission of instructor. Cr 4.5.

BIO 401 General Physiology
A study of physiological processes and their regulation in animals. Prerequisites: grade of C or higher in BIO 107 or BIO 211; one year of college chemistry; one semester of physics; or permission of instructor. Cr 3.

BIO 402 General Physiology Laboratory
Laboratory examination of physiological mechanisms in animals. Prerequisite: BIO 401 or concurrently. Cr 2.

BIO 403 Comparative Physiology
Physiological and biochemical basis of environmental adaptation. Prerequisites: grade of C or higher in BIO 107; one year of college chemistry; MAT 220 and junior standing. Cr 3.

BIO 404 Comparative Physiology Laboratory
Laboratory experiments on the physiological basis of environmental adaptation. Emphasis is on marine organisms. Prerequisite: BIO 403 or concurrently. Cr 2.

BIO 406 Molecular Biology and Genetics
An integrated lecture-laboratory course exploring modern molecular approaches in genetics, developmental biology and cell physiology, and providing direct experience in areas such as protein isolation and characterization, gene cloning, and analysis of membrane function. Prerequisites: CHY 251 and a grade of C or higher in BIO 301, or permission of the instructor. Cr 3.

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: two semesters of college biology with a grade of C or higher, CHY 251. 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 411 Coastal Marine Ecology
A comparative ecological study of coastal shores, wetlands, and estuaries. Prerequisites: grade of C or higher in BIO 331 or BIO 341. 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 441 Problems in Biology
Independent library or laboratory studies on a special topic as mutually arranged by instructor and student. Prerequisite: by arrangement. Credit Arranged.

Chemistry

Chair of the Department: John Ricci, 370 Science Building, Portland
Professors: Rhodes, Ricci, Smith, Stebbins; Associate Professor: Gordon; Assistant Professor: Newton; Professors Emeriti: 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.A. in chemistry with emphasis in biochemistry, and B.S. in applied chemistry). Since 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 interested in a chemistry major are strongly urged to consult with a member of the chemistry faculty to discuss the total program and should pay particular attention to the pre- and co-requisites necessary for different courses.

Programs and Requirements

Bachelor of Arts: Chemistry
The minimum number of credits in chemistry and related areas (exclusive of the University's Core curriculum) required for the major in this track: 60.

The courses include: CHY 113 & 114; 115 & 116; 231 & 232; 251 & 252; 253 & 254; 371 & 372, 373 & 374; two of the following five offerings: 321, 345, 351, 361 or 377/378; and 401 (a minimum of 39 hours within the department). In addition PHY 121K, 122K; 123, 124; MAT 152D, 153; and COS 140 (FORTRAN) or a math/computer science course approved by the Chemistry Department are required (a total of 21 more hours).

To graduate as a chemistry major a student must maintain a minimum overall grade point average (GPA) of 2.0 and a GPA of 2.0 in all courses required for the chemistry major.

Bachelor of Arts: Chemistry with Emphasis in Biochemistry
Excluding those credits required by the University Core curriculum, the minimum number of credits in chemistry and related areas required for the major in this track is 64.

The courses include: CHY 113 & 114; 115 & 116; 231 & 232; 251 & 252; 253 & 254; 361 & 362; 363; 371 & 372; 373 & 374; 401 (with the stipulation that the student elect a biochemical seminar topic). In addition, students will elect one of the following four offerings: 321, 345, 351, or 377 & 378 (a minimum of 43 hours within the Department). Additional requirements are: PHY121 & 122; 123 & 124; MAT 152D & 153; and COS 140 or 160 or a math/computer science course approved by the Chemistry Department (a total of 21 additional hours).

Bachelor of Science: Applied Chemistry
The minimum number of credits in chemistry and related areas (exclusive of the University's Core curriculum) required for the major in this track: 63.

The courses include: CHY 113 & 114; 115 & 116; 231 & 232; 251 & 252; 253 & 254; 371 & 372; 321 or 345 or 361; and 401 (a minimum of 31 hours within
Admission Requirements

CHY 100 Foundations for College Chemistry
A course designed to help students who are inadequately prepared to complete successfully the CHY 113-116 (Chemical Principles) sequence, either on the basis of their own perceptions or of their scores on two chemistry placement tests. The course will review basic chemical principles commonly presented in high school chemistry and emphasize solving mathematical problems commonly done in freshman college-level chemistry. Two lectures and one recitation session per week. No prerequisite. Cr 2.

CHY 101K 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; radiochemistry; 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 and one year of high school chemistry (taken during the past five years) or a satisfactory grade level on the proficiency test administered by the Department. Not appropriate for science majors, pre-med, pre-vet or pre-dentistry students. Cr 3.

CHY 102K 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 science majors, pre-med, pre-vet or pre-dentistry students. 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 110K Chemistry, Life, and the Environment
An introduction to chemistry and its importance to the citizen through the study of atoms and molecules, and how the structures of molecules give rise to the harmful and beneficial effects of chemicals. Classroom examples will include medicines, drugs, consumer products, pollutants, toxins, carcinogens, sources of energy such as nuclear and solar power, and the molecules of life—proteins and DNA. Laboratory projects will include measuring pollutants, making and purifying well-known compounds such as aspirin, and examining the chemical content of foods. Through readings and experiments, students will learn how chemists arrive at their models of molecular structure, and how the chemist's picture of matter has become clearer and more useful over the past two centuries. This course is designed to satisfy the Natural Sciences (Area K) requirement of the Core curriculum, and is recommended for students with no prior coursework in chemistry. Three one-hour lectures and one three-hour laboratory per week. Prerequisite: completion of all the 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. Prerequisite: high school algebra and one year of high school chemistry (taken during the past five years) or a satisfactory grade level on the proficiency test administered by the Department. Three lectures per week. 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. Corequisite: CHY 113. Cr 1.

CHY 115 Principles of Chemistry II
A continuation of CHY 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: 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. Corequisite: CHY 115. Cr 1.

CHY 231 Analytical Chemistry
A survey of modern analytical principles and instrumental techniques with emphasis on environmental, clinical, and industrial applications. Two lectures per week. Prerequisite: a grade of C or better in CHY 115. Cr 2.

CHY 232 Analytical Chemistry Laboratory
Quantitative experimental determination by means of gravimetric, volumetric, and instrumental methods. Classical procedures and modern instrumentation, including spectrophotometry, electroanalysis and chromatography. Six laboratory hours per week. Prerequisite: a grade of C or better in CHY 116. Corequisite: CHY 231. Cr 2.

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). Three lectures per week. Prerequisite: a grade of C or better in CHY 115. Cr 3.

CHY 252 Organic Chemistry Laboratory
Experiments will be performed to illustrate the basic laboratory skills of crystallization, extraction, distillation, and melting and boiling point determinations. Spectroscopic and chromatographic techniques will be demonstrated. Chemical reactions studied include free radical halogenation, nucleophilic substitution, and oxidation and reduction. One recitation and three laboratory hours per week.
Prerequisite: a grade of C or better in CHY 116. Prerequisite 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. Three lectures per week. Prerequisite: a grade of C or better in CHY 251. Cr 3.

CHY 254 Organic Chemistry Laboratory II
The course begins with a multi-step synthesis of an antibiotic. The second half of the semester is devoted to organic qualitative analysis, including solubility tests, classification tests, and preparation of derivatives. Interpretation of spectra produced to assist in the process of identification of unknowns. One recitation and three laboratory hours per week. Prerequisite: a grade of C or better in CHY 252. Prerequisite or corequisite: CHY 253. Cr 2.

CHY 321 Inorganic Chemistry
Descriptive chemistry of the inorganic compounds, structure, bonding and ligand field theory. Three lectures per week. Prerequisite or corequisite: CHY 371. Cr 3.

CHY 322 Inorganic Chemistry Laboratory
Preparation and characterization of inorganic compounds. One recitation and three laboratory hours per week. Prerequisite or corequisite: CHY 321. Not offered every year. Cr 2.

CHY 345 Polymer Chemistry
We live in a plastic society. During the past 40 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: CHY 253 and 373. Cr 3.

CHY 351 Advanced Organic Chemistry
This course examines the chemistry of natural products. Topics covered include the isolation of natural products from plants, their chemical and spectroscopic characterization, as well as their biosynthesis. The primary focus of the course, however, will be on modern synthetic methods with special emphasis on retrosynthetic analysis and the development of logical synthetic schemes. This course is intended for students who enjoyed introductory organic chemistry and who would like to learn more about the chemistry of biologically important molecules. Prerequisite: a grade of C or better in CHY 253. Cr 3.

CHY 361 Biochemistry
Application of chemical methods and principles to understanding biological processes. Topics include structure and action of proteins, lipids, carbohydrates, enzyme kinetics and mechanisms; and metabolism and energy conversion. This one-semester course provides a survey of the major areas of biochemistry except nucleic acids. Three lectures per week. Prerequisite: a grade of C or better in CHY 253. Cr 3.

CHY 362 Biochemistry Laboratory
Basic experimental methods in modern biochemistry. Experiments include detecting, purifying, and characterizing proteins; analyzing protein structure, and measuring membrane dynamics, enzyme action, and metabolic activity. Techniques include ultraviolet and visible spectrophotometry; ion-exchange, gel, and high-pressure liquid chromatography; centrifugation; electrophoresis, and the use of computers to analyze data and to display and analyze molecular structures. One hour lecture and three hours laboratory per week. Prerequisite: a grade of C or better in CHY 254. Prerequisite or corequisite: CHY 361. Cr 3.

CHY 363 Biochemistry II
Continuation of CHY 361. Topics include selected biosynthetic pathways; photosynthesis; structure and action of nucleic acids, including replication, transcription, translation, the genetic code, genetic regulation and genetic engineering; conformational analysis of biomolecules, and some of the following topics chosen according to student interest: molecular basis of immunity, membrane transport, hormone action, nerve action, motility, and origin of life. Three lectures per week. Prerequisite: a grade of C or better in CHY 361. Cr 3.

CHY 364 Biochemistry Laboratory II
Continuation of CHY 362. 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 362. Prerequisite or corequisite: CHY 363. Cr 3.

CHY 371 Physical Chemistry I
Introduction to the principles of theoretical chemistry: classical and statistical thermodynamics, molecular energetics, quantum phenomena and equilibrium. Candidates for the B.S. degree elect this course in the fall semester of the junior year. Three lectures per week.
Prerequisites: a grade of C or better in CHY 231, MAT 152, and PHY 123. Cr 3.

CHY 372 Physical Chemistry Laboratory I
Experiments illustrating material presented in CHY 371, such as thermochromy, absorption phenomena, and physical properties of gases and liquids. One recitation and three laboratory hours per week. Prerequisite: a grade of C or better in CHY 232. Prerequisite or corequisite: CHY 371. Cr 2.

CHY 373 Physical Chemistry II
Additional principles of theoretical chemistry: reaction kinetics, electrochemistry, quantum mechanics and spectroscopy. Three lectures per week. Prerequisite: a grade of C or better in CHY 371. Cr 3.

CHY 374 Physical Chemistry Laboratory II
Experiments illustrating material presented in CHY 373. One recitation and three laboratory hours per week. Prerequisite or corequisite: CHY 373. Cr 2.

CHY 377 Instrumental Analysis
A consideration of the applicability of current laboratory instrumentation both to the elucidation of fundamental chemical phenomena and to the measurement of certain atomic and molecular parameters. Topics include absorption and emission spectroscopy in the ultraviolet, visible and infra-red regions; chromatography; electrochemistry; mass spectrometry; and magnetic resonance. Two lectures per week. Prerequisite or corequisite: CHY 371 or permission. Cr 2.

CHY 378 Instrumental Analysis Laboratory
Experiments will be performed in low resolution ultraviolet and infrared absorption spectrometry, flame spectrometry, and atomic absorption. Prerequisite: a grade of C or better in CHY 371. One hour of pre-lab recitation and three laboratory hours per week. Cr 2.

CHY 401-409 Seminar
Oral and written presentation of a current topic in chemistry or of research results. Required of all senior majors. Satisfactory completion of written paper fulfills technical writing requirement. Cr 1.

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 490 Senior Research Project
Open to senior majors. Prerequisites include a 3.0 GPA in chemistry, completion of the Analytical and Organic Chemistry series, and permission of the department. 15 credits maximum. Cr 3-15.

Communication

Chair of the Department: Leonard Shedletsky, 218 Bailey Hall, Gorham
Associate Professor: Cowart, Shedletsky; Assistant Professors: Cojuc, Glasnapp, Kivatisky, Lasky, Lockridge

Communication examines the processes of communication at the level of the individual, the dyad, the group, the organization, the society, and the culture. Encoding and decoding information within the contexts of human interaction serve as foci of investigation. Questions central to communication are as follows: What is the nature of communication? How do humans communicate? Which variables influence communication? When is communication effective, ethical, normative? What are the social, legal, historical, educational, political, financial, cultural, interpersonal, and medical effects of communication? How can we best describe and understand communicative behavior?

Bachelor of Arts

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 36.

Students seeking to major in communication should: 1) complete the Basic Competence and Skills of Analysis components of the Core curriculum prior to taking COM 102J; 2) complete COM 102J, Introduction to Communication, before taking any other communication courses; 3) obtain at least a B average in COM 102J plus two additional courses required in the major; 4) have an overall 2.0 cumulative GPA with a minimum of 24 credit hours in courses 100 level or above; 5) plan to take at least two academic years to complete the degree program after taking COM 102J, Introduction to Communication.
In addition to COM 102J, Introduction to Communication, all majors must complete the following:

A) COM 265 Intrapersonal Communication OR
   COM 275 Theories of Language
B) COM 272 Persuasion
C) COM 280 Mass Media and Human Interaction
D) COM 330 Interpersonal Communication Theories OR
   COM 340 Small Group Communication

Two 400 Level Senior Seminars

Majors must complete at least two courses from categories A through D before proceeding in their coursework. When two of the categories (A through D) have been completed, students may begin to take the six additional elective communication courses required for the major. The senior seminars (400 level) should be among one of the last courses to be completed. The following distribution must be used in making elective course selections:

- 2 of the courses must be 200-level or above
- 3 of the courses must be 300-level or above
- 2 400 level Senior Seminars

All 400-level courses require junior standing

Students may take any of the following as general electives, but they will not be included in the 36 hours required for the major:

- COM 150 Business Communication
- COM 171 Interpersonal Communication
- COM 430 Internship
- COM 491 Independent Study

In order to graduate, majors must have received a grade of C or better in all required courses and have an overall 2.5 cumulative average in the major.

Minor in Communication

Students seeking to minor in communication should:

1) complete the Basic Competence and Skills of Analysis components of the Core curriculum prior to taking COM 102J;
2) complete COM 102J, Introduction to Communication, before taking any other COM courses;
3) have an overall minimum 2.0 cumulative GPA with a minimum of 24 credit hours.

In addition to COM 102J, Introduction to Communication, all minors will take one course from each of the following categories, A through E:

A) COM 265 Intrapersonal Communication or
   COM 275 Theories of Language
B) COM 272 Persuasion
C) COM 280 Mass Media and Human Interaction
D) COM 330 Interpersonal Communication Theories or
   COM 340 Small Group Communication
E) COM 400 Level Senior Seminar

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COM 102J Introduction to Communication

This course is designed to provide students with a conceptual framework of the basic elements of human communication. Students will examine different levels of communication analysis, learn to chart and analyze communication behavior, and discuss the effects of communication on themselves and others. Topics discussed will include communication theory, self-concept, interpersonal communication, nonverbal behavior, small group interaction, and mass communication. Students will be encouraged to adapt communication principles to their various fields of endeavor. Cr 3.

COM 150 Business Communication

A lecture-discussion course in business communication, emphasizing industrial, managerial, and labor communication. Investigation of theory, models, nets, barriers to communication, and other topics, including basic methods and techniques of internal business communication. Cr 3.

COM 171 Interpersonal Communication

An experiential learning-based course designed to acquaint the student with the elements of interpersonal communication, its basic nature and function. The course involves a study of the potential of human communication; with applications to the problems of
misunderstanding and their remedy. Prerequisite: COM 102J or permission. Cr 3.

COM 242 Media and Children
This course examines the impact of media presentations on the child audience from a developmental perspective. Special attention is given to the issue of the effects of televised violence and educational or pro-social programming. The readings and discussions cover the various theoretical approaches and models, as well as the major findings reported in the scientific literature. Legal, economic, and policy considerations that surround the debate on children and television are discussed. The course focuses mainly on the critical and empirical study of how young people use the mass media and how the media play a role in their lives. Prerequisite: COM 102J. Cr 3.

COM 250 Business and Professional Interviewing
Conducting effective interviews is an essential component of a successful career in business, government, and education. This skill is crucial to any professional who manages the work of other people. This course will aid students in applying theoretical concepts and developing communication skills essential to interviewing. Prerequisite: COM 102J. Cr 3.

COM 256 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. Prerequisite: COM 102J. Restricted to majors only, or permission of the instructor. Cr 3.

COM 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. Prerequisite: COM 102J. Restricted to majors only, or permission of the instructor. Cr 3.

COM 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. Prerequisite: COM 102J. Restricted to majors only, or permission of the instructor. Cr 3.

COM 280 Mass Media and Human Interaction
Mass Media and Human Interaction concentrates on the history and effects of mass communication in our society. Through readings and independent research, the student will explore the content and social consequences of our rapidly changing telecommunication technology. Media to be discussed include print, broadcasting, and cable. Prerequisite: COM 102J. Restricted to majors only, or permission of the instructor. Cr 3.

COM 284 Introduction to Film
This course will introduce the student to film aesthetics and appreciation. It assumes that the student has no knowledge of cinema beyond the moviegoing experience. The aim of the course is to survey the fundamental aspects of cinema as an art form and communication vehicle. The power of moving images and their mass-mediated messages will be analyzed. Prerequisite: COM 102. Cr 3.

COM 285J Introduction to Language
This course is a broad introduction to natural language, approaching language as a biological and psychological phenomenon central to an understanding of human nature. It deals with linguistic questions concerning the grammars of natural languages and how these may vary across cultures and time. It also deals 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 require any background in linguistics or foreign languages. Cr 3.

COM 294 Television Processes
The general 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,
COM 295 Communication Development in Children
This course will examine the structural and the functional development of children's communication behavior. Syntactic, semantic, and pragmatic aspects of communication development will be explored from both learning and acquisition theory perspectives. This course includes a final project of the student's creation. Freshmen must have instructor's permission. Prerequisite: COM 102J. Cr 3.

COM 300 Research Methods in Communication
This course introduces the methodology of communication research. The library, laboratory, field, and the computer will be considered. Topics to be studied include formulation of hypotheses; identification of variables; selection of research design; collection of data; and theory construction in a variety of communication contexts. The course is designed to enable students to evaluate critically the literature in communication research. Prerequisite: COM 102J. Cr 3.

COM 310 Nonverbal Communication
A study of the effects of nonverbal factors on the process of human communication. Proxemics, body motion, paralanguage, metacommunication, and other specific areas of nonverbal behavior will be explored and examined. Each student will be required to conduct a research project and prepare a scholarly paper related to a particular area of nonverbal communication. Prerequisite: COM 102J or permission of the instructor. Cr 3.

COM 320 Intercultural Communication
This course is primarily concerned with the interrelationship between communication and culture in human interaction. Initially, the course focuses on sensitizing students to intercultural communication variables that influence their interactions. Thereafter, those variables are applied to varied sub-cultures within the U.S. in an effort to expand students' knowledge and sensitivity to such sub-cultures. Course content includes theoretical readings and experiential exercises and discussions. Prerequisite: COM 102J. Cr 3.

COM 330 Interpersonal Communication Theories
A study of the current thinking in interpersonal communication with emphasis upon specific theories of human interaction. Students will engage in behavioral observations, experiential learning activities, group research projects, individual study, and will complete a final project on a selected topic in interpersonal communication. Prerequisite: COM 102J. Restricted to majors only, or permission of the instructor. Cr 3.

COM 340 Small Group Communication
A discussion-participation course designed to familiarize students with the theories and techniques of small-group communication. Students will examine role behavior, group norms, conflict, group development, decision-making, communication flow, and other variables relevant to small-group interaction. Prerequisite: COM 102J. Restricted to majors only, or permission of the instructor. Cr 3.

COM 357 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. Prerequisite: COM 102J and junior or senior standing. Cr 3.

COM 385 Introduction to Language Research
An introduction to the experimental study of human linguistic abilities, including the identification of feasible research questions, the review of the literature, and the design, conduct, and interpretation of language experiments. Attention will be given to special statistical considerations and reporting conventions, as well as to available computer resources. Prerequisites: COM 285, PSY 201 or MAT 120 or an equivalent course; or permission of the instructor. Cr 3.

COM 390 Organizational Communication
A lecture-discussion course with a practical field study required. The class will examine factors relevant to communication within organizations and will discuss such topics as
organizational roles, information flow, decisionmaking, leadership, and the nature of organizational change. Prerequisite: COM 340 or permission of the instructor. Cr 3.

COM 394 Theory of Film
The emergence and evolution of the film medium are traced through the writings and teachings of both the classic and the modern theorists/film-makers, from several perspectives: humanistic, ideological, and technical. The course focuses on the contributions of historical trends, film genres, major schools of thought, and the works of selected individuals in shaping a concept of what the medium of film is, how it operates as a language, how it relates to reality and what functions it serves. Students will apply these notions in their examination of the often conflicting relationships among the various theories as well as between film theory and film criticism. Prerequisite: COM 102] with a minimum grade of B-, or permission of the instructor. Cr 3.

COM 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. Prerequisite: junior or senior standing or permission of the instructor. Cr 3.

COM 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). Prerequisite: COM 102] and a precise definition of the project and director's consent. Pass/Fail only. Restricted to majors only, or permission of the instructor. Cr 3.

COM 440 Topics in Film
This course is a senior seminar designed to explore a particular topic in film communication. The professor designated to teach the course during any given semester will select an area of interest to explore with students. Such topics as film and society, women in film, and the silent cinema are areas that could be selected. Class sizes are limited in order for students to participate in discussion and contribute to the group's synergy. Prerequisite: COM 102. Restricted to majors only, or permission of the instructor. Cr 3.

COM 445 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 or not 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). Prerequisite: junior or senior standing and COM 102]. Restricted to majors only, or permission of the instructor. Cr 3.

COM 449 Theories of Mass Communication
A discussion of significant factors related to communication theory. Contemporary theories of mass communication, the mass media, audience analysis, and the role of mass communication in society will be among the topics examined in the course. Students elect to examine an aspect of mass communication that is of interest to them, and present their findings in research papers and projects. Prerequisites: COM 102, COM 280. Restricted to majors only, or permission of the instructor. Cr 3.

COM 451 Independent Study
A concentrated program of research or study on a particular topic of the student's choice, with approval of a communication faculty advisor. Periodic conferences with the advisor are required. Prerequisite: COM 102. Restricted to majors only, or permission of the instructor. Cr 3-6.

COM 455 Theories of Communication: Seminar
This course is designed for upperclass students who are 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. Open to juniors and seniors having at least 12 credit hours of communication coursework. Cr 3.
Criminology

Coordinator: Jim Messerschmidt, 120 Bedford Street, Portland
Professor: Beirne; Associate Professors: Fullam, Lehman, Messerschmidt; Assistant Professor: Bowditch

The bachelor of arts in criminology is a four-year degree offered by the Department of Sociology and Criminology. Criminology is the study of the complex relations among crime, law, and society. Criminologists have traditionally sought to understand why particular individuals or groups engage in criminal activities. Recently, however, the study of crime has been extended to the structures and processes that define certain behavior as criminal and to the ideas, ideals, and ideologies embedded in definitions of crime that are expressed in our everyday perceptions of crime, criminality, and crime control.

The curriculum in criminology is a rigorous series of courses that provides students with a comprehensive knowledge of crime and crime control in a 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 must therefore be taken in sequence. Elective courses enable students to place their criminological interests in a broader sociological perspective.

Many students in the program are interested in law studies or in social service occupations related to criminal or juvenile 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.

Bachelor of Arts

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 39.

The criminology major consists of 30 hours in required courses and 9 hours of sociology electives. Elective courses should be selected in consultation with the student's advisor.

Students are reminded that they must complete the requirements of the College of Arts and Sciences and the University Core curriculum.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CRM 215</td>
<td>Criminology</td>
</tr>
<tr>
<td>CRM 216</td>
<td>White Collar Crime</td>
</tr>
<tr>
<td>SOC 205</td>
<td>Methods of Social Research</td>
</tr>
<tr>
<td>CRM 301</td>
<td>Criminological Theory</td>
</tr>
<tr>
<td>CRM 302</td>
<td>Punishment and Discipline</td>
</tr>
<tr>
<td>SOC 317</td>
<td>Gender and Crime</td>
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<tr>
<td>SOC 336</td>
<td>Law and Society</td>
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<tr>
<td>SOC 375</td>
<td>Deviance</td>
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<tr>
<td>CRM 401</td>
<td>Comparative Criminology</td>
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<tr>
<td>CRM 402</td>
<td>Senior Seminar in Criminology</td>
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</tbody>
</table>

30 hours

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<thead>
<tr>
<th>Elective Courses</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CRM 217</td>
<td>Crime in Maine</td>
</tr>
<tr>
<td>SOC 300</td>
<td>Sociological Theory I</td>
</tr>
<tr>
<td>SOC 301</td>
<td>Sociological Theory II</td>
</tr>
<tr>
<td>SOC 310</td>
<td>Social Change</td>
</tr>
<tr>
<td>SOC 312</td>
<td>Class and Inequality</td>
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<tr>
<td>SOC 315</td>
<td>Self and Society</td>
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<tr>
<td>SOC 337</td>
<td>Juvenile Justice</td>
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<tr>
<td>CRM 340</td>
<td>Criminal Law</td>
</tr>
<tr>
<td>CRM 350</td>
<td>Special Topics</td>
</tr>
<tr>
<td>SOC 350</td>
<td>Urban Society</td>
</tr>
<tr>
<td>SOC 353</td>
<td>Social Movements</td>
</tr>
<tr>
<td>SOC 355</td>
<td>Social Structure and Politics</td>
</tr>
</tbody>
</table>

9 hours
Major Credit and Grade Policy
There are prerequisites for most major credit courses. See the departmental course listings for particulars. 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. The coordinator of the program routinely requests faculty teaching major courses to submit a list of those students doing less than C work at mid-semester. These students are strongly encouraged to meet with their professor, and may be required to meet with the coordinator for counseling.

Curriculum Summary and Guide
The Criminology curriculum is a series of structured and integrated case experiences of the student. The curricular sequence is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Required Courses</th>
<th>Elective Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Introduction to Sociology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Core requirements</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Complete Foundation requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Criminology (fall or spring)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Methods of Research (fall or spring)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>White Collar Crime (fall or spring)</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Criminological Theory (spring)</td>
<td>Electives</td>
</tr>
<tr>
<td></td>
<td>Gender and Crime (spring)</td>
<td>(fall or spring)</td>
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<tr>
<td></td>
<td>Law and Society (fall)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deviance (spring)</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Punishment and Discipline (fall)</td>
<td>Electives</td>
</tr>
<tr>
<td></td>
<td>Comparative Criminology (spring)</td>
<td>(fall or spring)</td>
</tr>
<tr>
<td></td>
<td>Senior Seminar (spring)</td>
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</tbody>
</table>

Declaration of Major
Consistent with the general policies of the College of Arts and Sciences, the Criminology program does not normally accept formal declaration of the major before the second semester of the sophomore year.

Students in or beyond the second semester of their sophomore year should complete a major declaration form. At the same time, their record will be evaluated and a final, binding version of their major requirements will be written. To be accepted as a formal major, the student must have been at the University for at least one full semester, be in good standing, and have demonstrated satisfactory performance in major courses.

Students are invited, before this time, to list their major with the Registrar and to be advised through the Criminology Office. This listing, however, should be considered a declaration of intent.

Transfer students must also formally declare their major even though they enter with junior or senior standing.

Supplementary information is published each semester by the Criminology Office to assist students in planning their course schedules. The information includes a summary of major courses for freshmen and sophomores, listings and descriptions of special courses, and general information for majors.

To obtain these publications, or for other information, write to: Coordinator, Criminology Program, University of Southern Maine, 96 Falmouth Street, Portland, Maine 04103 or telephone: (207) 780-4105.
Minor in Criminology

The number of hours required for the minor: 18.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CRM 215 Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CRM 216 White Collar Crime</td>
<td>3</td>
</tr>
<tr>
<td>SOC 205 Methods of Social Research</td>
<td>3</td>
</tr>
<tr>
<td>CRM 301 Criminological Theory</td>
<td>3</td>
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</tbody>
</table>

Electives—Two Courses (6 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CRM 340 Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CRM 401 Comparative Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CRM 390 Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>CRM 350 Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>CRM 302 Punishment and Discipline</td>
<td>3</td>
</tr>
<tr>
<td>CRM 317 Gender and Crime</td>
<td>3</td>
</tr>
<tr>
<td>CRM 373 Pornography and Violence</td>
<td>3</td>
</tr>
<tr>
<td>SOC 336 Law and Society</td>
<td>3</td>
</tr>
<tr>
<td>SOC 374 Sociology of Mental Health and Illness</td>
<td>3</td>
</tr>
<tr>
<td>SOC 375 Sociological Perspectives on Deviance</td>
<td>3</td>
</tr>
</tbody>
</table>

Transfer Students

Transfer students and students contemplating transfer into the criminology program are urged to meet with department faculty as early as possible for an evaluation of their progress and their requirements in the major.

Internships and Work Experience

The Department of Sociology and Criminology has begun a new and expanded internship and work experience program for criminology majors. The expanded program helps place students in community agencies and organizations, including neighborhood organizations and a variety of agencies dealing with youth services. Credit internships actively seek to bring together student academic work and community involvement. Students interested in an internship or work experience placement are encouraged to meet with the internship coordinator.

Required Courses

CRM 215 Criminology
This course focuses on the difficult question, "what is crime?" and on problems concerning the measurement and distribution of crime. The criminology course examines some of the popular misconceptions and myths about crime, the creation and utility of official and unofficial crime statistics, popular presumptions about the causes of crime, and the institutional responses to crime in our society. The course is also listed as SOC 215. Prerequisite: SOC 100J or permission of instructor. Cr 3.

CRM 216 White-Collar Crime
This course provides an analysis of the different sociological perspectives on white-collar crime as well as focusing on some specific types of white-collar crime: organized crime, occupational crime, corporate crime, political crime, and state terrorism. The course also discusses what can be done to curb these types of white-collar crime. Prerequisite: CRM/SOC 215. Cr 3.

SOC 205 Methods of Social Research
Conceptualization and research design, data collection and analysis, logic of inquiry, and research techniques. Prerequisite: SOC 100J or permission of instructor. Cr 3.

CRM 301 Criminological Theory
This course focuses on the development of criminological theory from 1830 to the 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. Offered spring semesters. Prerequisite: CRM 215. Cr 3.

CRM 302 Punishment and Discipline
This course distinguishes between different forms of discipline, such as punishment, therapy, conciliation, and repression. It traces the development of punishment as the definitive style of discipline in modern societies. Specific historical emphasis is given to the emergence of the doctrine of the rule of law. The development of the modern police and the modern
Elective Courses

CRM 217 Crime in Maine
An introduction to crime and penal policies in Maine, including official and unofficial crime statistics; common crimes; white-collar, corporate, and environmental crimes; and selected aspects in crime control. The course presents inter-state comparative analysis, and several guest lectures by Maine speakers. Prerequisite: CRM 215. Cr 3.

SOC 300 Sociological Theory I
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 these theories developed. Prerequisites: SOC 100J and two other SOC courses, or permission of instructor. Cr 3.

SOC 301 Sociological Theory II
An investigation of contemporary sociological theory. Traces descent of the classical statements through to the present and identifies both linkages and discontinuities in sociological analysis. Attention is also given to the socio-cultural settings within which various schools of sociological theorizing presently flourish. Prerequisites: SOC 300 and two other additional SOC courses, or permission of the instructor. Cr 3.

SOC 310 Social Change
Analysis of sociocultural factors related to social change and the dynamics of the change process. Prerequisite: SOC 100J or permission of instructor. Cr 3.

SOC 312 Class and Inequality
A systematic assessment of structured social inequalities in wealth, power, and status in industrialized societies. Emphasis is placed on assessing social policies employed to reduce, ameliorate, or sustain such inequalities. Prerequisite: SOC 100J or permission of instructor. Cr 3.

SOC 315 Self and Society
A sociological examination of theory and research in major areas relating personality and social systems; attitudes and behavior; socialization; social perception; bureaucratic structure and personality; etc. Emphasis on issues involved in relating two theoretical levels of analysis. Prerequisite: SOC 100J or permission of instructor. Cr 3.

SOC 337 Juvenile Justice
Examination and analysis of juvenile justice philosophies, processing, and treatment, with an emphasis on historical and comparative materials. Prerequisite: SOC 100J or permission of instructor. 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, 6th and 14th Amendment issues; pre-trial; trial; sentencing and appeals. Materials are drawn from U.S. Supreme Court and Maine Judicial Court opinions. Prerequisite: CRM 215 or permission of instructor. Cr 3.
CRM 350 Special Topics
Specially developed courses exploring areas of interest and concern in depth. Among those courses currently considered are criminal law, organized crime, occupational crime, and violent crime. Offered as resources permit. These courses can be applied to the nine-hour elective hours required in the criminology major. Cr 3.

SOC 350 Urban Society
This course focuses on the sociological study of urban existence, urban policy, and planning. Urban life is examined in context of the political, economic, and organizational aspects of contemporary American society. Topics include approaches to the study of urban society, varieties of urban experience, use of urban space, urban institutions and social problems, selected issues in planning, and policy making. Comparative materials on urban life of other countries are used when appropriate. Prerequisite: SOC 100J, or permission of instructor. Cr 3.

SOC 353 Social Movements
The rise and development of social movements emphasizing structuring and institutionalization, social movements, and sociopolitical change. Prerequisite: SOC 100J or permission of instructor. Cr 3.

SOC 355 Politics and Society
Possibilities and limitations of political democracy in industrial, bureaucratic society.

Optional Courses

CRM 390 Independent Projects
Individually arranged reading and/or research for juniors and seniors concentrating on a particular subject of concern under the advice and direction of a faculty member. Apply to program coordinator. Cr 3.

CRM 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 for upper-level social science majors with substantive background or 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. Offered each semester. Contact departmental internship coordinator for details. Cr 4 to 6.

CRM 412 Research In Criminology
Independent or group-organized research project or activity under the direction of a faculty member. Open to advanced students with some training or experience in research methods. Apply to the program coordinator. Cr 3.
In the study of literature, students learn to appreciate the possibilities of language for serious and often moving expression. Through writing practice, students learn to use language effectively. The understanding of language is fundamental to an understanding of what we do, and the quality of language in a society determines and reflects its moral and political condition.

The English major serves those interested in preparing for any profession or vocation where an understanding of experience is important, from the law and medicine to social work and politics. The range of English courses is large, and will prepare the student to think and write clearly and creatively, talents vital to success in any field. For information and counsel regarding the major or appropriate courses for non-majors, students should visit English offices in Gorham (200 Bailey Hall) or Portland (411 Luther Bonney Hall).

Students not majoring in English who want to satisfy the Humanities Core curriculum requirement in English should begin with English 120H, except when English 120H is waived. Courses numbered below 120 cannot be used to satisfy the Humanities Core curriculum requirement.

Bachelor of Arts

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 48.

The English major begins with a course in writing (100 or 101) and an introduction to the study of literature (120). The student then selects more advanced English courses (and up to 6 credits in approved courses of other departments) to complete the 48-credit major requirement. The English major curriculum is designed to assure that the student has a familiarity with many of the outstanding literary achievements of Western culture, a knowledge of how the language has developed, and a sensitive appreciation of works by the great representative writers and critics in major periods of English and American literature. Elective and independent study courses will permit the student to go more deeply into subjects of personal interest, including creative expression.

While the Department does not require courses in other disciplines, majors are strongly advised to develop a reading proficiency in a foreign language and to elect or satisfy Core requirements with History of Western Civilization I and II (HTY 101I and 102I), History of England (HTY 261), a course in American history (HTY 131I, 132I, 133I, or 134I), a lower-level philosophy course (PHI 101E to 111E), one or more history of philosophy courses (PHI 310I, 320I, 330I, 340I, 350I, 360I), an art course (ART 101G, 111G or ARH 112G), a music course (MUS 100G, 120G, 121G), and one or more theatre courses (THE 101G, 340, 341, 361, or 362).

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. Within the first 2/3 years, majors should have completed not only ENG 120 but also ENG 262 and 263 or 264 (genre courses) and a Classical or Biblical Backgrounds course.

1. ENG 100C or 101C or waiver; ENG 120H (0 credits toward major)
   A student may, with an advisor's approval, substitute the third Introduction for Majors course, or a second Classical and Biblical Backgrounds course for ENG 120H.

2. Introduction for Majors (6 credits required)
   ENG 262 Poetry (required of all majors)
   ENG 263 Fiction
   ENG 264 Drama
Majors who do not take the Fiction course (263) or the Drama course (264) must take an upper-level course in the omitted genre. For Drama, a course other than Shakespeare must be selected.

3. Writing Courses (3 credits required)
   ENG 306 Business and Report Writing and ENG 307 Technical Writing may not be used to satisfy this requirement.

4. Classical and Biblical Backgrounds (3 credits required)

5. Linguistics and Related Courses (3 credits required)

6. Criticism Courses (3 credits required)

7. Major Figures (6 credits required)
   The two major figures courses should be selected as follows:
   3 credits from Shakespeare (ENG 360 or 361); 3 credits from Chaucer (ENG 351), Milton (ENG 356), or another major figure or figures course.

8. Periods of Literature Courses (15 credits required)
   At least one course from five of the following six areas is required:
   Continental and World Literature; Medieval Period; Neoclassical and Romantic Periods; 19th Century British and American Literature; Modern Literature. Major figures courses other than Shakespeare also fulfill Periods of Literature requirements.

9. Electives (credits in courses numbered 200 and above to complete the 48-credit major required)

10. A senior seminar is required of all graduating majors.

Note: The requirements of the English major program may be waived in exceptional cases in favor of a Self-Designed Major that is approved in advance by the English Department Curriculum Committee.

Prerequisites and Course Waivers
   ENG 100C or 101C, or an equivalent or waiver, is a prerequisite for any English language or literature course, including ENG 120H. For English-major and general-interest courses numbered 130 to 199, ENG 100C or 101C (or an equivalent or waiver) and ENG 120H or permission of the instructor are prerequisites. For courses numbered 200 to 499, prerequisites are ENG 100C or 101C (or an equivalent or waiver), and ENG 120H. Certain advanced courses, as indicated in the course listings, and all Independent Study courses require the instructor's permission.

Note: 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 120H may be waived for a few exceptional students who pass a qualifying examination administered by the English Department, and for transfer students with certain literature course credits. English majors may, with their advisor's approval, substitute a third genre course (ENG 263 or 264) or a second Classical and Biblical Backgrounds course for ENG 120H.

Semester Course Guides
   Every semester the Department publishes a course guide which gives more detailed information, including texts and writing requirements, than the catalog can accommodate. Students are urged to get a copy of the guide in either of the English Offices.

The Honors Degree in English
   For a B.A. degree in English with honors, a student must achieve a B+ or better average, and he or she must successfully complete a seminar where a major paper is required (or a department-approved Independent Study course if a suitable seminar is not being offered).

Minor in English
   The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 18.
   The Department offers an English minor which requires 18 credits of upper-level courses in a program planned with an English faculty advisor and approved by the director of English Minor Programs. The goal of the program is to give students not simply a collection of courses, but a coherent experience with English courses chosen to suit their needs and interest,
whether in literature generally, creative writing, American literature, language and composition, or another area of study.

Each program must meet these specific requirements beyond ENG 100C/101C and ENG 120H (or waivers); a 200- or 300-level writing or language/linguistics course; three 200- or 300-level literature courses (one must focus on literature before 1800, one after 1800); one 300- or 400-level course that examines in depth a particular writer or writers, or a particular subject.

Further information about the minor is available in the English Department offices.

Internships, Job Opportunities, and Exchange Programs

Students of English are encouraged to take advantage of a variety of internship opportunities as part of their program. Internships allow academic credit for work experiences that use and enhance English skills. Also, students are invited to discuss job opportunities for those with training in English, and to examine pamphlets and books on the subject, in the English office at Gorham.

Students interested in writing and in developing research skills may wish to consider the interdisciplinary field study semester offered by the College of Arts and Sciences in association with the Salt Center for Field Studies (see the College of Arts and Sciences section of this catalog).

English majors are encouraged to apply for semester or year-long exchanges in English departments at King Alfred's College, Winchester, and Nijmegen University, The Netherlands.

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ENG 100C College Writing
Classes meet regularly to analyze professional and student writing as a way of sharpening awareness of how to use language effectively. The writing assignments encourage students to apply the principles discussed in class to their own work. Students may not take both ENG 100C and 101C for credit. This course cannot not be used to satisfy a humanities requirement. Prerequisite: writing proficiency. Every year. Cr 3.

ENG 101C Independent Writing
A course especially designed for the mature student who has been well prepared in writing by high school or previous experience and who has the discipline to work independently. The course is conducted primarily in individual weekly conferences, though classes meet occasionally. Independent Writing focuses on problems of style, presentation, and minor mechanical difficulties. Prerequisite: writing proficiency. Every year. Cr 3.

ENG 102 Term Paper Writing
This course will teach the student to write a research paper. The choice of subjects will be worked out by instructor and student. The student will learn how to develop a topic, prepare a working bibliography, become familiar with library resources, take notes in an orderly and meaningful fashion, and then write a final paper after having polished a number of rough drafts. Cr 1.

ENG 10E Straight and Crooked Thinking
The analysis, interpretation, and evaluation of various kinds of arguments and ways to reach logical decisions, with critical tracts, speeches, literary essays, scientific papers, and magazine articles. This basic course employs a new non-symbolic approach to practical reasoning expressed in natural language; its emphasis is on direct application to realistic cases. Exercises and readings are designed to aid undergraduates in reports, essays, and term papers. The materials for critical analysis have a broad appeal for future lawyers, administrators, executives, business people, and scholars. Regular oral reports; brief written exercises in critical reasoning and analysis; final examination based on actual specimens of contemporary argument. Prerequisite: ENG 100C/101C or permission of instructor. Cr 3.

ENG 120H Introduction to Literature
A general introduction to the various literary genres—poetry, the short story, drama—which will include a study of critical terminology, close textual reading, and practice in writing. Prerequisite: ENG 100C or 101C or waiver. Every year. Cr 3.

ENG 131 The Literature of Business
The drama of business as reflected in the fiction of important writers like Twain, Norris, Dreiser, and Warren. The course will focus on significant moments and problems in America's economic history and on the way these have been represented by writers who have concerned themselves with subjects like the exploitation of the West, the Robber Barons, manipulation in the stock market, and cycles of economic euphoria and disillusionment. Cr 3.
Writing Courses

Eng 150 Topics in Literature
A selection of courses varying in content from term to term. Under consideration for coming semesters: Utopian Literature, Radicalism and Revolt in Fiction, Feminism in the World Novel, Native American Literature, Popular Semantics, and Literature of the 60s. Descriptions of current offerings are available in the English offices. More than one section may be taken for credit. Cr 3.

ENG 262 Poetry
An intensive course in the close reading of many of the most significant poems in English. Attention will be given to important elements of poetry, including versification and the use of metaphor; characteristics and conventions of poetry written in different periods, early and contemporary, will also be explored. Required of English majors and recommended for all students seeking to understand a principal area of our cultural heritage. Every year. Cr 3.

ENG 201F Creative Writing
An introduction to the principles and practice of writing fiction, poetry, and drama. Emphasis is on fresh observation and meaningful selection of concrete details and their uses in the different genres. Recommended for beginners. Prerequisites: ENG 100C or 101C and ENG 120H. Every year. Cr 3.

ENG 300F Fiction Writing
A course for those who have already, in a course such as Creative Writing or on their own, 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. Suggested preparation: ENG 201F. Every year. Cr 3.

ENG 301F Poetry Writing
A course for those who, in a creative writing course or on their own, have developed basic skills of careful, thoughtful observation and a preference for concrete details to convey emotional meaning, 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 and exercises that stress the elements of poetry, as well as on the development of personal approaches. Suggested preparation: ENG 201F. Every year. Cr 3.

ENG 302F Fiction Workshop
An advanced course requiring the completion of short stories or a substantial part of a novel. Prerequisites: ENG 300 and instructor's permission. May be repeated for 3 additional credits with instructor's permission. Cr 3.

ENG 263 Fiction
A survey of various forms and techniques of fiction, typically beginning with oral storytelling and traditional tales, but concentrating on types of narrative developed in the nineteenth and twentieth centuries, e.g., symbolic realism, the fable, magical realism, metafiction, and other experimental forms. The course also examines the distinction between "fiction" and "non-fiction" and between "literature" and popular genre fiction. Every year. Cr 3.

ENG 264 Drama
Significant representative plays from several periods, including the contemporary, will be studied. Conventions of stagecraft at different points in the drama's history will be explored, and attention will be given to how dramatic and literary techniques, like the use of action, stage effects, and dialogue, contribute to the often profound meanings that plays can convey. Every year. Cr 3.

ENG 303F 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. Prerequisites: ENG 301 or instructor's permission. May be repeated for 3 additional credits with instructor's permission. Cr 3.

ENG 304 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 a one-act play. Prerequisites: THE 101G and THE 361 or 362 or 363. This course is also listed as THE 335. Cr 3.

ENG 305 Advanced Essay Writing
Study of various forms of discourse with concentration on exposition. Provides experience in logical analysis and in the uses of persona, appeals to the reader, stylistic and fictional devices, and other strategies. Prerequisite: a grade of B in ENG 100C or 101C, or permission of the instructor. Every year. Cr 3.

ENG 306 Business and Report Writing
Primarily for juniors and seniors majoring in business administration. Training in clear and effective writing of formal reports, business communications, and related materials. Every year. Cr 3.

ENG 307 Technical Writing
A skills course to prepare students for writing technical communication required in business, industry, or government occupations. Students will learn how to design technical reports by...
following a systematic procedure or writing process. Audience analysis, statement of purpose, selection and arrangement of report materials, text preparation, and editing procedures will be mastered in the writing of technical business letters, memoranda, and informal and formal reports. In addition to written assignments, students will give an oral report at the conclusion of the course. Prerequisite: ENG 100C. Cr 3.

**ENG 400 Independent Study in Creative or Expository Writing**
By instructor’s permission. See department for application form. Cr var.

**CLA 284 The Tragic Hero in Ancient Literature**
Intensive reading of selected plays in English translation by Aeschylus, Sophocles, Euripides, Seneca; discussion, papers. Cr 3.

The following Foreign Languages and Classics courses carry English major credit as electives. Note that these courses cannot count both toward the English major and toward the Core curriculum requirement.

- CLA 291I The Golden Age of Greece
- CLA 292I Rome, from Republic to Empire
- FRE 281H Masterpieces of French Literature I
- FRE 282H Masterpieces of French Literature II
- FRE 283H Contemporary French Thinkers
- GER 281H The German Novelle
- SPA 281H Masterpieces of Spanish Literature

For descriptions, see Foreign Languages and Classics section of this catalog.

Up to six hours of specific courses offered by such other CAS departments as History, Theatre, and Philosophy may be elected for English major credit.
ophies and their methods—traditional, structural, and transformational. 2 year cycle. Cr 3.

**ENG 333 Structural Linguistics and Culture**
The course analyzes the languages and culture (art, religion, poetry) of pre-literate societies, particularly the American Indian. Cr 3.

**ENG 334 Semantics**
Interpretation of literature by means of analysis of the language used. Recommended for prospective teachers of literature and English. 2 year cycle. Cr 3.

**ENG 335 Discovering Grammatical Structure**
This course prepares the student to find and understand the grammar and structure of any language. Includes work in American Indian languages, such as Passamaquoddy of Maine, and Maine Indian place names. 2 year cycle. Cr 3.

**Criticism Courses**

**ENG 340 History of Literary Criticism**
A study of the great literary critics, their methods and approaches, from Plato and Aristotle to the present day. Among the many figures included are Sidney, Johnson, Coleridge, Arnold, and T.S. Eliot. 2 year cycle. 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 year. Cr 3.

**ENG 342 Topics in Contemporary Theory**
This course studies in depth selected theoretical approaches to literature. 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). 2 year cycle. Cr 3.

**ENG 430 Independent Study in Linguistics**
By instructor's permission. See department for application form. Cr var.

**ENG 431 Seminar in Linguistics**
An advanced course focusing on specialized problems in language study. Emphasis is on the application of various scholarly approaches to important, limited subjects. Cr 3.

**ENG 344 Continental Masterpieces**
A study of some of the masterworks of medieval and renaissance culture, including Dante's *Divine Comedy* and Cervantes' *Don Quixote*. Every year. Cr 3.

**ENG 345 Dante**
This course on Dante and his poetic milieu begins with the troubadour poets of Provence and Sicily, then considers the Italian "stilnovisti" (Guinizelli and Cavalcante), and finally turns to Dante's major poems and literary criticism. Texts used will be bilingual so that reference can be made to the Italian originals of Dante's work. 2 year cycle. Cr 3.

**ENG 360 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 train students to translate elementary prose (*Apollonius, the Anglo-Saxon Chronicle,* etc.). Later weeks introduce the students to alliterative poetry. Students will translate "The Dream of the Rood," "The Seafarer," and passages from *Beowulf*. This course will satisfy either the Linguistic requirement or Medieval requirement for the major. 2 year cycle. Cr 3.

**ENG 430 Independent Study in Linguistics**
By instructor's permission. See department for application form. Cr var.

**ENG 431 Seminar in Linguistics**
An advanced course focusing on specialized problems in language study. Emphasis is on the application of various scholarly approaches to important, limited subjects. Cr 3.

**ENG 440 Independent Study in Criticism**
By instructor's permission. See department for application form. Cr var.

**ENG 441 Seminar in Literary Criticism**
An advanced course focusing on specific problems or historical movements in literary criticism. Emphasis is on applying various scholarly approaches to important, limited subjects. Typical subjects might be myth and myth criticism, psychoanalytic theory as myth; feminist criticism and the canon; gender and genre studies; literary criticism and social authority. 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 like Rilke, Stein, Barthes, and H. D. with more traditional forms of autobiography, the course investigates the historical vicissitudes in the conceptualization of a "self." 2 year cycle. Cr 3.
ENG 324 Arthurian Romance
A survey of medieval romances (originally written in English and continental languages) concerned with King Arthur and his knights and the social values represented by the Round Table. Students will examine romance as a literary genre and Arthur as a mythological and historical figure. Texts will include (but are not limited to) the Arthurian romances of Chretien de Troyes, a version of the Tristan legend, Sir Gawain and the Green Knight, and Malory's Morte Darthur. Later treatments of the Arthurian material may also be discussed. Non-English and regional Middle English texts are taught in translation. 3 year cycle. Cr 3.

ENG 325 Medieval Epic and Romance
The development of medieval traditions of epic and romance with readings of major works from England, Germany, France, Spain, and Italy (in translation). 3 year cycle. Cr 3.

ENG 326 Satire
A study of the principles of satire to define satire as a mode. The course focuses on various literary genres from classical through the modern era and, to a lesser extent, in film and graphic arts, emphasizing works selected from such prominent satirists as Aristophanes, Petronius, Boccaccio, Chaucer, Erasmus, More, Rabelais, Ben Jonson, Swift, Pope, Austen, Burns, Breughel, Hogarth, and others. 3 year cycle. 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, and Isaac Babel. 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. 2 year 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, and Christina Stead. Prerequisite: junior class standing or permission of the instructor. 2 year 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, and Pinter. The course will emphasize the experience of drama as much as possible by viewing video productions of several plays. Every year. Cr 3.

ENG 420 Independent Study in Comparative Literature
By instructor's permission. See department for application form. Cr var.

ENG 421 Seminar in Comparative Literature
An advanced course focusing on individual writers or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Typical subjects: Continental humanism, Dante, Continental influences on English literature. 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 the literature of fourteenth-century England. Major readings will include Chaucer's Troilus, the Pearl, and Sir Gawain and the Green Knight. 3 year 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. Every year. Cr 3.

ENG 352 Medieval Drama
This course will introduce the theatre 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 15th century. Attention will be paid to the aesthetic and theological principles underlying this conjunction of farce and high seriousness in the plays as well as to distinctly medieval techniques of staging and production. 3 year cycle. Cr 3.
ENG 450 Independent Study in Medieval Literature
By instructor's permission. See department for application. Cr var.

Renaissance

ENG 355 The English Renaissance
A study of the principal writers of the English Renaissance exclusive of Shakespeare, with emphasis on major figures like Spenser, Donne, and Milton, but with some attention to other figures. Every year. Cr 3.

ENG 356 Milton
Study of Milton's major poetry and selected prose with attention to critical and historical background. Every year. Cr 3.

ENG 357 British Drama to 1642
Shakespeare's predecessors, contemporaries, and followers to 1642. 3 year cycle. Cr 3.

Shakespeare

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. The division of plays within the two courses is largely arbitrary. Its intent is to permit students to take a second course in Shakespeare without repeating the readings of the first course. Neither course is introductory or prerequisite to the other. The main difference is that ENG 360 often includes a section on Shakespeare's history plays, while ENG 361 includes a section on Shakespeare's "romances" (dramatic fairy tales). Both courses include tragedies and comedies. Each course: Cr 3.

Neoclassical and Romantic Periods

ENG 365 Eighteenth-Century Literature
We will read and discuss a sampling of literary works written from the Restoration through the dawn of Romanticism (a period known as the Age of Exuberance). The reading list will be adjusted each term, in part to reflect the students' special interests, but authors likely to be included are Dryden, Swift, Pope, Dr. Johnson, Charlotte Lennox, and Fanny Burney. 2 year cycle. Cr 3.

ENG 366 Restoration and 18th-Century Drama
A study of Restoration and early 18th-century drama with emphasis on innovations in the post-Elizabethan theatre and on changing definitions of the tragic and comic will include Davenant, Dryden, Otway, Etherege, Shadwell, Cibber, Wycherley, Congreve, Farquhar. 3 year cycle. Cr 3.

ENG 369 The Earlier English Novel
The principal novelists from Defoe through Smollett and Burney. 3 year cycle. Cr 3.

ENG 370 Fiction of the Romantic Period
The novels of Jane Austen; readings in Maturin, Peacock, Edgeworth, Lewis, Godwin, Mary Shelley, Scott. 2 year cycle. Cr 3.

ENG 371 Major Romantic Writers
A study of the major British poets and essayists of the Romantic period (approximately 1785-1832) and of the nature of the Romantic movement. Readings selected from among Blake, Burns, Wordsworth, Coleridge, Keats, Byron, Shelley, Lamb, DeQuincey, Beddoes, Hunt, Peacock, etc.; also Mary Shelley's *Frankenstein*. 2 year cycle. Cr 3.

ENG 451 Seminar in Medieval Studies
An advanced course focusing on individual writers or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Cr 3.

ENG 455 Independent Study in Renaissance Literature
By instructor's permission. See department for application form. Cr var.

ENG 456 Seminar in Renaissance Studies
An advanced course focusing on individual writers, or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Typical subjects: the metaphysical poets, Elizabethan prose fiction. Cr 3.

ENG 460 Independent Study in Shakespeare
By instructor's permission. See department for application form. Cr var.

ENG 461 Seminar in Shakespeare Studies
An advanced course in Shakespeare which emphasizes the application of various critical and scholarly approaches to important aspects of the poet and dramatist's work. Typical subjects: allegorical elements in Shakespeare's plays, Shakespeare and the daemonic. Cr 3.
Nineteenth-Century British and American Literature

ENG 375 The Victorian Novel
The principal novelists from Austen to Hardy. 2 year cycle. Cr 3.

ENG 376 Eminent Victorian Writers
Major writers of the Victorian era, such as Emily Bronte, Tennyson, Browning, Arnold, Dickens, George Eliot, Ruskin, Pater, Hardy and Wilde. 2 year cycle. Cr 3.

ENG 377 Victorian Poetry and Prose
A study of the major poets and non-fiction prose writers of the Victorian period, such as Tennyson, the Brownings, Arnold, the Rossettis, Meredith, Morris, Swinburne, Hopkins, Hardy, Carlyle, Newman, Ruskin, and Pater. 2 year cycle. 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. The course investigates the changes the idea of *Bildung* underwent at the hands of various authors in the 19th and early 20th 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 include Goethe’s *Wilhelm Meister’s Apprenticeship*, Bronte’s *Jane Eyre*, Dickens’ *David Copperfield*, and Joyce’s *Portrait of the Artist as a Young Man*. 2 year cycle. Cr 3.

ENG 379 Earlier Women Writers
The aim of this course is twofold, to introduce students to the wealth of major works by women writers and to consider in detail the voices of women on women and society. Women novelists and poets have explored the entire range of human experience, of social, political, and philosophical issues as well as personal experience. This course will discuss the ways in which they have treated such issues as they relate to women's own lives. Although specific content may vary from semester to semester, readings are likely to emphasize nineteenth-century writers like Jane Austen, George Eliot, Charlotte Bronte, and Elizabeth Gaskell. 2 year cycle. Cr 3.

ENG 380 The American Renaissance
Major American writers of the mid-19th century. Includes critical study of major works by Emerson, Thoreau, Hawthorne, Melville, Whitman, and Dickinson with attention to the social and literary backgrounds. 2 year cycle. Cr 3.

ENG 381 Colonial American Literature
A study of early American writers of religious prose, fiction, and poetry. A course in early American history is recommended background. Cr 3.

ENG 382 The Earlier American Novel

ENG 384 Twain and James
A study of the major figures in the development of realism in American fiction after the Civil War. Selections will include *Adventures of Huckleberry Finn, Pudd’nhead Wilson, The Mysterious Stranger*, and *Old Times on the Mississippi*, as well as representative novels by James (e.g., *The Europeans, What Maisie Knew, The Spooks of Poynton, and The Ambassadors*). 2 year cycle. Cr 3.

ENG 389 Writers of Maine
Historical and literary analysis of writers in and about Maine. The emphasis will be on the literary quality of the best-known men and women writers and the place in history both past and present of the lesser-known writers. Extra credit in the course will be given for a report about any off-campus project related to an author and a particular locality in Maine. English majors should have already taken a survey of American literature; prospective teachers will prepare an annotated bibliography of one author of their choice. Every year. Cr 3.

ENG 475 Independent Study in the Victorian Period
By instructor's permission. See department for application form. Cr 3.

ENG 476 Seminar in Victorian Studies
An advanced course focusing on individual writers or particular literary themes or prob-
Modern Literature

ENG 385 The Modern Age: British
The purpose of this course is to define and discuss the nature of Modernism as it developed in 20th-century Britain. Both technical change and innovation and changes in themes and attitudes will be considered. What kind of world, for example, does a poem like *The Waste Land* or a novella like *Heart of Darkness* portray? What assumptions underlie them? What changes in poetic narrative form do they demand? The class will emphasize early Modern (pre-World War I) but will attempt to discover, as well, how contemporary British literature has developed since then. The course will include such writers as Joyce, Conrad, Yeats, MacDiarmid, Woolf, Lessing and Beckett. 2 year cycle.

ENG 386 The Modern Age: American
The purpose of this course is to examine the nature of Modernism as it developed in 20th-century America. Early precursors such as Whitman, Dickinson, and Twain will be considered with a view to determining what special issues and techniques developed to express an American Experience. Emphasis, however, will be on major recent writers such as Faulkner, Hemingway, Fitzgerald, Pound, Williams, Katherine Anne Porter, Flannery O'Connor, Stevens, Moore, Hurston, and selected contemporary poets. 2 year cycle.

ENG 387 Contemporary Women Writers
The focus of the course is on 20th-century novelists and/or poets. Specific readings and thematic approaches will vary depending on instructor. The course has been taught, for example, with an emphasis on the regional and ethnic cultures from which American women writers come, reading works by Kate Chopin, Willa Cather, Eudora Welty, Alice Walker, Toni Morrison, Maya Angelou, Leslie Silko, Maxine Kingston, Grace Paley, and Anne Sexton. 2 year cycle.

ENG 388 Modern Christian Writers
Dostoevsky's novels mark a resurgent interest in Christian religious experience as a subject for major literature. This development in the 20th century includes such figures as Bloy, Eliot, Auden, Waugh, Greene, Undset, Claudel, Peguy, Mauriac, Bernanos, Silone, Lowell, Percy, and O'Connor. A representative selection, primarily fiction, will be examined. 2 year cycle.

ENG 481 Seminar in Earlier American Literature
An advanced course focusing on individual writers or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Typical subjects: backgrounds of American thought, Hawthorne and Melville, Twain and James, Thoreau. Cr 3.

ENG 390 Modern British Poetry
Modern British poetry has taken diverse forms and concerned itself with a wide range of themes. This course, however, will focus on two or three selected major figures such as Hardy, Yeats, Eliot, MacDiarmid, Auden, and Thomas with the aim of placing them in the larger context. The class will examine and discuss early changes in poetic forms, the impact of World War I poets and the Georgians, the developments in contemporary Britain. The primary focus will then be to consider in depth the two or three major figures, defining what determines their particular voice and vision of reality. The selected poets will vary with the semester. 2 year cycle.

ENG 391 Modern American Poetry
This course will focus on two or three major poets such as Stevens, Frost, Marianne Moore, Pound, Williams, Plath, and H. D. The course will also, however, seek to place them in a historical perspective, both in technical development and specifically American themes and conceptions of reality. There will be some examination of poets like Whitman and Dickinson, who stand at the beginning of modern American poetry, as well as contemporary poets like Levertoft, Rich, Gwendolyn Brooks, Kinnell, and Bly. The primary focus will then be to examine the selected figures against the broader context, with the purpose of defining their unique voices and forms. The selected poets will vary with the semester. 2 year cycle.

ENG 392 Twentieth-Century British Novels
Selected novels from the late 19th century to the present. 2 year cycle.

ENG 393 Twentieth-Century American Novels
An historical survey of American novels beginning around 1900. 2 year cycle.

ENG 394 Modern Poetry
This course explores the tradition of experimentation in Dickinson, Frost, and Stevens. It draws from a range of figures in an effort to bring into focus the achievement of such English and American figures as Dorn, Berryman, Amy Clampitt and Norman Dubie. Course content varies.

Cr 3.
ENG 395 Anglo-Irish Literature
A study of the major Irish writers from 1880 to the present. Topics may vary, but they will typically include some of the foremost Irish writers of the past century, such as Yeats, Lady Gregory, Wilde, Shaw, Synge, Joyce, O'Casey, Behan, Beckett, O'Connor, Bowen, Lavin, Heaney, and Friel. 2 year cycle. Cr 3.

ENG 396 Southern Women Writers
Novels and collections of stories by Ellen Glasgow, Elizabeth Madox Roberts, Katherine Anne Porter, Eudora Welty, Carson McCullers, Flannery O'Connor, Elizabeth Spencer, Ann Tyler, Alice Walker, and others will be examined individually and as expressions of female experience in a male-dominated traditional culture. 2 year cycle. Cr 3.

ENG 397 American Drama
A study of the drama in the United States. A brief history of early American playwrights followed by a close study of major figures, with O'Neill as the center. Others: Maxwell Anderson, Robert Sherwood, Tennessee Williams, Arthur Miller, and Edward Albee. (This course is also listed as THE 460). Cr 3.

ENG 398 The Southern Renaissance

ENG 490 Independent Study in Modern Literature
By instructor's permission. See department for application form. Cr var.

ENG 491 Seminar in Modern British Literature
An advanced course focusing on individual writers or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Typical subjects: Joyce's Ulysses, modern Scottish literature. Cr 3.

ENG 492 Seminar in Modern American Literature
An advanced course focusing on individual writers or particular literary movements. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Typical subjects might be the image of blacks in American literature; the fugitive poets; Fitzgerald, Faulkner, and Hemingway; and the feminization of American culture. Cr 3.

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.

Foreign Languages and Classics

Chair of the Department: Lucia A. diBenedetto, 518 Luther Bonney Hall, Portland
Professors: Crochet, Duclos; Associate Professors: Dalvet, di Benedetto, Lepelley, Rolfe, Ubans; Assistant Professors: Kinsella, Owens, Rosenthal, Suscavage

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 composition 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, travel, social services, the arts, and teaching.
The Department offers a major in French and broader, interdepartmental majors in foreign languages, classical studies, French studies, German studies, and Hispanic studies. Also classics, French, German, and Spanish minors are available which augment other majors in the College of Arts and Sciences. Courses in Italian are offered on a regular basis.

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 and civilization. These courses are numbered 281-299. Courses in this category may be credited towards a major or a minor in the Department if the readings, exams, and papers are done in the target language.

Independent study courses, numbered 470, are available to qualified students with the permission of the instructor and the department chair.

**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 successful years of high school language study. Those whose background does not fit any of these categories, especially Franco-Americans and students with Hispanic, German, or Italian backgrounds, 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.

The Department grants credit in French, German, Greek, Latin, and Spanish to an enrolled student who presents evidence of competency in one of those languages by completing the appropriate Advanced Placement Examination of the College Entrance Examination Board. For more details, contact the chair of the Department.

**Language Laboratory**

The language laboratory is located on the Portland campus in Payson Smith Hall, Room 203, and is open every weekday. Students enrolled in beginner's courses are required to work with language laboratory materials one hour per week as a part of their 4-credit course. Students enrolled in intermediate courses may register for supervised language practice amounting to a minimum of one hour a week in the laboratory; they will receive one extra credit (on a pass/fail basis) for regular and active attendance. Since the work done in the language lab is coordinated with classroom work, only the students enrolled in a language course can take the corresponding lab section for credit. Credit for the lab is granted only if the student passes the course. Any exception to this has to be approved by the chair of the Department. All students are welcome to use the language lab facilities for their own purposes, without credit.

Students are also urged to get extra practice in French, German, Italian, Russian, Spanish, and Portuguese 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 secretary.

All major programs in the Department of Foreign Languages and Classics require that the student fulfill the requirements of the Core curriculum.

**Bachelor of Arts in French**

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 36.

One Language Theory course or two semesters of Latin (please consult Department)

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<thead>
<tr>
<th>Language</th>
<th>Course</th>
<th>Course Title</th>
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<tr>
<td>FRE 321</td>
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<td>French Composition/Workshop in Writing French</td>
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<td>FRE 323</td>
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<td>French Conversation/Workshop in Speaking French</td>
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<td>FRE 305</td>
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<td>Phonetics</td>
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Civilization
FRE 291I Civilization, historical approach
OR
FRE 292I Contemporary France

Literature (any two)
FRE 361 The Novel
FRE 362H Poetry
FRE 363H Theatre

Any two
FRE 460 Quebecer Literature
FRE 461 17th Century Literature
FRE 462 18th Century Literature
FRE 463 19th Century Literature
FRE 464 20th Century Literature

PLUS
FRE 465 Survey of French Literature

Electives (or any two of the above courses)
FRE 221 Practice in Writing
FRE 223 Practice in Conversation

Summer and junior year studies in France or French Canada are encouraged and acknowledged by transfer of 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 the French faculty. All majors must achieve at least 12 credits of B or better grades in their major courses. No grade of D will count toward fulfillment of a French major.

Group Contract in Foreign Languages

The Self-Designed Major Program of the College of Arts and 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:

Foreign Languages
Classical Studies (concentration in either Greek or Latin)
French Studies
German Studies
Hispanic Studies
Russian Studies

Please refer to the section on interdepartmental majors of this catalog or contact the chair of the Department of Foreign Languages and Classics for additional information.

Minors

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 9.

Since the knowledge of a foreign language, or languages, is valuable to all majors in other CAS disciplines, the Department offers minor programs in Classics (Latin or Greek), French, German, and Spanish. A given program consists of nine credits selected from the following courses:

Classics Minor (Greek)
GRE 251, 252; 310; CIA 2911
Classics Minor (Latin)
LAT 251, 252; 310; CIA 2921
French Minor
FRE 321; 323; 305; 361, 362 or 363
German Minor
GER 321, 322; 351, 352; 281
Russian Minor
RUS 291; 301, 302; 470
Spanish Minor
SPA *331, *332, 351H, 352H or 270
(*SPA 301, 302 are prerequisites)

*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 283H The Epic Hero in Ancient Literature**  
Intensive readings in English translations of *Gilgamesh, Iliad, Odyssey, Argonautica, Aeneid*; discussion, papers. Prerequisite: sophomore standing.  
Cr 3.

**CLA 284H The Tragic Hero in Ancient Literature**  
Intensive reading of selected plays in English translation by Aeschylus, Sophocles, Euripides, Seneca; discussion, papers. Prerequisite: sophomore standing.  
Cr 3.

**CLA 2851 Classical Mythology**  
Examination of the myths of Greece and Rome from a variety of perspectives: anthropological, etiological, historical, psychoanalytical, structural. Prerequisite: sophomore standing.  
Cr 3.

**CLA 2911 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, museum trip. Prerequisite: sophomore standing.  
Cr 3.

**CLA 2921 Rome, from Republic to Empire**  
The literature, history, politics, philosophy, art, and architecture of Rome in the first century B.C. Lectures, discussion, papers, museum trip. Prerequisite: sophomore standing.  
Cr 3.

**FRE 281H Masterpieces of French Literature I**  
Novels and plays representative of French literature from the beginning of the 19th century to the present. No knowledge of French is necessary.  
Cr 3.

**FRE 282 Masterpieces of French Literature II**  
Novels and plays representative of French literature from the Middle Ages to the end of the 18th century. No knowledge of French is necessary.  
Cr 3.

**FRE 283H 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 2911 French Civilization: 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 2921 French Civilization: Contemporary France**  
Institutions, education, society, economy, politics of France. No French is spoken in the classroom.  
Cr 3.

**GER 281H The German Novelle**  
The study of the genre of the novelle and its development through the major literary movements from the early nineteenth 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 281H 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 281H 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.

**SPA 281H 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.
**Classics: 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**

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**French**

**FRE 101 Beginning French I**
Beginner's course in French. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. The class meets three times a week. In addition, one hour of language lab work is required. Cr 4.

**FRE 1021 Beginning French II**
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 2011. Prerequisites: FRE 102, FRE 103, two years of high school French or the equivalent. Cr 3. (With lab, Cr 4.)

**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. Daily practice in the language laboratory is required (for two additional credits). Offered during the summer only. Cr 6. (With lab, Cr 8.)

**FRE 2011 Intermediate French I**
Review of grammatical structures. Further development of listening comprehension, speaking, reading and writing skills. Emphasis on understanding cultures and contemporary life of French-speaking countries through reading and discussion. Students are encouraged to also register for laboratory practice (one more credit). Prerequisites: FRE 102, FRE 103, two years of high school French or the equivalent. Cr 3. (With lab, Cr 4.)

**FRE 2021 Intermediate French II**
Continuation of FRE 2011. Prerequisite: FRE 201I or the equivalent. Cr 3. (With lab, 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.). Prerequisites: FRE 105, 102, 103, or instructor's permission. Cr 3.

**FRE 221 Practice in Writing**
Advanced study of the French language. Proficiency in writing, vocabulary development and idiomatic expression are the objectives of the course. Prerequisite: FRE 2021 or equivalent. Cr 3.

**FRE 223 Practice in Conversation**
Intensive oral practice, expository reports, debates, class discussions. Prerequisite: FRE 2021 or equivalent. Cr 3.

**FRE 251H Readings in French Literature**
Reading and discussion of representative literary works in the major genres (fiction, drama, poetry). Designed to give a general background for the major as well as to provide a representative sampling for the non-major. Prerequisite: FRE 201I or equivalent. Cr 3.

**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 2021 or equivalent. Cr 3.
FRE 321 Workshop in Writing French
Practice of free composition and translation.
Prerequisite: FRE 221 or equivalent. Cr 3.

FRE 323 Workshop in Speaking French
Practice of French conversation for advanced students. Prerequisite: FRE 223 or equivalent. Cr 3.

FRE 361 The French Novel
A study of novels and short stories, especially of the 19th and 20th centuries, and of the various critical approaches to fiction. Prerequisite: FRE 251H or equivalent. Cr 3.

FRE 362H French Poetry
A study of works by famous French poets and of the critical approaches to French poetry. Prerequisite: FRE 251H or equivalent. Cr 3.

FRE 363H The French Theatre
A study of representative works by the major playwrights of France in the classical, romantic, and modern periods and of critical approaches to drama. Prerequisite: FRE 251H or equivalent. Cr 3.

FRE 460 Quebecer Literature
Reading and discussion of prose fiction, poems, and plays by contemporary French Canadian writers such as Gabrielle Roy, Gérard Bessette, Anne Hébert, Marie-Claire Blais, Saint-Denis Garneau, and Marcel Dubé. Prerequisites: FRE 361, 362H or 363H. Cr 3.

FRE 461 17th-Century Literature
A seminar in 17th-century French literature based on selected themes which will vary each time the seminar is offered. The theme will be announced the year that the course is given. Prerequisites: FRE 361, 362H or 363H. Cr 3.

FRE 462 18th-Century Literature
A study of the critical and revolutionary thought of the major 18th-century French thinkers (Montesquieu, Voltaire, Rousseau, Diderot) in an attempt both to define the role of the Enlightenment in the downfall of the Ancien Régime and to determine its place in the history of ideas. Prerequisites: FRE 361, 362H or 363H. Cr 3.

FRE 463 19th-Century Literature
A seminar in 19th-century French literature based on selected themes which will vary each time the seminar is offered. The theme will be announced the year that the course is given. Prerequisites: FRE 361, 362H or 363H. Cr 3.

FRE 464 20th-Century Literature
A seminar in 20th-century French literature based on selected themes which will vary each time the seminar is offered. The theme will be announced the year that the course is given. Prerequisites: FRE 361, 362H or 363H. Cr 3.

FRE 465 Survey of Literature
An opportunity for senior students to review and complete their previous studies of French literature by surveying its development and styles through the centuries. Prerequisites: FRE 361, 362H or 363H. Cr 3.

FRE 470 Independent Study
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 202I 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.

Italian

ITA 101 Beginning Italian I
Beginner’s course in Italian. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. The class meets three times a week. In addition, one hour of language lab work is required. Cr 4.

ITA 102 Beginning Italian II
Prerequisite: ITA 101 or equivalent. Cr 4.

ITA 201 Intermediate Italian I
Reading of short stories and essays reflecting the wealth and variety of Italian culture. Classroom practice of conversation. Prerequisite: ITA 102, two years of high school Italian or the equivalent. Cr 3.

ITA 202 Intermediate Italian II
Continuation of ITA 201. Prerequisite: ITA 201 or the equivalent. Cr 3.

ITA 251 Readings in Modern Italian Novels I
Students will read novels written in Italy during the past seventy years (Silone, Moravia, Vittorini, Calvino, Sciascia and others) and will discuss them in class. Prerequisite: ITA 202 or equivalent. Cr 3.

ITA 252 Readings in Modern Italian Novels II
Continuation of ITA 251. Prerequisite: ITA 251 or equivalent. Cr 3.

Portuguese

POR 101 Beginning Portuguese I
Beginner’s course in Portuguese. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. The class meets three times a week. In addition, one hour of language lab work is required. Cr 4.

POR 102 Beginning Portuguese II
Prerequisite: POR 101 or equivalent. Cr 4.

POR 201 Intermediate Portuguese I
Review of grammatical structures. Further development of listening comprehension, speaking, reading, and writing skills. Continued emphasis on understanding of Portuguese culture and civilization through reading and discussion of literary and historical texts as well as frequent reference to contemporary customs and events. Cr 3.

POR 202 Intermediate Portuguese II
Continuation of POR 201. Prerequisite: Portuguese 201 or the equivalent. Cr 3.

Russian

RUS 101 Beginning Russian I
Beginner’s course in Russian. Initiation into the five skills of language learning: oral comprehension, reading, speaking, writing, and cultural knowledge. This course meets five hours a week; in addition, work with coordinated language tapes is required. Cr 5.

RUS 102 Beginning Russian II
Prerequisite: RUS 101 or equivalent. Cr 5.

RUS 107 Intensive Beginning Russian
An intensive course to prepare the beginning student for the intermediate level of college Russian. Emphasis is placed upon the four skills of language learning: speaking, oral comprehension, reading, and writing, along with an introduction to contemporary culture and civilization. Daily practice with tapes is required (for two additional credits). Offered during the summer only. Cr 6. (With tape work, Cr 8.)
RUS 201 Intermediate Russian I
Review of grammatical structures. Further development of listening comprehension, speaking, reading and writing skills. Emphasis on understanding Russian culture and contemporary life through reading and discussion. Students are encouraged to also register for laboratory practice (one more credit). Prerequisite: RUS 102, two years of high school Russian or equivalent. Cr 3. (With lab, Cr 4.)

RUS 202 Intermediate Russian II
Continuation of RUS 201. Prerequisite: RUS 201 or the equivalent. Cr 3. (With lab, Cr 4.)

RUS 281H Russian Literature in English Translation
The content of this course will vary. Topics for the course 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 281H and the discussion will be in English. Cr 3.

RUS 291 Introduction to Russian Culture and Civilization
A historical view of Russian society and culture from the origins of the East Slavic settlements to the present day. No Russian is required. Cr 3.

SPA 101 Beginning Spanish I
Beginner's course in Spanish. Initiation in the four skills of language learning: listening comprehension, speaking, understanding, and writing. The class meets three times a week. In addition, one hour of language lab work is required. Cr 4.

SPA 102 Beginning Spanish II
Prerequisite: SPA 101 or equivalent. Cr 4.

SPA 107 Intensive Beginning Spanish and SPA 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 Spanish. 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.)

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 (one more credit). Prerequisite: SPA 102, two years of high school Spanish or the equivalent. Cr 3. (With lab, Cr 4.)

SPA 202 Intermediate Spanish II
Continuation of SPA 201. Prerequisite: SPA 201I or the equivalent. Cr 3. (With lab, Cr 4.)

SPA 207 Intensive Intermediate Spanish
SPA 207 is an intensive course for the beginning student, covering a full year's work at the college level to prepare the student for an advanced language level. Emphasis is placed upon the four skills of language learning: speaking, understanding, reading, and writing. Readings and discussions of contemporary Hispanic civilization and culture are included. Daily lab work is mandatory. Prerequisite: SPA 102 or equivalent. Offered during the summer only. Cr 6. (With lab, Cr 8.)

SPA 301 Practice in Conversation
The objective of the course is oral proficiency in advanced contexts. Situational activities include reports, debates, class discussions, and conversations. Prerequisite: SPA 202I or equivalent. Cr 3.
SPA 302 Practice in Writing
The objective of the course is advanced proficiency in writing. Grammar review and study of advanced linguistic expressions through readings in the target language are included. Prerequisite: SPA 202I or equivalent. Cr 3.

SPA 331 Advanced Conversation
SPA 331 is a group discussion course for advanced students. Collateral reading and study of vocabulary idioms and expressions are required. Prerequisite: SPA 301 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 302 or equivalent. Cr 3.

SPA 351H Introduction to Hispanic Literature I
A survey of the important periods and trends in Spanish literature with reading of representative works. Prerequisite: SPA 202I. Cr 3.

SPA 352H Introduction to Hispanic Literature II
Continuation of SPA 351H. Cr 3.

SPA 470 Independent Study
Students electing to concentrate in anthropology must take:

ANT 310 History of Anthropological Thought
GEO 104 Cartography I

OR

GEO 303 Economic Geography
ANT 240 Primate Behavior

OR

ANT 305 Models in Archaeology
ANT 301 Victims of Progress

OR

ANT 230 Hunters and Gatherers

and

12 ANT hours

This would result in a 43-hour major.

Students electing to concentrate in geography must take:

ANT 213 Strategies for Survival
GEO 102 Physical Geography
GEO 104 Cartography I

OR

GEO 205 Air Photo Interpretation
GEO 303 Economic Geography

OR

GEO 402 Urban Geography

and

12 GEO hours

This would result in a 44-hour major.

Additionally, all geography-anthropology majors are required to take:

3 hours of research writing or demonstrate competence by successfully completing research papers in the major, as reviewed by the Department

3 hours of quantitative methods

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.

Applied Geography Minor in Planning

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

Required courses: GEO 101, GEO 104
Choice of one from: GYA 350-351, GYA 400
Choice of one from: GEO 204, GEO 205
Choice of one from: GEO 209, GEO 210
Choice of one from: GEO 303, GEO 402

Concentration in Geography-Anthropology for the Social Sciences area major in the College of Arts and Sciences:

ANT 101 Cultural Anthropology
ANT 102 Biological Anthropology
ANT 103 Introduction to Archaeology
GEO 101 Principles of Geography
GEO 102 Physical Geography
GEO 201 Cultural Geography

And/either

GEO 104 Cartography I

OR

GEO 205 Air Photo Interpretation

OR

ANT 306 Archaeological Lab Analysis
Archaeology Laboratory

The Archaeology Laboratory located in 317 Bailey Hall provides facilities for research in archaeology and related areas. Current collections include human skeletons, fossil human skulls, a comparative faunal collection, and various research collections, primarily from Maine and Alaska. The Archaeology Laboratory also houses 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.

Cartography Laboratory

The Cartography Laboratory located in 323 Bailey Hall provides facilities for map making and air photo interpretation. The room is open for faculty and student use daily. There is a map collection available including Maine maps, topographic maps, and various world regional maps. Student instructors are present at most hours of the day to offer assistance.

Geography-Anthropology

GYA 100 Museum Aide
Museum aides serve on volunteer projects related to research classification, maintenance and display of artifactual materials. Since the museum solicits input from students, their contributions are expected to show originality and complement the goals of the Museum of Cultural Change. A minimum of thirty (30) hours of service each semester is required for credit. Cr 1-3.

GYA 106 The Local Environment
This is a field-oriented course that deals with the application of fundamental geographic concepts in the interpretation of areal development. The local area serves as the "laboratory" and provides models of geographic interaction that have applications on a broader scale. Cr 3-6.

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.

GYA 321 Historic Material Analysis
This lab/discussion course involves the analysis of materials derived from field survey and archaeological investigation of selected historic period North American sites. Activities include the chronological and distributional analysis of ceramics, glass, metal and other artifacts of the historic period. Students are encouraged to pursue specific research topics using documentary sources as well as assist in the curation of artifacts in the Museum of Cultural Change. Cr 3.

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. The paper will be presented by the student at the end of the semester to a departmental seminar on applied geography-anthropology. Prerequisite: junior or senior standing in geography-anthropology. 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). Individuals wishing to take advantage of this option should secure a faculty sponsor and departmental approval. Variable credits will be offered.
ANT 101J 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 "primitive," intermediate, and complex cultures through readings and films. This course is required for all majors concentrating in anthropology. Cr 3.

ANT 102K 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
Introduction to Archaeology 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 Maine. Cr 3.

ANT 201J Human Origins
This course focuses on the fossil and cultural evidence for human evolution. Topics to be covered include evolutionary theory, primate behavior, hominid 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 202I Hunters and Gatherers
Hunting and gathering is a way of life, not simply a subsistence technique. Ninety-nine percent of human evolutionary history involved this kind of life, and our biology as a species was created through this mode of existence. In this ethnographically oriented course we will study several hunter-gatherer societies including the Kung San, the Mouti pygmies, the Australian aborigines, and the Eskimo. Special attention will be given to understanding the traditional life and world view of hunters-gatherers, but we will also focus on how recent political and economic events are changing their lives. Cr 3.

ANT 213 Strategies for Survival
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 101J or 102J. Cr 3.

ANT 220I North American Indians
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 Indian societies that followed the European invasion of North America. No prerequisites. Cr 3.

ANT 222I 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 101J or 103 or permission of the instructor. Cr 3.

ANT 230I The Anthropology of Sex and Gender
Anthropologists have long considered a division of labor and status on the basis of sex a universal practice throughout most if not all of civilization's history. There has, however, been a great deal of controversy regarding the nature, origin, and future of sexual stratification. Is the
superior status of men cross-culturally "only in the eye of the beholder"? If not, why does it exist? Are its roots biological or cultural; is it inevitable? This course examines these provocative questions by looking at the range of women's roles in a variety of cultures, through readings, films, and slides. No prerequisites. Cr 3.

**ANT 240 Primate Behavior**
This is a general course in primatology. Although the focus will be ethological, we will also consider primate biology, ecology, and biogeography. Aspects of primate behavior that will be considered include social organization, aggression, dominance, the mother-infant bond, play, sex roles, and intergroup relationships. We will also examine attempts to teach language to non-human primates and will consider the use of primates in models of human evolution. Cr 3.

**ANT 301I Victims of Progress: Primitive Peoples in the Modern World**
This course examines the disappearance of simpler societies as a result of the expansion of industrial society, and the implications of such a process for the future of humanity from both a scientific and humanistic point of view. It also discusses the role of anthropology in explaining and promoting culture change, and reviews the various philosophies of development exhibited in modern society. Prerequisite: ANT 101. Cr 3.

**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 101J or permission of instructor. Cr 3.

**ANT 303 Food and Nutrition: An Anthropological Perspective**
The purpose of this course is to examine the relationship between human population and their subsistence base, as a part of the larger study of human ecology. Much attention will be given to examining dietary variation in modern human societies. To that end, biological and demographic as well as cultural adaptations to different dietary regimes will be analyzed. Various human subsistence types will be examined (hunting and gathering, horticulture, pastoralism, etc.), and attention will be given to methods for reconstructing prehistoric diets. Although previous anthropological and/or biological background may be useful, neither are required for mastering the concepts developed in this course. Cr 3.

**ANT 305 Models in Archaeology**
Using archaeological data, archaeological anthropology tests a wide range of hypotheses about human society. The introduction of the hypothesis testing approach into archaeology is the result of recent expansions in theory and methodology. The literature discussing those theoretical and methodological developments will be critically evaluated by the student. Special attention will be given to reconstruction of prehistoric subsistence and settlement, and application of theory to public (conservation) archaeology. Prerequisite: ANT 103. Cr 3.

**ANT 306 Archaeological Laboratory Analysis**
Students will be introduced to the analysis of materials collected on an archaeological site. Their work will be centered on the results of previous summers' archaeological excavations. Research projects will be associated with the same materials. Lecture material will focus on environmental archaeology, with special attention given to topics such as faunal analysis. This course may be repeated up to twice with the permission of the instructor. Prerequisite: ANT 103. Cr 4.

**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. Prerequisite: ANT 101J or permission. Cr 3.

**ANT 320 Human Osteology**
This course provides an introduction to the study and analysis of human skeletal material found at archaeological sites. We will focus on learning detailed human skeletal anatomy and the various metric and non-metric techniques used in aging, sexing, stature determination, and analysis of pathologies and injuries. Consideration will be given to how these techniques are applied in demographic and other analyses of prehistoric human populations. Prerequisite: ANT 102 or ANT 103 or permission of instructor. Cr 3.
**GEO 101J Principles of Geography**  
This course applies a problem-solving approach to the learning of basic geographic skills and concepts. Cultural factors are emphasized in presenting human/environment relationships as seen from the geographer's point of view. The course is prerequisite for most upper-level geography courses and required for all majors concentrating in geography. It also provides models and concepts useful in many other disciplines. Cr 3.

**GEO 102K Physical Geography**  
This course examines the interrelationships between people and the physical environment. Climate, soil, vegetation, landforms, water and mineral resources are the topics that are covered in this introductory course. This course is required for all majors concentrating in geography. Cr 3.

**GEO 103K Physical Geography Laboratory**  
Laboratory exercises acquaint the student with the materials, methods, and data with which the physical geographer works. Numerical data, climate and topographic maps, and other forms of field data are employed to solve practical problems of human interaction with the physical environment. Co-requisite: GEO 102K. Cr 1.

**GEO 104 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. This course is required for all majors concentrating in geography. Cr 3.

**GEO 105J 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. No prerequisite. Cr 3.

**GEO 201I Cultural Geography**  
This course revolves around such components of culture as religion, art, music, settlement, economy type and their relation to one another. Concepts include spread, integration, and landscapes of culture. A problem oriented discussion format is used to relate the ideas of other cultures to our own. Prerequisite: GEO 104 or permission of instructor. Cr 3.

**GEO 204 Advanced Cartography (Cartography II)**  
This course is intended to build upon the basic cartographic skills introduced in GEO 104 and to develop new, more advanced skills in cartographic design and communication. The course will be tailored around individual student's needs and interests, and will include fundamental aspects and use of major types of map projections, statistical mapping, landform representation, and mapping point, volume and linear data. Prerequisite: GEO 104 or permission of instructor. Cr 3.

**GEO 205 Air Photo Interpretation**  
This course deals with the earth as perceived from the air and space. Hands-on analysis of various types of imagery includes basic photogrammetry plus air photo and satellite remote sensing interpretation. Applications to land use planning, archaeology, geology, and military science are among the topics covered. Recommended as a companion course to Cartography 204. Cr 3.

**GEO 206 Field Camp in Geography (also Farmington GEO 206)**  
This system-wide offering brings students and teachers of several campuses together to participate in a geographic field experience of regional focus. A University of Maine system host campus is selected on a rotating basis and an appropriate theme developed to integrate the field studies in time and space. Various methods of geographic field analysis, mapping, and site interpretation are employed. Recommended for all majors concentrating in geography. No prerequisite. Cr 3.

**GEO 207 Map Appreciation**  
This course is intended to provide a basic understanding of ways maps can serve the individual and the role maps can play in geography, science, business, the media, and historical studies. Various techniques that show linkage, flow, pattern, and comparison will be explored. Contemporary maps from various fields, as well as notable examples from the past, will be analyzed. Special themes will include mental maps, municipal maps, imagery from space, and the use of maps as propaganda. Non-majors are welcomed and encouraged to pursue projects in their chosen fields. Prerequisite: GEO 101 or 104 or permission of instructor. 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. No prerequisite. 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 301 Political Geography
Political Geography examines geo-political theories and ideas, analyzes current and long-lasting political problem areas, and deals with some of the locational results of political decisions. Prerequisite: Introductory course in geography-anthropology or POS 104. Cr 3.

GEO 303J Economic Geography
Economic Geography presents an examination of classes of economic activities and explains the reasons for their location. There are two major objectives: to make available to the student the skills which allow him or her to interpret and understand the present economic landscapes and to evaluate critically the factors and trends that anticipate the future. Prerequisite: GEO 101J or ANT 101J or permission of instructor. Cr 3.

GEO 402 Urban Geography
This course deals with the American city as a type. Urban centers are dealt with at two levels—as whole entities in which location, characteristics, growth, and relations with the countryside are explored, and as complex nodal regions in which the internal variations of the city are examined. Prerequisite: GEO 101J or permission of instructor. Cr 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.

Geosciences

Chair of the Department: Stephen G. Pollock, 311B Bailey Hall, Gorham
Associate Professors: Ayers, Novak, Pendleton, Pollock, Swanson; Assistant Professor: Zolidis

Programs and Requirements

Courses offered by the Department of Geosciences are grouped under the following headings: Astronomy; Oceanography; and Geology.

A bachelor of arts degree program in geology is offered in the College of Arts and Sciences. A student majoring in geology must achieve a 2.0 grade point average and have no D grades in major courses.

Geology
The geology major is available for those students interested in environmentally related employment, or for those who plan to pursue a professional career in geology. Geology majors intending to pursue graduate work are urged to determine graduate school foreign language requirements. Students are also encouraged to consider concentrations in allied areas such as biology, chemistry, physics, computer science, economics, geography, and statistics.

Bachelor of Arts in Geology
The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 71.
Chemistry and Physics
CHY 113, 114 Principles of Chemistry I
AND
CHY 115, 116 Principles of Chemistry II
PHY 121K, 122K General Physics I
AND
PHY 123, 124 General Physics II
OR
PHY 111K Elements of Physics I
AND
PHY 112 Elements of Physics II

Mathematics
MAT 120D Introduction to Statistics
MAT 152D Calculus A

It is recommended that freshmen in the geology major who lack at least two years of high school algebra and a semester each of geometry and trigonometry, take MAT 140D Precalculus Mathematics.

Geology
GEY 111K, 112K Physical Geology
GEY 113, 114 Historical Geology
GEY 202 Geomorphology
GEY 203 Mineralogy
GEY 204 Optical Mineralogy
GEY 206 Paleontology
GEY 301 Structural Geology
GEY 302 Sedimentology
GEY 303 Igneous and Metamorphic Petrology
GEY 327 Applied Hydrogeology
GEY 491, 492 Senior Thesis in Geology
OR
GEY 498 Independent Study in Geology
GEY 495 Geology Seminar
GEY 496 Special Topics in Geology

Elective Courses: In addition to those courses listed above students are required to take six credit hours from the remaining electives.

GEY 205 Geological Oceanography (also OCN 205)
GEY 250 Library Research in the Earth Sciences
GEY 304 Sedimentary Rocks
GEY 310 Glacial and Pleistocene Geology
GEY 340 Geophysics
GEY 350 Geological Field Methods
GEY 402 Ore Deposits
GEY 405 Tectonics
GEY 427 Introduction to Groundwater Modeling

Students planning to attend graduate school are strongly recommended to include a course(s) in computer science, languages, and additional courses in mathematics and chemistry.

To be retained in the geology major program, students are required to maintain a minimum grade point average (GPA) of 2.0 in geology courses.

Minor in Geology
The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 20.
Required courses: GEY 111K/112K; GEY 113/114; GEY 203; GEY 301; GEY 202 or GEY 302.
Astronomy

**AST 100K 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. Optional evening observations with telescopes are included. No prerequisite. Cr 3.

**AST 103K Activities and Experiments**
A one-credit course meeting weekly for two hours. May be taken concurrently with AST 100K 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: AST 100K. Cr 1.

**AST 105 Astronomy in the Planetarium**
For non-science majors. Includes apparent stellar movement and planetary motions, star names and constellation study, stellar magnitudes, stellar navigation, and celestial coordinate systems. No prerequisite. Cr 3.

Oceanography

**OCE 100K Introduction to Oceanography**
Origin and extent of the oceans; nature of the sea bottom; causes and effects of currents and tides; chemical and physical properties of sea water; animal and plant life in the sea. Three hours lecture. Cr 3.

Geology

**GEY 111K Physical Geology**
A study of the ever-changing earth by wind, water, volcanism, plate tectonics, and glaciation. Three hours of lecture. GEY 111K may be taken without GEY 112K. Cr 3.

**GEY 112K Physical Geology Lab**
Identification of common rocks and minerals, introduction to topographic maps, and development of the processes covered in lecture; field trips when weather permits. To be taken concurrently with GEY 111K. Lab two hours. Cr 1.

**GEY 113 Historical Geology**
Study of the earth's history in terms of physical, chemical and biological change from its origin to the present time, stressing the methods of determining chronology and conditions through fossils and structural characteristics. Prerequisites: GEY 111K, 112K. Two hours of lecture. To be taken concurrently with GEY 114. Cr 4.

**GEY 114 Historical Geology Lab**
A study of rocks, minerals, and fossils to determine the geological conditions at some ancient time. Introduction to paleogeographic and geologic maps. Field trips. To be taken concurrently with GEY 113. Three hours. Cr 0.

**GEY 202 Geomorphology**
Description and interpretation of landform development in terms of geologic structure, process, and stage. One, possibly two, weekend field trips. Prerequisites: GEY 113, 114. Two hours lecture. Two hours lab. Cr 4.

**GEY 203 Mineralogy**
An introduction to crystallography and a study of the physical properties and chemical structures of common rock-forming minerals. Laboratory analysis is an important part of the course. Three hours lecture. Three hours lab. Prerequisites: GEY 111K, 112K. CHY 113, 114 (may be taken concurrently). Cr 4.

**GEY 204 Optical Mineralogy**
The principles of crystallography and crystal optics are presented as the basis of a practical approach to the identification of minerals with a petrographic microscope. The laboratory is an important part of the course, providing practical applications of the theory and methods covered in the lecture. Prerequisite: GEY 203. Lecture three hours. Lab four hours. Cr 4.

**GEY 205 Geological Oceanography**
The origin and structure of the continental shelves and ocean basins. Coastal and oceanic processes; geomorphic development of the marine environment. Prerequisites: GEY 111K, 112K or OCE 100K or permission of the instructor. Three hours lecture. Cr 3.

**GEY 206 Paleontology**
A description and classification of the important phyla of the fossil invertebrates and a survey of their use in biostratigraphic, evolutionary, and paleoecologic studies. One weekend field trip. Prerequisites: GEY 113, 114. Two one-hour lectures and one two-hour lab per week. Cr 3.
GEY 250 Library Research in the Earth Sciences
This course is specifically designed to help earth science students develop skills in recognizing research topics and then developing a strategy to find information pertaining to those topics. This course is applicable to all fields of study but the examples and references focus on the earth sciences. Prerequisite: sophomore standing. Cr 1.

GEY 301 Structural Geology
An introduction to the mechanics of rock deformation, faulting, jointing, top-bottom criteria, and metamorphic foliations. The lab includes problems in descriptive geometry, stereonets, the Brunton compass, geologic maps and cross sections, and analysis of polyphase folding. Prerequisites: GEY 111K, 112K and GEY 113, 114. Field trips. Three hours lecture, two hours lab. Cr 4.

GEY 302 Sedimentology
Principles of sedimentation, facies, nomenclature, and sedimentary processes and environments. Students will analyze common field problems associated with these areas. Prerequisite: GEY 203. GEY 202 recommended. Some weekend field trips. Two hours lecture, three hours lab. Cr 4.

GEY 303 Igneous and Metamorphic Petrology
The study of the origin of igneous and metamorphic rocks. Topics include operational thermodynamics as applied to igneous and metamorphic rocks, crystallization of silicate systems, mineral equilibria and paragenesis. Laboratory studies include work with hand specimens and thin sections. One or more day or weekend field trips. Prerequisite: GEY 204. Three hours lecture, four hours laboratory. Cr 4.

GEY 304 Sedimentary Rocks
A study of stratigraphic principles, facies, paleocurrents, and sedimentary basins. The petrology of the sedimentary rocks is considered from burial to the onset of very low grade metamorphism. Prerequisite: GEY 204. (May be taken concurrently) Three hours lecture, two hours laboratory. Cr 4.

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. Prerequisite: GEY 202. Two hours lecture, two hours lab. Cr 3.

GEY 327 Applied Hydrogeology
This is an introductory course in the basic physical principles of groundwater flow. Topics include Darcy's Law, groundwater flow equations, well hydraulics, regional flow systems, and groundwater quality and management. Prerequisites: GEY 111K and junior standing or permission of instructor. Calculus is recommended. Three hours lecture, two hours laboratory/discussion. Cr 4.

GEY 340 Geophysics
A study of the principles of seismology, gravity, and magnetism and their applications and significance to our understanding of crustal geology, structure, and tectonics. Three hours lecture. Prerequisites: GEY 301; PHY 123, 124. Cr 3.

GEY 350 Geological Field Methods
A course in geological field methods intended to introduce to the student the tools and practical techniques used in collecting, compiling, and analyzing geological data. Students will have assignments in the igneous/metamorphic and surficial terrain of southern coastal Maine and sedimentary and volcanic terrain in eastern coastal Maine. Summer. Five weeks. Prerequisites: GEY 111K, 112K and GEY 113, 114. GEY 203, GEY 301. Recommended: GEY 302, GEY 303, GEY 202. Cr 6.

GEY 402 Ore Deposits
A study of the geologic setting and processes involved in the formation of the major types of epigenetic and syngenetic metallic ore deposits. Laboratory examines sulfide-oxide mineralogy, reflected light microscopy of ore samples, and map relations of ore districts. Prerequisites: GEY 301, 303. (GEY 303 may be taken concurrently). Afternoon and weekend field trips. Three hours lecture, two hours laboratory. Cr 4.

GEY 405 Tectonics
Major topics include the nature of the earth's crust and interior, continental drift, seafloor spreading, and plate tectonics. The evolution of mountain ranges, continents, and ocean basins will be studied on a global scale. Current articles in scientific journals will be discussed. Lab includes graphical, computer, and dynamic-clay modeling of plate tectonic processes. Prerequisite: GEY 301 or 303 or permission of instructor. Three hours lecture, two hours laboratory. Cr 4.

GEY 427 Introduction to Groundwater Modeling
This course examines the basic concepts, data requirements, limitations, and types of groundwater models. Microcomputers are used for simulating steady state and transient groundwater flow with external stresses, as well as for simulating solute transport in groundwater flow. Prerequisite: GEY 327 or permission of instructor. Three hours lecture, two hours lab. Cr 4.

GEY 490/491 Senior Thesis
The Senior Thesis is designed for the senior level student to pursue independent research in geology. The thesis is designed to be a
scholarly effort in culmination of the student's 
baccalaureate program. Cr 3.

GEY 495 Geology Seminar
The seminar is meant to provide the geology 
major with an overall view of the discipline as 
well as the opportunity to discuss, read, and 
report about specific topics in the field. 
Current problems, research, and philosophy of 
geology will be included. Prerequisite: senior 
standing. Cr 1.

GEY 496 Special Topics in Geology
A critical and in-depth investigation of one of 
various topics and issues in different areas of 
job situation. The University makes arrange­ments with certain institutions, businesses, and 
industries to employ qualified students for 
specific jobs for a set time period. The stu­dent's work is ordinarily in a related field and 
the work experiences increase in difficulty 
and responsibility as the student progresses 
through the sequence of courses. The expe­riences are approved on a case-by-case basis by 
the department. Evaluation is done through a 
written report done by the student together 
with the employer and a faculty supervisor. 
Prerequisites: junior class standing and a 
major in earth science. Each semester students 
may take each course only once. Cr 1-5.

History

Chair of the Department: Parker B. Albee, 414 Luther Bonney Hall, Portland
Professors: Cole, Dietrich, Eastman, Hunt, Schleh; Associate Professors: Albee, 
Bibber, Long, Padula, Ventresca, Whitmore; Assistant Professors: Eagan, 
Holden, Johnson

History remains a venerable and enduring academic discipline because of 
the nature of time and the human need to gain perspective and direction 
by recovering a sense of the past. To do this requires the techniques of col­ 
lecting, evaluating, organizing, and interpreting historical evidence. The 
history curriculum offers students the opportunity to learn the historian's 
craft through lectures, discussions, research, and writing.

History is one of the classic liberal arts disciplines that prepares students 
for a full and satisfying life as well as for careers in business, government, 
and nonprofit organizations. More particularly, history is widely recom­
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mended as preparation for graduate studies in business, law, and library 
science. Besides teaching, specific careers include service with federal, state, 
and local governments; archival and library work; social science research; 
editing of documents; publishing; writing and research for historical pre­
tsations on television and radio; and many others.

The Department of History offers a 41 credit-hour major which leads to a 
bachelor of arts in history and an 18-hour minor for students majoring in 
other disciplines. In addition, the Department offers an exchange program 
with King Alfred's College in Winchester, England, and an internship pro­
gram in cooperation with area historical societies, museums, libraries,
and other institutions. Departmental offices have information on all of these programs.

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. It is strongly recommended that majors, especially those expecting to undertake graduate study, acquire proficiency in a foreign language.

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. No required course may be repeated more than once. Unusually well-prepared entering students may, upon passing an examination, gain exemption from any of the required courses. College Level Equivalency Program (CLEP) examinations are available in Western Civilization and United States history, and a department examination has been prepared for HTY 200 Reference, Research and Report Writing. See the Department chair for details. Majors and minors are reminded that, in addition to Department requirements, they must also meet those of the University Core curriculum.

Other courses in the College of Arts and Sciences have historical interest. Although they do not count for history credit, the major may wish to take some of them as supplementary electives.

Bachelor of Arts in History

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 41.

**European and American survey courses**

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**Third World survey courses (select two)**

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**Research methods course**

| HTY  | 200  | Reference, Research and Report Writing |

**Research paper courses (taken concurrently with HTY 303 to HTY 399)**

| HTY  | 395  | Research Paper (to be taken twice) |

**Elective advanced history courses**

Select five 303-399 level courses in consultation with your major advisor.

**Senior seminar**

| HTY  | 400  | Senior level seminar |

Minor in History

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

Students majoring in CAS disciplines who desire a concentration in history may develop an 18 credit-hour minor. The program of study must focus on an area, a chronological period, or methodological approach. The program must be developed in cooperation with a member of the history faculty, include the two-semester survey sequence appropriate to the area, period, or topic, and be approved by the chair of the Department.

Requirements: appropriate two-semester survey sequence (approved by the advisor and Department chair); and elective advanced history courses (four courses approved by advisor and Department chair).
HTY 101I Western Civilization I
A basic survey and introduction to the heritage of Western man 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.

HTY 102I Western Civilization II
A basic survey and introduction to the heritage of Western man 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.

HTY 131I United States History to 1877
A basic survey and introduction to the field of American history, covering the political, social, and economic development of the United States through Reconstruction. Cr 3.

HTY 132I United States History Since 1877
The course is a continuation of HTY 131. A survey of American political, social, and economic development since about 1877. Cr 3.

HTY 133I American History I
A survey of United States history which examines institutional development and change in major areas of American society and culture before 1900 by means of lecture case studies, a variety of paperbound readings, films, slides, music, and small-group discussions. (This course may not be used to fulfill requirements for major, minor or concentration as of September, 1976.) Cr 3.

HTY 134I American History II
A continuation of HTY 133I which examines institutional change and development in modern American urban industrial society and culture since 1900. (This course may not be used to fulfill requirements for major, minor or concentration as of September, 1976.) Cr 3.

HTY 161I Introduction to African History to Partition
A survey of African history from early migrations to the beginning of the Colonial era. The approach is both regional, stressing selected countries representative of their regions, and topical, cutting across political boundaries. Topics include the states of the Sudan, city states of East Africa, Islam, the slave trade, exploration, and partition. Cr 3.

HTY 162I Introduction to African History Since Partition
A survey of the Colonial era, the transformation of African societies, the rise of nationalist movements, wars of liberation, and early years of the new era of independence. Cr 3.

HTY 171I 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.

HTY 172I Modern East Asia
China and Japan since about 1700, emphasizing contrasting moves toward modernization in two traditional societies. Cr 3.

HTY 181I Latin America I
This survey outlines the nature of the pre­Columbian Indian civilizations, their conquest by the European powers and the creation of the Hispanic and Portuguese empires in America. Cr 3.

HTY 182I Latin America II
This survey begins with the shattering of Iberian colonialism, and moves rapidly into the 20th century. Special attention is given to Mexico, Brazil, Argentina and Cuba, and their varying solutions to the problem of national development. Cr 3.

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. Cr 3.

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; see department chair for details. Graded pass/fail, so does not count for major credit. Can be taken twice. Cr 3.

HTY 303 History of the Ancient Near East and Greece
This course surveys the early history of the eastern Mediterranean region from ca. 4000- ca. 300 B.C. The evolutions of near eastern civilizations in Mesopotamia, Egypt, Israel/Palestine, and Anatolizare 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 8th Center B.C. to the 5th Century A.D. Emphasis is given to the period of the Roman Republic (509-31 B.C.) and to the rise of Christianity within the Roman Empire. Prerequisite: HTY 101 or equivalent. 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 101I 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 102I 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 101I or 102I, 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 19th century; there is a strong emphasis on cultural aspects of Russian and Soviet developments. Prerequisite: HTY 102I or permission. Cr 3.

HTY 320 Europe at the Turn of the Century (1871-1913)
This course concentrates on the culture and politics of fin de siècle Europe. The pre-World War I society will be viewed from a variety of perspectives and will focus on various individuals who helped shape the times. Of particular interest will be the views and impact of Marx, Darwin, and Wagner within the framework of the Industrial Revolution and imperialism. Prerequisite: HTY 102I or permission. Cr 3.

HTY 322 20th-Century Europe
An intensive survey of European developments in the 20th century. The course deals with such intellectual trends as the revolt against positivism, Freudian psychology, expressionism and surrealism in the arts as well as with such phenomena as totalitarianism in its various forms (Nazism, Fascism, Soviet Communism). World Wars I and II and the post-1945 evolution of Europe are thoroughly analyzed. Prerequisite: HTY 102I 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: HTY 102I, 132I or permission. Juniors and seniors only. Cr 3.

HTY 326 History of England
A survey of England from Anglo-Saxon times to the beginning of the 20th 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 101I or permission. Cr 3.

HTY 327 Italy, Unification to World War I
A political, intellectual, diplomatic, and social history of Italy from the Risorgimento to the eve of World War I. Considerable emphasis will be given to the role of the Papacy in Italian affairs. Major literary figures to be examined will include Foscolo, Leopardi, Manzoni, Verga, and Carducci. Prerequisites: HTY 101I and HTY 102I or permission. Cr 3.

HTY 328 Fascist Italy
This course examines the development, practice and theory of Fascism. Considerable attention will be centered on Benito Mussolini and his relationship to the Fascist Party, the people, the Catholic Church, and foreign affairs. Italian culture in the fascist era will be
explored through literature and the arts. Prerequisite: HTY 102I 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: HTY 102I or permission. Juniors and seniors only. 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 102I. Another course in 20th-century Europe or the United States is also recommended. Cr 3.

HTY 335 Leaders of the 20th Century: Churchill, Roosevelt, Hitler
This course studies in depth the lives of three major political leaders of the 20th century: Winston Churchill, Franklin Roosevelt, and Adolf Hitler. The approach is biographical, with considerable emphasis on the personality of each individual and his conduct in peace and war. An effort has been made to select contemporaries whose lives interrelate, thus providing a study of an era. Documentary film footage, slides, and readings will accompany lectures and discussions. Prerequisite: HTY 102I or 132I or permission. Cr 3.

HTY 336 European Women's History
A survey of women's lives in historical context, from ancient times to the 20th 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 337 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 131I or permission. 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
HTY 359 America Since 1938
The United States since the Great Depression with coverage of the foreign policy of the New Deal, the background to Pearl Harbor, World War II, the Fair Deal, the Cold War, the Eisenhower years, the New Frontier, and the Great Society. Prerequisite: HTY 132I 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: HTY 131I and 132I 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 365 History of Black Americans
An examination of the interaction of black people with American social, political, cultural, and economic institutions. Major topics include the African heritage, components of slavery, abolitionism, segregation, programs of race advancement, and the modern search for identity. Prerequisites: HTY 131I and 132I or permission. Cr 3.

HTY 366 A 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 heritage. Prerequisites: HTY 131I and 132I or permission. Cr 3.

HTY 367 The American Home
A survey of U.S. domestic architecture, considering the influence of changing tastes, as well as climate and technology on the buildings in which Americans have lived. Attention will be given to the historical styles as illustrated in the homes of the well-to-do, but attempts also will be made to look carefully at where and how "the people" lived. The approach will include slide-illustrated lectures and on-the-spot observation. Prerequisite: six hours of U.S. history. Cr 3.

HTY 368 American Urban History
A survey of the American city: social, political, intellectual, and cultural components; the changing nature of "community"; the course of urban development; and the emergence of urban life styles. Special attention is focused on the population movement to the city; the development of slums, ghettos, and suburbs; the growth of municipal institutions and services; the relationship of city dwellers and government; and the emergence of "Megalopolis." Prerequisite: HTY 131I or permission. Cr 3.

HTY 369 Viewpoints in American History
A seminar involving discussions of selected topics in United States history, with emphasis on varying interpretations of trends and events. Students will read and analyze both traditional and more recent views, noting changes in frames of reference, methodology, and general approach. Prerequisite: 12 hours of U.S. history. Cr 3.

HTY 370 American Economic and Business History, 1607-1860
Economic and business developments in the United States from the first settlements to the Civil War. The course covers the British mercantile system, the colonial economy, the transportation revolution, the Southern plantation system, and the beginnings of American industrialization. Prerequisite: HTY 131I or permission. (Offered occasionally) Cr 3.

HTY 371 American Economic and Business History Since 1860
Economic and business developments in the United States from the Civil War to the present. The course covers the growth of a national market and distribution system, the revolution in agriculture, the rise of big business, the organization of labor, and the growing involvement of the federal government in business and the economy. Prerequisite: HTY 132I or permission. (Offered occasionally) 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 131I or permission. Cr 3.

HTY 373 American Social and Intellectual History II
A continuation of HTY 372 from 1865 to the present. Prerequisite: HTY 132I or permission. Cr 3.

HTY 375 CIA: U.S. Foreign Intelligence Since Pearl Harbor
This course traces the rise of the U.S. intelligence empire with case studies of its information gathering and covert action activities, as well as a consideration of the moral questions and political dilemmas, short and long term, posed by these operations. In effect, it is an
examination of the underside of recent U.S. foreign relations. Prerequisite: six hours of history or social science or permission. Cr 3.

**HTY 377E Chinese Thought**
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 171I 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 the Spanish-American War. Prerequisite: HTY 131I or permission. Cr 3.

**HTY 379 Diplomatic History of the United States II**
The chief emphasis is placed on the causes and results of World Wars I and II, the nature of the Cold War, and the character of our present commitments. Prerequisite: HTY 132I or permission. 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.

**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 and folkloric religions will be considered.

**HTY 384 Contemporary Africa**
An interdisciplinary seminar on contemporary Africa examining literature and the arts, social change, development and adaptation in African politics, economic development, race relations, and international politics.

**HTY 385 Africa Through Its Literature**
An examination of how African history has been portrayed through novels. Both historical re-creation novels and books reflective of the societies which produced them are used, with particular emphasis on English-speaking Africa. Prerequisite: HTY 161I or HTY 162I recommended. Cr 3.

**HTY 386 History of South Africa**
An in-depth examination of one of Africa’s most controversial and important countries. Combines a series of illustrated lectures on South Africa’s historical background with discussions of contemporary political (domestic and international), social and economic issues.

**HTY 388 History of Modern China**
After dealing with the nature of Chinese society and institutions as they existed around 1800, the course will take up problems of modernization, imperialism, revolution, warlordism, Japanese aggression, civil war, and the present communist regime. Prerequisite: HTY 172I recommended.

**HTY 389 History of Modern Japan**
This course will explore what Japan was like when Perry “opened” it in 1854 and will deal with the rapid social changes which made Japan the outstanding example of modernization among non-Western nations. The problems which this development has created will also be considered. Prerequisite: HTY 172I recommended.

**HTY 390 China and Cuba Under Communism**
This is a course in comparative history, focusing on developments in China and Cuba since the assumption of power by Communist regimes in 1949 and 1959 respectively. The principal topics dealt with include political events, the organization of power, economic and social development, and relations with the outside world.

**HTY 394 Selected Topics in History**
An analysis of a selected controversial historical problem. The topic to be studied and the method of approaching it will be chosen jointly by interested students and the staff. Prerequisite: permission of the instructor. (Offered occasionally) Cr 3.

**HTY 395 Research Project for History Majors**
The conceptualization, research, and writing of a term paper. Course must be taken concurrently with a course numbered between HTY 303 and HTY 394 and offered by the same instructor. Course limited to and required for history majors. Prerequisites: HTY 200 and permission of instructor. Course must be taken twice but not more than once with the same instructor. Cr 1.

**HTY 397 Independent Study Semester**
This is the course designator for students who participate in the History Department’s semester abroad exchange program with King Alfred’s College in England. Cr 3-15.

**HTY 398 Independent Study in History**
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, bearing upon it previous course experiences, and emerging with an intellectually sound, coherent synthesis reflecting a high caliber of performance. Prerequisite: permission. Cr 1-3.

**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. Note: The requirement of this seminar for the history major does not apply to students who entered the department prior to fall 1988. Prerequisites: HTY 395 and 396 and Senior status. Preference to History majors. Cr 3.

Other courses in the College of Arts and Sciences have historical interest. Although they do not count for history credit, the major may wish to take some of them as supplementary electives.

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**Mathematics & Statistics**

*Chair of the Department:* Joel W Irish, 115G Bailey, Gorham  
*Professors:* Estes, Guay, Gupta, B., Kratzer, Mainville, Rogers; *Associate Professors:* Brown, Chabot, Foster, Irish, MacDonald; *Assistant Professors:* El-Taha, Farris, Flagg, Gupta, S., Kenyon, Narang, Soychak, Uddin

The Department of Mathematics and Statistics offers a four-year program leading to a B.A. in mathematics. All students are reminded that, in addition to meeting departmental requirements for a major; they must also meet the requirements of the school or college involved, and the University Core curriculum requirements.

**I. Bachelor of Arts in Mathematics**
The minimum number of credits (exclusive of the University's Core curriculum) required for a bachelor of arts in mathematics is 44 (26 in foundations and 18 in one of the three concentrations listed below).

**A. Foundations**
As a mathematics major, a student may 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 an accumulative grade point average of at least 20 in major courses before being considered for a baccalaureate degree in mathematics.

**Foundations Sequence (Required of all majors in mathematics)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 152D</td>
<td>Calculus A</td>
<td>4 cr</td>
</tr>
<tr>
<td>MAT 153</td>
<td>Calculus B</td>
<td>4 cr</td>
</tr>
<tr>
<td>MAT 252</td>
<td>Calculus C</td>
<td>4 cr</td>
</tr>
<tr>
<td>MAT 290</td>
<td>Foundations of Mathematics</td>
<td>4 cr</td>
</tr>
<tr>
<td>MAT 381</td>
<td>Introduction to Probability and Statistics</td>
<td>4 cr</td>
</tr>
<tr>
<td>MAT 295</td>
<td>Linear Algebra</td>
<td>3 cr</td>
</tr>
<tr>
<td>COS 160</td>
<td>Structured Problem Solving: PASCAL</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

(26 cr hrs)

**B. Concentrations**
Each mathematics major should choose one of the following concentrations. (18 cr hrs)

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 I and II, 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 four of the courses listed below:
MAT 352 Real Analysis I
MAT 355 Complex Analysis
MAT 395 Abstract Algebra
MAT 490 Topology
MAT 370, 371, or 372 Non-Euclidean, College, or Projective Geometry

b. Successful completion of at least two additional mathematics courses with second digit 5 or greater.

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 Introduction to Probability and Statistics, Statistical Inference, Numerical Analysis, and the appropriate courses in the School of Business, Economics and Management. Majors intending to pursue graduate work in applied mathematics are urged to take Real Analysis and Abstract Algebra.

a. Successful completion of four of the courses listed below:
MAT 350 Differential Equations
MAT 354 Topics in Advanced Calculus
MAT 364 Numerical Analysis
MAT 366 Deterministic Models in Operations Research
MAT 460 Mathematical Modeling
MAT 561 Stochastic Models in Operations Research
MAT 492 Graph Theory and Combinatorics

b. Successful completion of at least two additional mathematics courses with second digit 5 or greater.

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 MAT 382 and three of the courses listed below:
MAT 384 Non-Parametric Methods
MAT 386 Sampling Techniques
MAT 388 Statistical Quality Control
MAT 481 Stochastic Processes
MAT 582 Introduction to Time Series Analysis
MAT 584 Design and Analysis of Experiments

b). Successful completion of at least two additional mathematics courses with second digit 5 or greater.

II. Double Major in Mathematics and Computer Science
The Department of Mathematics in cooperation with the Department of Computer Science offers a double major in mathematics and computer science. Students may receive either a B.S. in computer science with an additional major in mathematics or a B.A. in mathematics with an additional major in computer science.

The minimum number of credits (exclusive of the University's Core curriculum) required for the double major: 63.

Each student must have an accumulative grade point average of at least 20 in the major courses before being considered for a baccalaureate degree. Students should see the chair of the Department of Mathematics for advising.

A. Successful completion of the following courses
MAT 152D Calculus A
MAT 153 Calculus B
MAT 252 Calculus C
B. Successful completion of two courses from one of the following areas
a) Pure Mathematics Area
MAT 352 Real Analysis I
MAT 355 Complex Analysis
MAT 395 Abstract Algebra
MAT 490 Topology
MAT 370 Non-Euclidean Geometry

OR
MAT 371 College Geometry

OR
MAT 372 Projective Geometry

b) Applied Mathematics/Operations Research Area
MAT 350 Differential Equations
MAT 354 Topics in Advanced Calculus
MAT 364 Numerical Analysis
MAT 366 Deterministic Models in Operations Research
MAT 460 Mathematical Modeling
MAT 561 Stochastic Models in Operations Research
MAT 492 Graph Theory and Combinatorics

c) Statistics Area
MAT 381 Introduction to Probability and Statistics
MAT 382 Statistical Inference
MAT 384 Non-Parametric Methods
MAT 386 Sampling Techniques
MAT 388 Statistical Quality Control
MAT 481 Stochastic Processes
MAT 582 Introduction to Time Series Analysis
MAT 584 Design and Analysis of Experiments

C. Successful completion of three of the following computer science courses, to include at least one 400-level course.
COS 355 Computer Architecture
COS 357 File Organization
COS 370 Topics in Computer Science
COS 374 Numerical Analysis (not to be taken in addition to MAT 364)
COS 450 Operating Systems
COS 469 Introduction to Compiler Construction
COS 472 Artificial Intelligence

D. Successful completion of six additional hours of electives in mathematics or computer science with second digit 5 or greater.

III. Minor in Mathematics

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 21.
An accumulative grade point average of at least 2.0 in these courses must be maintained, and successful completion of the following courses: MAT
It is expected that students will possess and be able to operate a basic scientific calculator.

**MAC 100 Computers and Society**  
A general course designed for students not majoring in mathematics or computer science. Topics will include: history of data processing technology; study of the tools and methods; the application of computers and their economic and social implications; and an introduction to a programming language. Cr 3

**MAC 234 Computer Programming for Elementary Teachers**  
This course introduces the elementary education major to programming techniques and applications using the BASIC language. No programming skills will be presumed. Prerequisite: MAT 131. Cr 3.

**MAC 249 Computer Programming: LOGO**  
An introduction to the LOGO language for microcomputers. Emphasis will be given to writing computer programs for use in elementary school classrooms beginning with turtle graphics. Cr 3.

**MAT 010 Elementary Algebra**  
The first course of a two-course sequence designed for students who are deficient in high school algebra. Topics covered include number systems, functions, graphs, the solution of equations, and the solution of problems with a business orientation. Prerequisite: MAT 009 or its equivalent. Cr 3.

*Note: MAT 010 carries credit only in the associate degree program.*

**MAT 011B Intermediate Algebra**  
A continuation of MAT 010. Prerequisite: MAT 010 or one year of high school algebra. Cr 3.

*Note: MAT 011B carries credit only in the associate degree program.*

**MAT 100D College Algebra**  
The real number system, algebraic operations, sets, equations, inequalities and their graphs, functions and relations, quadratic functions, exponential and logarithmic functions, theory of equations, systems of equations, permutations, combinations, probability, sequences and series, matrices and determinants, and mathematical induction. Prerequisite: two years high school algebra. Cr 3.

**MAT 105D Mathematics for Quantitative Decision Making**  
This course is designed to give students not majoring in mathematics or related fields an understanding of some key ideas in quantitative decision making. The material is chosen to develop awareness of the utility of mathematics in life and to instill an appreciation of the scope and nature of its decision making potential. The computer packaged programs may be used as tools to assist the students in performing calculations necessary for the decision-making process. Prerequisites: Two years of high school algebra and one year of geometry.

**MAT 109D Linear Systems**  
An introduction to vectors, matrices, and linear systems of algebraic equations and linear programming. Prerequisites: two years of high school algebra and one year of geometry. Cr 3.

**MAT 110D Business Calculus**  
A unified treatment of the elementary functions of analysis, their analytical properties including derivatives, integrals, and series, introduction to multivariate calculus, applications. Prerequisites: two years of high school algebra and one year of geometry, and a passing grade on an algebra competency test which will be administered at the first class meeting. Cr 3.

**MAT 120D Introduction to Statistics**  
An introductory course including basic probability, random variables, and their distributions; estimation and hypothesis testing; regression and correlation. Prerequisite: two years of high school algebra. Cr 3.

**MAT 131D 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. Prerequisites: two years of high school algebra and one year of geometry. Cr 3.
MAT 140D Pre-Calculus Mathematics
A brief review of elementary algebra followed by a study of the algebraic, exponential, logarithmic, and trigonometric functions. Prerequisite: two years of high school algebra and one year of geometry, and a passing grade on an algebra competency test which will be administered at the first class meeting. Cr 3.

MAT 152D Calculus A
This is the first of a sequence of three basic calculus courses covering functions of one or more variables, graphs, limits, derivatives, integrals, optimization, infinite series, vectors, and various applications. Calculus A provides an introduction to the differential and integral calculus of functions of one variable. Prerequisite: two years of high school algebra plus geometry and trigonometry, or MAT 140D. Cr 4.

MAT 153 Calculus B
A continuation of Calculus A. Calculus B will usually include infinite series and an introduction to vectors. Prerequisite: MAT 152D. Cr 4.

MAT 211 Probability
Common probability laws and distributions of discrete and continuous random variables; business applications in probability. Prerequisite: MAT 110D or MAT 152D. Cr 3.

MAT 212 Statistics
Sampling distributions; estimation; hypothesis testing; introduction to regression analysis and analysis of variance. Applications primarily in business and economics. Prerequisite: MAT 211. Cr 3.

MAT 220 Intermediate Statistics
An extension of MAT 120, Introduction to Statistics. Topics emphasized: correlation, regression, Chi-square goodness of fit, analysis of categorical data, non-parametric methods, analysis of variance (one- and two-way layouts, random effect and mixed effect models), design of experiments. Students will utilize at least one of the large computer-based statistical packages (BMD, SAS, SPSS, SCSS). Prerequisite: MAT 120D or the equivalent. Cr 3.

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 constructions, congruence, parallelism, and similarity. Direct and indirect methods of proof are studied but the main approach is intuitive. Prerequisite: MAT 131D. Cr 3.

MAT 233 Probability for Elementary Teachers
An introductory course in probability designed for the elementary and junior high teacher. The course content includes empirical probability through conditional probability, random variables and their distributions, including binomial and normal distributions. Prerequisite: MAT 131D. Cr 3.

MAT 235 History of Mathematics for Elementary Teachers
A history of certain topics in number theory, geometry, and elementary algebra. Prerequisite: MAT 131D. Cr 3.

MAT 252 Calculus C
Multivariate calculus and vector calculus. Prerequisite: MAT 153. Cr 4.

MAT 290 Foundations of Mathematics
Selected topics in set theory, symbolic logic, and methods of proofs needed in more advanced mathematics courses. Prerequisite: consent of the department. Cr 4.

MAT 292 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: COS 280 or MAT 290. Cr 3.

MAT 295 Linear Algebra
An introduction to the theory of vector spaces and linear transformations. Prerequisite: COS 280 or MAT 290. Cr 3.

MAT 350 Differential Equations

MAT 352 Real Analysis I
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 COS 280 or MAT 290. Cr 3.

MAT 353 Real Analysis II
A continuation of Real Analysis I. Prerequisite: MAT 352. Cr 3.

MAT 354 Topics in Advanced Calculus
Selected topics on multivariate functions, vectors transformations, line integrals, and surface
integals. Prerequisites: MAT 252, and COS 280 or MAT 290. 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 or permission of 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, COS 160, and permission of instructor. Cr 3.

MAT 366 Deterministic Models in Operations Research
Formulation and analysis of mathematical models for the optimal solution of decision making problems under certainty: Linear programming; the simplex method, duality and sensitivity analysis. Network analysis: shortest paths, minimal spanning tree, network flows. Introduction to non-linear optimization: convex programming, Kuhn-Tucker conditions. Applications to pricing, allocation, production planning, transportation and scheduling problems. Prerequisites: MAT 153 and MAT 295. Cr 3.

MAT 370 Non-Euclidean Geometry
A development of one or more of the non-Euclidean geometries. Prerequisite: COS 280 or MAT 290. Cr 3.

MAT 371 College Geometry
Selected topics from Euclidean geometry. Prerequisite: COS 280 or MAT 290. Cr 3.

MAT 372 Projective Geometry
Synthetic and analytic projective geometry, including finite projective planes. Prerequisite: COS 280 or MAT 290. 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 381 Introduction to Probability and Statistics
Basic concepts of probability theory with an introduction to its statistical applications. Particular topics will include discrete and continuous distributions, moment generating functions, characteristic functions, limit theorems, sampling distributions, basic elements of estimation and hypothesis testing and simple linear regression. Prerequisite: MAT 153. Cr 4.

MAT 382 Statistical Inference
This course will survey various statistical methods and applications, such as order statistics, MVU estimation including Rao-Blackwell Theorem, completeness and Fisher's information, method of least squares, method of maximum likelihood, confidence intervals, hypothesis testing and uniformly more powerful tests, linear regression and correlation. Prerequisite: MAT 380 or MAT 381. Cr 3.

MAT 384 Non Parametric Methods
Tests of goodness of fit, Pearson's Chi-square test for multinomial populations, contingency tables, sign tests based on ranks, media test, Mann-Whitney Test, Wilcoxon Test, Spearman's Rank Correlation Coefficient, order statistics. Prerequisite: MAT 380 or MAT 381. 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 380 or MAT 381. 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 380 or MAT 381. Cr 3.

MAT 390 History of Mathematics
The development of mathematics from ancient to modern times. Prerequisites: MAT 152D and COS 280 or MAT 290. Cr 3.

MAT 395 Abstract Algebra
Algebraic structures, such as groups, rings, integral domains, and fields. Prerequisite: COS 280 or MAT 290. Cr 3.

MAT 431 Selected Topics in Mathematics for Elementary Teachers
A course designed to provide enrichment topics for the elementary teacher. The course will include such topics as number theory, motion geometry, topology, projective geometry, graphs, and sets and logic. Prerequisites: Junior elementary education major and permission of the instructor. Cr 3.

MAT 432 Selected Topics in Mathematics for Elementary Teachers
A course designed to provide enrichment topics for the elementary teacher. The course will include such topics as awareness geometry, transformational geometry, analysis of shapes, number theory, and measurement. Prerequisites: Junior elementary education major and 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 interpret-
ing 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 481 Stochastic Processes**
Introduction to the basic stochastic processes, simple random walk, discrete Markov chains; transition matrices, classification of states, long run behavior, the Poisson processes and related distributions, limiting behavior of birth and death processes, finite state continuous time Markov chains, elements of renewal theory. Prerequisites: MAT 381 and MAT 295 or 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 COS 280 or MAT 290. 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: COS 280 or MAT 290. 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 chairman. Cr 1-3.

**MAT 498 Topics**
Selected topics in advanced mathematics. Prerequisite: permission of instructor. Cr 3.

**MAT 561 Stochastic Models in Operations Research**
Applications of probabilistic analysis to models involving uncertainty; queueing models, inventory control models, and reliability models. Additional topics include: elements of dynamic programming, simulation, and Markov decision analysis. Prerequisite: junior or senior standing; some elementary calculus including differentiation and integration, elementary probability, and computer programming. Cr 3.

**MAT 582 Introduction to Time Series Analysis**
Objectives and simple descriptive techniques of time series analysis, probability models for time series, estimation in the time domain, forecasting, Box-Jenkins methodology, spectral analysis. Prerequisite: MAT 380 or MAT 381. Cr 3.

**MAT 584 Design and Analysis of Experiments**
Quadratic forms and their distribution, general linear hypothesis, completely randomized and randomized block designs, two-way and higher-way layouts, Latin-square and orthogonal Latin-square designs, Youdeen square designs, random effects and mixed effect models, nested designs and split-plot designs are some of the specific topics to be covered. Prerequisites: MAT 295 and MAT 380 or MAT 381 or permission of the instructor. Cr 3.

**Mathematics Education**

**MEO 200-201, 300-301, 400-401**

**Cooperative Education in Mathematics**
The student has the opportunity to relate academic knowledge to practical experience in a job situation. The University makes arrangements with certain institutions, businesses, and industries to employ qualified students for specific jobs for a set time period. The student's work is ordinarily in a related field, and the work experiences increase in difficulty and responsibility as the student progresses through the sequence of courses. The experiences are approved on a case-by-case basis by the department. Evaluation is done with the employer and a faculty supervisor. Open to qualified students, subject to availability of suitable jobs. Cr 1-5.

**MME 345 Teaching Mathematics in the Secondary School**
Critical study of programs and techniques for teaching and learning mathematics in grades 7-12 for the slow, average, and advanced pupil, with the use of instructional media. Prerequisite: permission of the instructor. Cr 3.
Music

Chair of the Department: Ronald F Cole, 102A Corthell Hall, Gorham
Professors: Bowder, Cole, Martin; Associate Professors: Atterbury, Boden, Russell; Assistant Professors: Fithian, Kargul, Parchman, Reeves. Lecturer: Freeman

Applied Music Faculty Piano: Thomas Bucci, Ronald Cole, Robert Glover; Laura Kargul, Janet Reeves; Voice: Ellen Chickering, Bruce Fithian, Linda Freeman; Violin: Stephen Kecskemethy, Ronald Lantz; Viola: Julia Adams; Cello: Katherine Graffam, Paul Ross; Flute: Alison Hale, Susan Thomas; Oboe: Neil Boyer; Clarinet: Thomas Parchman; Saxophone: Bill Street; Bassoon: Ardith Freeman; Trumpet: John Schnell; French Horn: John Boden; Trombone: Mark Manduca; Euphonium: Donald Rankin; Tuba: Donald Rankin; Percussion: Nancy Smith; Harp: Jara Goodrich; Classical Guitar: Keith Crook, Michael Katz; Jazz Guitar: Tony Gaboury; Jazz Bass: David Clark; Jazz Drums: David Clark; Jazz Piano: Janet Reeves

The Department of Music offers a number of music ensembles open to all students, a number of courses primarily for non-majors, and concentrated study in the areas of music history, music theory, performance, and music education. Students majoring in music may earn a baccalaureate degree in education (bachelor of music in music education), in arts and sciences (bachelor of arts in music), or in music (bachelor of music in performance). In addition, a minor in music and a cognate in music are offered for students majoring in elementary education, and a minor in music is offered for students in the College of Arts and Sciences. Students who wish to pursue a self-designed major in music should consult the chair of the Music Department.

Music Fees
An applied music fee of $60.00 per semester for hour lessons, or $30.00 per semester for half-hour lessons will be charged all music majors in addition to the University tuition fee. Applied lessons for music majors, beyond those required for the degree, will be subject to a fee of $180.00 for half-hour lessons and $360.00 for hour lessons in addition to the University tuition fee.

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. The University will subsidize the applied music fee for a cognate to a maximum of nine credit hours. The student will pay $60.00 per semester for hour lessons and $30.00 per semester for half-hour lessons in addition to the University tuition fee.

Students other than music majors, cognates, and minors will be accommodated for applied music lessons if a teacher's time is available, but will be subject to a fee of $180.00 for half-hour lessons or $360.00 for hour lessons in addition to the University tuition fee.

Students registering for applied music must report to the chair of the Department for assignment to an applied music teacher and scheduling of lessons. All fees must be paid before lessons commence.

Admission Requirements
Admission to degree programs in music major, cognate, and minor will be based on the following criteria: a) the applicant's high school record, including recommendations, and SAT achievement scores; b) an audition, which includes performance on the applicant's major instrument, and tests in aural comprehension, rhythmic recitation, and sight singing which are administered to each applicant individually by a member of the staff; and c) a written standardized musical achievement test.

Students who desire to apply for advanced standing in music curricula should apply to the chair of the Department for a special examination.
Department Standards

Each student enrolled in the music education degree program will play a jury exam on his or her major instrument at the end of each academic year. Each student enrolled in the performance degree program will play a jury exam on his or her major instrument at the end of each semester. The jury panel will determine a level of performance and submit a written evaluation which will be included in the student’s file. Students are required to perform at the appropriate level of competence as established by the music faculty.

Each student must earn grades of C or better in all courses which count toward fulfillment of major requirements. D and F grades do not fulfill prerequisite requirements. However, an exception will be made for the following sequence courses: Theory I, II, III, IV; Solfeggio I, II, III, IV; Basic Conducting; Instrumental Conducting; and Choral Conducting. In these courses a grade of D will allow the student to progress to the next semester in the sequence. If a grade of C or better is earned in this next semester, the preceding semester need not be repeated. If a grade of D or F is earned in this next semester, both semesters must be satisfactorily repeated in proper sequence. No course may be repeated more than once. If a student fails in the second attempt to pass a course with a grade of C- or better, he or she will not be allowed to continue as a music major, cognate, or minor.

Each student must attain a 2.25 minimum grade point average before being admitted to junior or senior level music major courses. Students who fall below academic or applied music standards will be placed on probation and will be suspended if they do not meet these standards by the end of the following semester.

Music Core Requirements

Each student enrolled as a major in a music degree program will take the following courses during his or her first and second years:

- MUS 120G, 121G, 220G, 221G History of Music
- MUS 130F, 131, 230, 231 Music Theory
- MUS 132, 133, 232, 233 Sight Singing and Ear Training

Concert Attendance Policy

All music majors, cognates, and minors are required to attend a number of concerts and recitals each semester in order to maintain good standing in the Department. Failure to meet the requirements of this policy can result in probation and suspension. Information concerning this policy is available in the Department office.

Bachelor of Music in Music Education (MUE)

The degree of bachelor of music in music education prepares students for careers in music teaching. Students completing this course of study receive public school music certification for kindergarten through high school. Since a person must first be a good musician in order to be a good music educator, the program includes substantial work in music theory, ear training, music history, applied music, ensembles, and conducting, in addition to music education methods courses and field experiences. Students elect (1) instrumental concentration, (2) vocal concentration, or (3) a general program which includes major portions of both the instrumental and vocal concentrations.

The minimum number of credits (exclusive of the University's Core curriculum) required for the major, instrumental concentration: 99; vocal concentration: 98; or general concentration: 101.

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 University's Core curriculum requirements.

All music education majors are required to take the following 20 hours of professional education courses: MUE 100 Introduction to Music Education; MUE 220 Studies in Historical Foundations and Learning Theories of Education; MUE 400 Student Teaching; HRD 333 Human Growth and Development; and MUE 422 Music for Exceptional Children.
Additionally, all music education majors will meet the following requirements:

1. Fulfillment of minimum requirements in both voice and piano, regardless of major instrument.
2. Successful completion of $3\frac{1}{2}$ credit hours in Chorale and $3\frac{1}{2}$ credit hours in the appropriate major instrumental ensemble (Concert Band or Chamber Orchestra). Students who do not meet the audition requirements of either Concert Band or Chamber Orchestra will be assigned to Percussion Ensemble. Pianists will satisfy 1 credit of this requirement through accompaniment. Guitarists may take up to 1 credit of this requirement in chamber music.
3. Successful completion of seven semesters of major applied music lessons.
4. Successful completion of recital class in each semester when registered for major applied lessons. The requirement is fulfilled after 7 successfully completed semesters, even if the student continues to study applied music.
5. 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 ensemble performance. Normally the program will be shared with another B.S. senior or B.M. junior recital. A longer (full-length) program requires the special approval of the faculty.

**Piano Proficiency Requirement**  Students must enroll in applied piano each semester until the requirement is met. The proficiency exam must be taken at the end of four semesters of study. If is is not passed, further study will be at the student's own expense. The piano proficiency must be passed by the end of the third week of the semester before student teaching.

New students who feel prepared to meet the requirement may schedule an exam during the orientation period. Thereafter, exams will be offered at the end of each semester and may be taken whenever the student and the applied music teacher feel the student is qualified.

Requirements for the exam are as follows:

a) Play all major and minor scales (two octaves, hands together in eighth notes, $\text{tempo}=72$);

b) Play a prepared piece, or pieces, of the student's choice of at least the difficulty of a sonatina by Clementi or Kuhlau (minimum 5 minutes);

c) Play *America, America the Beautiful*, and *The Star Spangled Banner*;

d) Offer a representative list of music studied on piano;

e) Prepare in 24 hours an assigned folk melody with chordal accompaniment and a notated piano accompaniment as found in a standard public school music text;

f) Sight read a folk melody with chord symbols and a notated piano accompaniment as found in a standard public school music text.

**Vocal Proficiency Requirement**  All students in the music education program must complete at least one year of vocal study before student teaching. They must also pass the following requirements in a vocal proficiency examination before graduation:

1. Demonstrate and explain the principles of singing, including posture, breathing, tone production, and articulation.
2. Submit a list of 12 songs, including songs in English and at least one foreign language.
3. Perform from memory six songs, at least one of which is in a foreign language.

If the proficiency is not met after four credits of study, the student will continue to study for no credit at his or her own expense until this standard is met.

**Student Teaching**  Student teaching is the culmination of a comprehensive, preprofessional, required sequence of activities that includes the following:

Freshman year: All first-year music education majors enroll in MUE 100 Introduction to Music Education.

Sophomore year: the equivalent of two days of assisting classroom teachers in music, serving in a capacity similar to teacher aides.
Junior year: elementary and secondary methods courses wherein students observe, plan, and teach using actual classroom situations.
Senior year: student teaching that encompasses both elementary and secondary as well as instrumental and vocal areas.

**Professional Education: Music Education Courses**

*Courses marked with an asterisk (*) are offered on a rotating basis. Students should work closely with their advisors in planning their courses of study in the music education program.*

All music education majors must complete the following courses:

- **MUE 221** Brass Class
- **MUE 222** Percussion Class
- **MUE 224** Woodwinds I
- **MUE 320** String Class-Violin
- **MUE 322** Elementary General Music Methods

For instrumental concentration, these additional courses must be completed:

- **MUE 225** Woodwinds II
- **MUE 321** String Class-Viola, Cello and Bass
- **MUE 324** Instrumental Methods
- **MUE 420** Marching Band Techniques

For vocal concentration, this additional course must be completed:

- **MUE 323** Secondary Choral Methods

For general concentration, these additional courses must be completed:

- **MUE 225** Woodwinds II
- **MUE 324** Instrumental Methods
- **MUE 323** Secondary Choral Methods

**Musicianship: Music Courses**

*Courses marked with an asterisk (*) are offered on a rotating basis. Students should work closely with their advisors in planning their courses of study in the music education program.*

All music education majors must take the following courses:

- **MUP 202F** Applied Music Major, 14 credits
- **MUP 201F** Applied Music Minor, 5 credits
- **MUS 244** Basic Conducting
- **MUS 420** Orchestration
- **MUS 442** Recital Class (seven semesters)
- **MUS 401F** University Chorale (seven semesters)
- **MUS 402F** Concert Band (seven semesters)

**OR**

**MUS 400F** Orchestra (seven semesters)

The following courses apply to each specialized music education curriculum.

- **MUP 201F** Voice Lessons (2 semesters)
- **MUS 344** Instrumental Conducting
- **MUS 240, 340** Instrumental Conducting Lab

- **MUP 201F** Voice Lessons (not additionally required of voice majors) (2 semesters)
- **MUS 255** Guitar
- **MUS 345** Choral Conducting
- **MUS 241, 341** Choral Conducting Lab
- **MUS 355** Vocal Pedagogy
- **MUS 410** Opera Workshop
- **THE 290** Oral Interpretation of Literature (not required, but strongly recommended)

**General concentration:**

- **MUP 201F** Voice Lessons (not additionally required of voice majors) (2 semesters)
- **MUS 255** Guitar

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Bachelor of Arts in Music (MUS)

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 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 as it relates to the repertoire 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.

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 97.

Courses marked with an asterisk (*) are offered on a rotating basis. Students should work closely with their advisors in planning their courses of study in this degree program.

Music Core Requirements, 28 credits
*MUS 320 Seminar in Music History
*MUS 330, 331 Form and Analysis I, II
*MUS 332 Counterpoint

Applied Music (4 credits)
Recital Class (8 semesters, no credit)
Performance Ensembles (4 credits)
Music Electives (9 credits)
Electives including language proficiency, but not music electives (40 credits)

Language proficiency means completion of a second year of a language. This may be bypassed by examination for no academic credit.

The University will subsidize up to a total of 16 credit hours of applied music lessons for B.A. music students.

Bachelor of Music in Performance (MUP)

This degree program is designed to meet the needs of 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.

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 96.

Courses marked with an asterisk (*) are offered on a rotating basis. Students should work closely with their advisor in planning their course of study in this degree program.

Music Core Requirements, 28 credits
MUS 244 Basic Conducting
MUS 321 Literature of the Major Instrument
*MUS 330, 331 Form and Analysis I, II
*MUS 332 Counterpoint
MUS 442 Recital Class (eight semesters)
*MUS 356 Diction for Singers (voice majors only)
MUP 203 Applied Music, Major Instrument (eight semesters)
MUS 372 Pedagogy of the Major Instrument
Music Electives (9 credits)
Performance Ensembles (6 credits)
Electives in any college (15 credits)
Diction for Singers (MUS 356) is required of voice majors only and may be taken in lieu of three credits of music electives. Voice majors must meet a minimum proficiency in two foreign languages either by exam or through completion of the second semester of the basic course in the Department of Foreign Languages and Classics.

Performance majors must have a minimum of four credit hours in the appropriate major ensemble and 2 credit hours in chamber music. Piano majors must complete 2 credit hours in chamber music and the remaining 4 credit hours in chamber music, accompanying, or playing keyboard in a conducted ensemble. Guitar majors must complete 6 credit hours in chamber music or playing guitar in a conducted ensemble. Jazz concentration majors must complete 4 credit hours in jazz ensembles (MUS 407 Jazz Ensemble or MUS 406 Chamber Music) and 2 credit hours in major ensembles.

All performance majors are required to pass a piano proficiency examination or to complete successfully two years of piano as a minor instrument. The content of the exam is appropriate to the student's major. In addition, performance majors must complete satisfactorily a short recital in the junior year and a full recital in the senior year. The junior recital must meet the same standards as the B.S. senior recital. 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.

Bachelor of Music in Performance—Jazz Studies Concentration (MUP)

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 theory and 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.

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 96.

Courses marked with an asterisk (*) are offered on a rotating basis. Students should work closely with their advisor in planning their course of study in this concentration.

Music Core Requirements, 28 credits

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MUS 103G</td>
<td>Introduction to Jazz</td>
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<tr>
<td>MUS 380, 381</td>
<td>Jazz Improvisation I, II</td>
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<tr>
<td>MUS 336</td>
<td>Jazz Theory and Ear Training</td>
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<tr>
<td>MUS 337</td>
<td>Jazz Arranging</td>
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<tr>
<td>MUS 442</td>
<td>Jazz Pedagogy</td>
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<tr>
<td>MUP 201, 202, 203</td>
<td>Applied Music, Major Instrument</td>
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<td>(eight semesters)</td>
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Jazz Ensembles 4 credits in any of the following:

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<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>MUS 407</td>
<td>Jazz Ensemble</td>
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<tr>
<td>MUS 406</td>
<td>Chamber Music: Vocal Jazz Ensemble</td>
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<tr>
<td>MUS 406</td>
<td>Chamber Music: Jazz Combo</td>
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Major Ensemble (2 credits)

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<th>Course</th>
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| Electives (6 credits)          |
| Electives in any college (15 credits)

A student is expected to be enrolled in the appropriate ensemble whenever registered as a full-time student.

All students enrolled in the jazz concentration are required to pass a piano proficiency examination or to complete successfully two years of piano as a minor instrument.

Students in the jazz concentration must complete satisfactorily a full recital in the senior year which includes both traditional and jazz repertoire. The recital contains 50 minutes of music, including 25 minutes of jazz repertoire and 25 minutes of traditional repertoire. (Exceptions to the traditional portion of the recital requirement for rhythm section instruments
may be granted by petitioning the faculty. The jazz repertoire shall demonstrate the student's skills at improvisation and composition or arranging. Jazz students must consult with the director of jazz studies prior to choosing repertoire for the jazz portion of the recital and must perform this material at a recital hearing at least one month prior to the recital date. Jazz students will be expected to achieve the same jury levels and recital requirements on the traditional applied instrument as are required of music education majors.

Students in the jazz concentration, with the exception of rhythm section instruments (guitar, piano, drum set, or bass), must take 24 credit hours of applied music in the traditional area of study. Jazz students whose major instrument is a rhythm section instrument should divide their applied credits between traditional applied studies and applied credits in jazz guitar, jazz piano, jazz drum set, or jazz bass. This should be done by taking 2 credits of traditional applied studies and 1 credit of applied jazz studies during each semester of the first two years, and 2 credits of applied jazz studies and 1 credit of traditional study during each semester of the last two years.

Minor in Music Education

The minor program is designed to provide an opportunity for potential educators who demonstrate interest and ability to continue music studies beyond the high school level and to equip them to implement successfully in their classrooms the planned programs recommended by music supervisors.

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

MUS 100G; MUS 130, 131; MUS 132, 133; MUE 322; and MUP 201F (2 semesters) comprise the minor. Additionally, students must take an elective in music history and other music electives for two credits.

Minor in Music (Bachelor of Arts)

This minor program is designed to provide an opportunity for candidates for the degree of bachelor of arts who demonstrate interest and ability to continue music studies at the undergraduate level.

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 20.

The minor consists of elective courses in music and ensembles. However, MUS 100G, MUS 110F, and all MUE courses are not acceptable for the minor.

Applied music fees, to a maximum of eight credit hours, will be subsidized by the University only when the student demonstrates adequate proficiency.

Courses Primarily for Non-Majors

MUP 101F Applied Music
An opportunity to continue at the college level the private study of piano, voice, organ, guitar, or any orchestra or band instrument to fulfill one credit of Core requirements in a performance-centered art. 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 102F Applied Music
An opportunity to continue at the college level the private study of piano, voice, organ, guitar, or any orchestra or band instrument to fulfill two credits of Core requirements in a performance-centered art. 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 100G 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 102G 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 103G 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 110F Fundamentals of Music
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 202G 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 203G Music in the Twentieth Century
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 204 Symphonic Literature
A survey of music for the symphony orchestra from the pre-classical period of C.P.E. Bach to the present. Open to all students. Cr 3.

MUS 205G Chamber Music Literature: Portland String Quartet
An historical survey of the literature for chamber ensembles from the classical period to the present. Recorded and live performances will be studied in class. Open to all students. Cr 3.

MUS 211 Class Piano
Practical class piano for the elementary teacher with little or no piano background. Course covers note reading, scales, accompaniment of simple songs, transposition, and sight reading. Open to all students. Cr 2.

MUS 224F Electronic Music I
Lectures, discussions, and exercises in sound generation and processing, with emphasis on sound-processing systems. The student's time will be divided between class sessions and actual work in the electronic studio. Open to all students. Cr 3.

MUS 225F Electronic Music II
Lectures, discussions, and exercises in sound generation and processing, with emphasis on sound-processing systems. The student's time will be divided between class sessions and actual work in the electronic studio. Open to all students. Cr 3.

MUS 226F Electronic Music III
Lectures, discussions, and exercises in sound generation and processing, with emphasis on sound-processing systems. The student's time will be divided between class sessions and actual work in the electronic studio. Open to all students. Cr 3.

Music Performance Groups
Major Ensembles

MUS 400F Chamber Orchestra
A choral ensemble of students from all departments. Performances of large works with instrumental accompaniment and a capella works, including representative repertoire from all periods. Local performances and a spring tour. Cr 0.5.

MUS 401F The University Chorale
A choral ensemble of students from all departments. Performances of large works with instrumental accompaniment and a capella works, including representative repertoire from all periods. Local performances and a spring tour. Cr 0.5.

MUS 402F 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. Cr 0.5.

MUS 403F The Chamber Singers
A select group of twenty-five singers specializing in music from the renaissance to the contemporary. Cr 0.5.

MUS 404F Wind Ensemble
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. Cr 0.5.

Small Ensembles

MUS 405F Wind Ensemble
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. Cr 0.5.

MUS 406F 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 407F Jazz Ensemble
An instrumental ensemble specializing in the study and performance of jazz for large and small groups from Dixieland to present. Open to all students by audition. Cr 0.5.

MUS 408F Wind Ensemble
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. Cr 0.5.

MUS 409F Harp Ensemble
A harp ensemble open to all University students by audition. The ensemble focuses on the fundamentals of ensemble performance and plays literature of contrasting musical periods and styles. Cr 0.5.

MUS 410F 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. A vocal performance major may take this ensemble twice in lieu of one credit of chamber music. Cr 0.5.
Courses for Majors
Music History and Theory

MUS 120G History of Music I
Medieval and renaissance periods: historical development and music practices from the Gregorian chant and early polyphony through the 19th century. Musical examples of outstanding composers are played, analyzed, and discussed. Music majors only or permission of the instructor. Cr 3.

MUS 121G History of Music II
Baroque period; continuation of MUS 120G, from the establishment of opera in Italy to the culmination of polyphony in the works of J.S. Bach. Music majors only or permission of the instructor. Cr 3.

MUS 130F Music Theory I
Major and minor scales; intervals, triad, and chord connections; cadences; harmonization of soprano and bass lines utilizing primary triads. Music majors only or permission of the department. Cr 3.

MUS 130 Music Theory Lab I
A laboratory course in music theory required of those students needing additional assistance in first semester theory, as determined by the student's score on the entrance testing. To be taken concurrently with MUS 130 Music Theory I LEC. Does not count for music elective credit. Cr 2.

MUS 131 Music Theory II
Triads in first and second inversion; modulation; non-harmonic tones (passing, auxiliary, appoggiature, suspension, and anticipation); dominant seventh chord (root position inversion, regular and irregular resolutions). Prerequisite: MUS 130. Cr 3.

MUS 132 Sight Singing and Ear Training I
A course in sight singing and ear training. Music majors and minors only. Cr 1.

MUS 133 Sight Singing and Ear Training II
A continuation of MUS 132. Prerequisite: MUS 132. Cr 1.

MUS 220G History of Music III
Classical and romantic periods; historical development and musical practices from the establishment of the sonata, string quartet, and symphony, through program music, music-drama, and the rise of nationalism in music. Works of outstanding composers are played, analyzed, and discussed. Music majors only or permission of the instructor. Cr 3.

MUS 221G History of Music IV
Contemporary period; continuation of MUS 220, from Impressionism to recent tendencies. Melodic, harmonic, rhythmic, and structural features of twentieth-century American and European music and their relationship to tradition. Music majors only or permission of the instructor. Cr 3.

MUS 230 Music Theory III
Diatonic seventh chords; modulation; expansion of nonharmonic tones; altered chords; Neapolitan sixth; augmented sixth chords; chromatic alterations; chorales and their harmonizations; composition in simple forms of the 18th and the 19th centuries. Prerequisite: MUS 131. Cr 3.

MUS 231 Music Theory IV

MUS 232 Sight Singing and Ear Training III
An advanced course in sight singing and ear training. Prerequisite: MUS 133. Cr 1.

MUS 233 Sight Singing and Ear Training IV
A continuation of MUS 232. Prerequisite: MUS 232. Cr 1.

MUS 320 Seminar in Music History
A concentrated study of selected topics in music history based on individual research. Prerequisite: History of Music I, II, III, and IV. 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 department. Cr 3.

MUS 330 Form and Analysis I
Study and analysis of music of the classical, romantic, and contemporary periods with emphasis on homophonic forms and styles. Prerequisite: MUS 131. Cr 3.

MUS 331 Form and Analysis II
Study and analysis of music of the baroque and contemporary periods with emphasis on contrapuntal forms and styles. Prerequisite: MUS 131 Theory II. Cr 2.

MUS 332 Counterpoint
Tonal counterpoint. The process of invention and fugue as exemplified in the music of the baroque era. Prerequisites: MUS 230 and MUS 331. Cr 3.

MUS 420 Orchestration
A study of the nature of the various instruments. Practice in scoring for instrumental combinations, orchestra, and band. Prerequisite: MUS 231. 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: MUS 231 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. Departmental permission required. Cr 1-3.

Music Performance

MUP 201F 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, cognates, and minors. May be repeated for credit. Special fee assessed. Cr 1.

MUP 202F 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, cognates, 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 2.

MUP 240 Instrumental Conducting Lab
Performance techniques on instruments of primary and/or secondary interest to each student. Principles of ensemble training are exemplified. The repertoire consists of selections from various periods and styles and is varied from year to year in order to cover a considerable range during the student's attendance. Cr 0.5.

MUP 241 Choral Conducting Lab
Emphasizing singing technique and interpretation and an exploration of choral literature of various periods and styles. Principles of choral training are exemplified. The repertoire is varied from year to year so that the course covers a considerable range during a given student's attendance. Cr 0.5.

MUP 244 Basic Conducting
Practical conducting experiences; score reading, basic beat patterns, gestures, and interpretation. Prerequisite: MUS 230. Cr 2.

MUS 255 Guitar
An introduction to basic guitar skills. Emphasis is placed upon those skills that lead to playing effective accompaniments. Cr 1.

MUS 336 Jazz Theory and Ear Training
An in-depth study of jazz theory, including calligraphy, scales and modes, extended and altered chords, chord progressions and substitutions, compositional forms, instrumental capabilities and transpositions, functional piano voicings, as well as basic compositional and arranging techniques. Emphasis will be placed on training the ear to recognize jazz theory through harmonic, melodic and rhythmic dictation and through transcriptions. Prerequisite: MUS 231 or permission of instructor. 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: MUS 336. Cr 3.

MUS 340 Instrumental Conducting Lab
Performance techniques on instruments of primary and/or secondary interest to each student. Principles of ensemble training are exemplified. The repertoire consists of selections from various periods and styles and is varied from year to year in order to cover a considerable range during the student's attendance. Cr 0.5.

MUS 341 Choral Conducting Lab
Emphasizing singing technique and interpretation and an exploration of choral literature of various periods and styles. Principles of choral training are exemplified. The repertoire is varied from year to year so that the course covers a considerable range during a given student's attendance. Cr 0.5.

MUS 344 Instrumental Conducting
Advanced development of non-verbal gestures through the art of instrumental conducting. Score reading analysis, rehearsal techniques and performance preparation. Prerequisite: MUS 244. Cr 2.

MUS 345 Choral Conducting
Organization, training, and directing of choruses and glee clubs in high schools and junior high schools. Study and practice in rehearsal techniques, problems of diction, and emphasis on repertoire and musical style. Prerequisite: MUS 244. Cr 2.

MUS 355 Vocal Pedagogy
A study of basic principles of vocal production—breathing, phonation, registration, and resonance—and a discussion of the techniques used to teach voice. Cr 1.

MUS 356 Diction for Singers
A study of the principles of English, Italian, German, and French diction through use of the International Phonetic Alphabet (IPA). An
application of these basic principles to art songs in the four languages. Students shall perform songs in all four languages. This course is required of voice performance majors. Prerequisite: 3 semesters of voice study. 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 department. Cr 2.

MUS 374 Jazz Pedagogy
A study of the teaching methods and materials in the jazz education area. Emphasis will be placed on jazz ensemble literature and conducting techniques, beginning improvisation and writing techniques, securing employment in the jazz field, and promotion of a jazz curriculum within the schools. Prerequisite: open to music majors of junior standing. Cr 3.

MUS 380 Jazz Improvisation I
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: MUS 131 or permission of the instructor. Cr 3.

MUS 381 Jazz Improvisation II
A performance course designed to expand upon the improvisation principles presented in Jazz Improvisation I. 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 442 Recital Class
Performance in major field, stage deportment, and evaluation of performances. May be repeated for credit. Cr 0.

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 Education

MUE 100 Introduction to Music Education
This course will provide an introduction to varied music programs found in schools, K-12. Students will explore the value of music education. An overview of effective teaching techniques will be presented and students will participate in structured observations. Restricted to music majors, cognates, and minors. Prerequisite: None. Cr 1.

MUE 220 Historical Foundations and Learning Theories
This course will provide an overview of the historical role of schools in American society and an introduction to contemporary learning theory upon which music instruction in kindergarten through grade 12 is predicated. Restricted to majors, cognates, and minors. Prerequisite: None. Cr 3.

MUE 221 Brass Class
Methods of teaching brass instruments including practical experience on the various instruments; elements of transposition. Prerequisites: MUS 131 and 133. Cr 1.

MUE 222 Percussion Class
Practical experience on and methods of teaching percussion instruments. Prerequisites: MUS 131 and 133. Cr 1.

MUE 224 Woodwinds I
Methods of teaching flute and clarinet. Practical experience on these instruments; elements of transposition. Prerequisites: MUS 131 and 133. Cr 1.

MUE 225 Woodwinds II
Methods of teaching saxophone, oboe, and bassoon. Practical experience on these instruments; elements of transposition. Prerequisite: MUE 224. Cr 1.

MUE 320 String ClassViolon
Class methods and materials in teaching violin. Fundamentals of violin, including bowing, tone production, intonation, and fingering techniques extended into the third position. Prerequisites: MUS 131 and 133. Cr 1.

MUE 321 String ClassViola, Cello and Bass

MUE 322 Elementary General Music Methods
Study of methods and materials in present elementary school music education, including those of Kodaly and Orff. Restricted to junior and senior music majors and minors. Cr 3.

MUE 323 Secondary Choral Methods
Techniques and procedures for teaching choral music in junior and senior high schools. Restricted to junior and senior music majors. Cr 3.

MUE 324 Instrumental Methods
The course will acquaint the instrumental music major with methods and procedures of teaching instrumental music in the public.
schools. Administering and organizing the program, recruiting, budgets, public relations, ensemble literature, scheduling and performance are issues addressed in the course. Discussions will focus on developing an effective instrumental music program in the public schools. Restricted to junior and senior music majors. Cr 3.

**MUE 400 Student Teaching**

Full-time student teaching during the senior year is provided for one semester under direct supervision in off-campus situations for all who meet requirements. Normally, two separate half-semester experiences are provided which encompass both elementary and secondary as well as instrumental and vocal areas. Cr 12.

**MUE 420 Marching Band Techniques**

The course is designed to prepare the music educator to organize and effectively teach Marching Band in the public school. A statement of philosophy is stressed. Marching styles, execution, music developing marching percussion, role of the drum major and effective instrument placement are emphasized in the course. Restricted to junior and senior music majors. Cr 2.

**MUE 422 Music for Exceptional Children**


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**Philosophy**

*Chair of the Department:* Julien S. Murphy, 47 Exeter St., Portland

*Professors:* Gavin, Grange, F. Schwanauer; *Associate Professors:* Conway, Louden, Murphy; *Assistant Professors:* Caffentzis, Wininger

"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, such as "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 in a way no other activity does one's problem-solving capacities. 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' ability 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, the philosophy of religion are of similar value in understanding the respective fields of art, sociology, politics, and religion.

**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, 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.

**Bachelor of Arts in Philosophy**

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 consultation 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 beyond a PHI 100-level course.

All philosophy majors must take four history of philosophy courses. The first two of these, which need not be taken in sequence, must be PHI 310I (Ancient Philosophy) and PHI 330I (Early Modern Philosophy). Thereafter, any two additional courses in the history of philosophy may be taken. These courses are PHI 320I (Medieval Philosophy), PHI 340I (Late Modern Philosophy), PHI 350I (American Philosophy), PHI 360I (Existentialism), PHI 370 (Analytic Philosophy).

In the last year a senior tutorial is optional. This tutorial 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 tutorial. Upon completion of the paper, an oral examination will be conducted by the full department. Upon successful completion of the senior tutorial, honors status is granted if a student's GPA in philosophy is at least 3.33.

If the tutorial option is not taken, students must complete a Senior Seminar (PHI 400, 401, 402).

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 150 Symbolic Logic.

Any introductory philosophy course is a prerequisite to all other courses in philosophy.

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**

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 beyond the introductory level, that is, any PHI 100 course.

These should include two courses in the history of philosophy: PHI 310I; PHI 320I; PHI 330I; PHI 340I; PHI 350I; PHI 360I; PHI 370.
PHI 101E Introduction to Philosophy: Freedom and Determinism
Is there a human will at all? This course will concentrate on the issue of freedom vs. determinism. The importance of the human will insofar as it influences views of experience, politics, society, etc., will also be considered. Cr 3.

PHI 102E 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, including existentialism and pragmatism, will be undertaken. Cr 3.

PHI 103E Introduction to Philosophy: Human Alienation
Why do human beings picture themselves as alienated from nature and from 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. Cr 3.

PHI 105E Introduction to Philosophy: Theories of Human Nature
A study of some influential theories of human nature in Western culture. Among issues to be studied are: the question of method; freedom and determinism; materialism and dualism; and the nature of moral values. Cr 3.

PHI 106E 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. Cr 3.

PHI 110E Introduction to Philosophy: Self and Society
To what extent does society shape our view of ourselves? The course will introduce the student to philosophical thinking as a mode of reflection on the meaning of our daily lives. We will analyze the individual consciousness, the court and the state, and current methodologies in terms of their influence on the discourse of social life and institutions. Emphasis will be given to the role of the philosopher in society and the task of philosophy in determining our possibilities for freedom. Students will gain skill in philosophical thinking: the formulation of philosophical questions, identification and analysis of philosophical theories, and in-depth criticism and evaluation of philosophical perspectives. Cr 3.

PHI 111E 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. Cr 3.

PHI 112E Introduction to Philosophy: Concepts and Consequences
Philosophy comprises both a kind of question and a way of answering questions. The questions it asks are fundamental ones; the way of answering is universally applicable. This course will provide an introduction to some typical questions: how are my mind and body related? What makes me me? What is causation? Am I free? How can I know anything? What ought I do? In addressing these questions and looking at responses to them by contemporary and historical thinkers, we will also practice the methodology of philosophy in discussion and writing. The aim is not so much to find "the answers," but to learn how to think clearly about such issues and to present one's thoughts precisely and logically. Cr 3.

PHI 200 Metaphysics
An analysis of various theories of reality, together with a critical examination of their conceptual constructs, principles and methodologies. Issues to be discussed include change, time, freedom and necessity, immortality and God, good and evil. Thinkers to be studied include Plato and Aristotle, Spinoza, Kant, Hegel, Whitehead and Heidegger. Prerequisite: any PHI 100-level course. Cr 3.

PHI 205 Symbolic Logic
Techniques of modern deductive logic; properties of formal systems; logical implications and paradoxes of language. Prerequisite: any 100-level philosophy 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: any PHI 100-level course. Cr 3.
PHI 211 Ethics in Business
This course will be an investigation of the wide range of ethical issues confronting business. It will study these issues primarily through an examination of specific case studies of business practices. It will also present various philosophical concepts of what constitutes right conduct and will attempt to see whether these concepts can assist the business person in resolving the ethical problems with which business is faced. 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. Cr 3.

PHI 220 Philosophy of Art
Inquiry into the question of whether aesthetic experience is intelligible, or emotional, or both; examination of various theories and interpretations, classic and contemporary. Prerequisite: any PHI 100-level course. Cr 3.

PHI 225 Philosophical Psychology
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: any PHI 100-level 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: any PHI 100-level 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: any PHI 100-level 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: any PHI 100-level 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: any PHI 100-level course. Cr 3.

PHI 265 Feminist Philosophy
The course explores the contributions of feminist philosophers to gender analysis and the philosophical assumptions inherent in theories of gender difference, including theories from sociobiology, biological determinism, physiology, and social construction theory. Examination of gender assumptions may be studied in any of the following applied areas: women's work, women and sports, legal sexual inequality, pornography, and reproductive rights. Prerequisite: any PHI 100-level course. Cr 3.

PHI 270 Epistemology
An analysis of various theories of knowledge in reference to their methodologies and consequences. Texts to be read include Berkeley, Hume, Descartes, Kant, and Hegel. Prerequisite: any PHI 100-level course. Cr 3.

PHI 275 Theories of Language
This course examines the nature of language from an interdisciplinary perspective. Philosophy, linguistics, and psycholinguistics will be employed to inquire into the structure and function of language, and its relation to perception and the human mind. Prerequisite: any PHI 100-level course. This course is also offered as COM 275. Cr 3.

PHI 290 Problems in Philosophy
Consideration of selected problems or systems of philosophical significance, including general problems of metaphysics, epistemology, axiology, specialized areas, etc. Prerequisite: any PHI 100-level course. Cr 3.

PHI 291 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 vital topic. Has the term death changed its meaning from time to time?
time and place to place in human history? This course will deal with these and similar epistemological issues. Prerequisite: any PHI 100-level course. Cr 3.

PHI 3101 History of Ancient Philosophy
Philosophic thought from the pre-Socrates to the late Hellenistic period, with major emphasis on Plato and Aristotle. Prerequisite: any PHI 100-level course. Cr 3.

PHI 3201 History of Medieval Philosophy
The merger of the philosophic with the religious stream; ideas of Augustine, Thomas Aquinas, Bonaventure, and others critically examined; determining cultural factors explored. Prerequisite: any PHI 100 level course. Cr 3.

PHI 3301 History of Early Modern Philosophy: Descartes to Kant
Main currents of rationalism and empiricism are explored, as developed in major writings from Descartes to Hume. Prerequisite: any PHI 100-level course. Cr 3.

PHI 3401 History of Late Modern Philosophy
Development of German idealism; emergence of social and scientific philosophies; contributions of Kant, Hegel, Marx, Schopenhauer, Nietzsche, Feuerbach, and others. Prerequisite: any PHI 100-level course. Cr 3.

PHI 3501 American Philosophy
History and background of the origin of philosophical ideas in America; particular emphasis given to Peirce, James, Royce, Dewey. Prerequisite: any PHI 100-level course. Cr 3.

PHI 3601 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: any PHI 100-level 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: any PHI 100-level course. Cr 3.

PHI 380 Contemporary Continental Philosophy
The course presents a survey of central movements within continental philosophy in the 20th century: phenomenology, structuralism, hermeneutics, and deconstruction. Possible figures of study are: Husserl, Heidegger, Merleau-Ponty, Sartre, Foucault, Gadamer, Barthes, and Derrida. Prerequisite: any PHI 100-level course. Cr 3.

PHI 398 Independent Study
Independent study undertaken under the mentorship of a professor in the department. Prerequisites: a minimum of two (2) 300-level philosophy courses plus written permission of the instructor involved. Cr 3.

PHI 400, 401, 402 Seminar in Philosophy
These numbers are used to indicate seminar courses dealing with a specific topic or person in philosophy. Topics or individual philosophers will change from year to year and may or may not be repeated. The prerequisite for any 400-level seminar course is two (2) 300-level courses in philosophy, or permission of the instructor. Cr 3.

PHI 409 Senior 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 Tutorial
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 and permission of the department. Cr 3.
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.

In addition to the B.A. program, the USM Physics Department provides the first two years of the courses required for the engineering physics B.S. major at the University of Maine. Students planning to transfer to the Orono campus should contact the USM Physics Department as early as possible to plan courses.

Bachelor of Arts in Physics

The total number of credits in physics and related areas (exclusive of the University's Core curriculum) required for the physics major: 63. A student majoring in physics must take 37 credit hours of physics courses including some requirements and some electives as outlined below. In addition, 15 credits of mathematics courses, 8 credits of chemistry courses, and 3 credits of computer science courses must be completed.

1. Required courses
   PHY 121K, 122K, 123, 124 General Physics I & II with lab (PHY 111K may replace PHY 121K and 122K with Departmental permission.)
   OR
   PHY 211, 212 Modern Physics with lab
   PHY 221 Mechanics I
   PHY 223 Electricity & Magnetism I
   PHY 240 Intermediate Lab
   PHY 291 Special Relativity

2. Electives. The student must take a minimum of 13 credits of physics courses numbered 200 or higher including at least 3 credits from each of groups 1, 2, and 3 below.
   Group 1. Classical Physics Courses
   PHY 321 Mechanics II
   PHY 323 Electricity and Magnetism II
   CHY 371 Physical Chemistry
   Group 2. Topical Courses
   PHY 281 Astrophysics
   PHY 269 Radiological Physics
   PHY 375 Optics
   PHY 251 Electronics
   PHY 253 Microprocessor Electronics
   Group 3. Advanced Courses
   PHY 311 Quantum Mechanics
   PHY 440 Advanced Physics Laboratory I
   Group 4. Other Electives
   PHY 390 Special Topics in Physics

The physics major must also complete the following courses:
MAT 152D Calculus A
MAT 153 Calculus B
MAT 252 Calculus C
MAT 350 Differential Equations
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
The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 19. The required courses are PHY 121K, 122K, 123, 124 or PHY 111K, 112; PHY 211, 212; at least 6 credits of physics courses numbered 200 or higher.

PHY 101K 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 102K Introduction to Physics Laboratory
Laboratory experiments and additional material designed to supplement the topics considered in PHY 101K. Prerequisite: concurrent registration in PHY 101K or permission of the instructor. Cr 1.

PHY 105 Acoustics and Noise
A semi-descriptive course on sound, with emphasis on applications of interest to the scientist and non-scientist alike. Discussion will cover the questions: what is sound, how is it perceived, how is it measured, what are its benefits and liabilities? Particular topics may include: the ear and hearing, sound waves, musical acoustics, building acoustics, noise and the environment, legal aspects of noise, underwater sound, biological aspects of sound, and ultrasonics. Consideration will be given to the interests of the members of the class. Three hours of lecture and demonstration. Occasional field experience may be provided. Prerequisite: a course in high school algebra. Cr 3.

PHY 109 Radiation: Problems and Effects
An introduction to several current topics of vital importance such as the use of nuclear fission and fusion in power generation, radioactive materials and x-rays in medical diagnosis and treatment, measurement of radiation, safety considerations, and biological effects. Intended to aid the understanding of the non-scientifically trained citizen. Student participation and discussion will be encouraged. Lecture with demonstration and occasional student use of radiation-related equipment, and maximum use of external resources. Prerequisite: None; high school physics and chemistry helpful. One two and one-half hour session per week. Cr 3.

PHY 111K Elements of Physics I
An introduction to the fundamental concepts of mechanics, sound and heat. Lectures, problem solving, demonstrations, laboratory exercises will be used to develop an understanding of physical phenomena. This course is not recommended for students planning to major in the physical sciences or engineering. Prerequisite: high school algebra. Three hours of lecture, two hours of laboratory, and one hour of recitation per week. Cr 4.

PHY 112 Elements of Physics II
A continuation of PHY 111K introducing the concepts of electricity, magnetism, optics, and modern physics. Prerequisite: PHY 111K or equivalent. Three hours of lecture, two hours of laboratory, and one hour of recitation per week. Cr 4.

PHY 121K General Physics I
An introduction to the fundamental concepts of mechanics, sound and heat, using calculus. This course is recommended for students who plan further study in physical sciences, mathematics, or engineering. It should be taken with PHY 122K. Prerequisite: prior or concurrent registration in MAT 152D or equivalent experience. Three hours of lecture and one and one-half hours of recitation per week. Cr 4.

PHY 122K General Physics Laboratory I
Experiments designed to illustrate the concepts studied in PHY 121K. Prerequisite: concurrent registration in PHY 121K or permission of the instructor. Two hours per week. Cr 1.

PHY 123 General Physics II
A continuation of PHY 121K, introducing the concepts of electricity, magnetism, and light, using calculus. This course is intended for students who plan further study in physical sciences, mathematics, or engineering. It
should be taken with PHY 124. Prerequisites: PHY 121K or equivalent and one semester of calculus. Three hours of lecture and one and one-half hours of recitation per week. Cr 4.

PHY 124 General Physics Laboratory II
Experiments designed to illustrate the concepts studied in PHY 123. Prerequisite: concurrent registration in PHY 129 or permission of the instructor. Two hours per week. Cr 1.

PHY 211 Introductory Modern Physics
A discussion of the more important topics which show the departure of physics from its classical roots, namely, the nature of atomic particles, methods of determining particle properties, the concept of quantization, atomic and nuclear structure, and radioactivity. Prerequisites: PHY 123/124, or PHY 112, and MAT 152D. Cr 3.

PHY 212 Modern Physics Laboratory
A laboratory course designed to accompany PHY 211. The experiments will illustrate the determination of particle properties, spectroscopy, fundamental constants, radioactive decay, and safe methods of handling radioactive materials. Concurrent registration in PHY 211 is required. Cr 1.

PHY 221 Mechanics I

PHY 223 Electricity and Magnetism I
An intermediate treatment of static and current electricity and magnetism, leading to Maxwell's Equations and their applications. Prerequisites: PHY 123, 124, and MAT 153. Cr 3.

PHY 240 Intermediate Laboratory
A sequence of experiments designed to illustrate the more important principles and measurement techniques of mechanics and electricity and magnetism. Prerequisites: one 200-level course and 2 semesters of calculus. Two 3-hour sessions per week. 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 152 or equivalent, or permission of instructor. Cr 3.

PHY 253 Microprocessor Electronics and Applications
A study of microprocessors and microprocessor interfacing. Programming of a representative 8-bit microprocessor will be covered. Laboratory experience will cover both machine language programming and interfacing of the microprocessor. Prerequisites: PHY 251 and any COS programming course. Cr 3.

PHY 259 Radiological Physics
A study of the effects of ionizing radiation on matter, emphasizing principles of radiation measurements, the effects of radiation on living materials, and the safe use of radiation. Prerequisites: PHY 121K, 122K, 123, 124, and one semester of calculus. Lecture 3 hours, laboratory 3 hours. Cr 4.

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: Physics 221. Cr 3.

PHY 291 Special Relativity
A study of the special theory of relativity at the intermediate level. This course is intended to complement PHY 221, but may be taken independently of that course. The course meets three hours per week for four weeks. Prerequisites: PHY 121, MAT 153. Cr 3.

PHY 311 Quantum Mechanics
A study of the quantum physics of atoms, nuclei, and particles. Topics covered include wave particle duality; the Schrödinger Wave Equation and its application to a variety of quantum systems, three-dimensional and time-dependent systems, and photons. Prerequisite: PHY 321. Cr 3.

PHY 321 Mechanics II
A study of kinematics and dynamics continuing beyond topics covered in PHY 221. Topics may include Lagrange's equations, Hamilton's equations, mechanics of continuous media, motion of rigid bodies, wave motion. Prerequisites: PHY 221, MAT 350. Cr 3.

PHY 323 Electricity and Magnetism II
A study of classical electromagnetic theory going beyond topics covered in PHY 223. Topics include Maxwell's Equations in differential form and their application to a number of physical situations, especially electromagnetic waves. Prerequisite: PHY 223. 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. Lecture three hours, laboratory three hours. Cr 4.
PHY 390 Independent Study in Physics
A laboratory research investigation of an approved topic in physics, using the facilities of the University laboratories and/or those of industrial and professional laboratories. Prerequisite: consent of the instructor. Cr 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, PHY 212, and at least one 300-level physics course. Cr 3.

Political Science

Chair of the Department: Richard J. Maiman, 126 Bedford St., Portland
Professors: Fisher, Maiman, Woshinsky; Associate Professors: Coogan, Roberts;
Assistant Professors: Erickson, Faksh, Hamilton

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 study of political science does not prepare students directly for any specific career, but it does provide substantive and analytic background that can lead to a variety of professions. Most obviously it serves those with an interest in entering politics and government. Political science majors go on to become town managers, city planners, budget specialists, foreign service officers, policy researchers, and hold a variety of management positions in local, state, national, and international organizations. Beyond government, a political science degree leads naturally to law school or other graduate training. Many journalists and broadcasters were political science majors. Business has recognized the analytic and management skills obtained through training in political science. Indeed, some studies have estimated that perhaps one-third of undergraduate majors undertake careers in business. Political science training is also useful in other rapidly developing fields such as polling, communications, campaign management, consulting, private and public interest group activity, and data analysis. College teaching has also been a traditional career for the political scientist. Demographics now suggest that entering freshmen can look forward to good job prospects by the time they have completed their graduate educations.

Bachelor of Arts in Political Science

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 36.

Each major must complete POS 101, 102, and 103. These courses, which may be taken in any order, are prerequisites for all upper level courses. No major will be permitted to take more than one upper level course without first having completed these three prerequisites. A grade of C minus or better is required to receive major credit in the department. Each major must select the balance of required courses from the following, taking at least one course from each of the following five areas of the department:

American Political System: POS 120; POS 201; POS 233; POS 256; POS 257; POS 258; POS 265; POS 283; POS 284; POS 357; POS 358.

Comparative Political Systems: POS 235; POS 236; POS 237; POS 238; POS 242; POS 245; POS 247; POS 259; POS 332.

International Politics: POS 104; POS 239; POS 240; POS 249; POS 250; POS 275; POS 385; POS 386; POS 389.

Political Theory: POS 289; POS 290; POS 292.

Public Administration and Public Policy: POS 210; POS 251; POS 252; POS 253; POS 286.
Students interested in an international studies major should consult the International Studies Program section in this catalog.

The Department 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.

The Political Science Department strongly urges its majors to take courses in economics, history, sociology, and computer science. For a number of majors, courses in geography-anthropology, psychology, philosophy, and communication would also be useful. All political science majors 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 101J, 102J, 103, 104J, and internships.

Yearly: (Fall) POS 223, 283, 289. (Spring) POS 284, 290. (Either semester) POS 235, 236, 237, 249, 250, 251, 253, 265, 307, 358, 385, 386.


Note: POS 307 Statistical Methods for Social Research may be substituted for POS 103.

Minor in Political Science

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 should take the following courses: POS 101J and POS 102J; three additional courses, to be selected so that three of the five fields within the discipline are represented (see above for the listing of courses within each field); and one additional course in political science. A grade of C- or better in POS required courses is necessary to receive credit toward the minor. Cr 3.

POS 101J 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 102J 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 101J is not a prerequisite for POS 102J. Cr 3.

POS 103 Political Science Research Methods

An introduction to the way political scientists conceive and carry out research projects. Students will learn the scientific method: how to formulate theories, gather data, and test hypotheses. They will be taught how to find political science sources in the library, how to document sources in footnotes and bibliography, and how to conduct legal research in a law library. Students will eventually complete a major research project. This course is required for all political science majors; they are strongly urged to take it during their first or second semester after entering the Department. Cr 3.
POS 104J 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 201 Women and Politics
An introduction to the way gender affects political behavior. Special attention will be given to the social, psychological, and legal factors which, over the years, have inhibited women from engaging in full-scale political activity. Special consideration will also be given to the way the women's movement and the ideas of feminism have encouraged growing rates of political participation by women. The course will include a thorough review of the different behavior patterns of women and men in politics. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor.
Cr 3.

POS 210 Inter-governmental Relations
This course examines attempts to bring about social and economic changes through governmental action. Functional and dysfunctional aspects of the political, economic, and social systems are considered. Attempts at intervention are examined through selected case studies in inter-governmental relations. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor.
Cr 3.

POS 233 The American City
The city in American political life; types of municipal governments; developments in inter-governmental relations; metropolitan area problems; the future of the city. Students will participate in a task force on a selected urban program. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor.
Cr 3.

POS 235 Democratic Governments of Europe
An introduction to the parliamentary system, through a study of the governmental operations and politics of Britain, France, and the Federal Republic of Germany. Other topics covered: the Common Market and prospects for European integration; relationship of democratic Europe with communist Europe. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor.
Cr 3.

POS 236 Communist Governments
This course offers a survey of existing communist social systems. The following topics will be considered: variation in political parties and state systems, the problem of nationalism, economic management, and cultural policy. Special attention will be given to a comparative survey of current communist ideology and the question of the "socialist commonwealth." Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor.
Cr 3.

POS 237 The Politics of the Soviet Union
An introduction to the USSR: Russian and Soviet political history; Marxism-Leninism; the party and state structures; the socialist economy; the impact of the regime on the individual. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor.
Cr 3.

POS 238 Canadian Government and Politics
An introduction to political life in Canada. Primary topics to be covered in the course: Canadian political culture, voting behavior; the parliamentary system, federalism, political parties, and interest groups. The place of Quebec and French-speaking Canadians within the Canadian political system will be given special emphasis. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor.
Cr 3.

POS 239 Soviet Foreign Policy
A survey of Soviet foreign policy as a continuation of Tsarist policies and as a world movement. Major topics include: the Comintern and the Popular Front: impact of World War II; the emergence of the USSR as a superpower; and post-Stalin modifications. Case studies in contemporary foreign problems, including relations with the Communist world. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor.
Cr 3.

POS 240 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. Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor. POS 104J is recommended.
Cr 3.

POS 242 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. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor. Cr 3.

POS 245 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. Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor. Cr 3.

POS 247 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. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor. Cr 3.

POS 249 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 East regional 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. The course will examine the nature of Middle East regional 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. Prerequisites: POS 101J, POS 102J, and POS 103 or permission of the instructor. Cr 3.

POS 250 International Terrorism
One of the most puzzling aspects of international relations today is the extent to which terrorist methods seem to be effective. Terrorist attacks, guerrilla actions, and subversion are increasingly significant as means of access to power. Terrorism is "subwar," but appears to achieve results that might not be matched by entire armies. Why is this? Is the nation-state, center of power and authority in the international system for centuries, unable to meet the challenges of today's world? How do we explain the rise, development, and success of the new forces that seek to achieve control at both the national and international levels? The purpose of this course is to explore these questions as a basis for understanding a critical phenomenon of our time. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor. Cr 3.

POS 251 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?" Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor. Cr 3.

POS 252 Budgets and Politics
A comparative examination of the budgetary processes of municipalities, states, and nations. The budget is the critical point at which goals intersect with resources. Students who complete the course will have a working understanding of various budgeting techniques (such as PPBS, zero-based budgeting, and incremental budgeting) as well as an appreciation of their effectiveness, their impact on expenditures, and their political consequences. Prerequisites: POS 101J, POS 102J, POS 103, and POS 251, or permission of the instructor. Cr 3.

POS 253 Politics of American Policy Making
An introduction to political analysis of public policy formation and implementation. Policy processes will be examined to see what their study can tell us about American politics, institutions, and political behavior. Particular attention will be paid to "who gets what, when and how" from the United States political system, especially how they get it and why it works that way. Alternative methods of policy analysis will be applied to selected areas of current interest and critically evaluated. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor. 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 257 Political Parties
Development and present organization and operation of the American party system. Nature and function of major and minor parties, sectionalism, nominating system, presidential and congressional elections, the electorate, finance, interest groups. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor. Cr 3.

POS 258 Public Opinion and Electoral Behavior
The role of public opinion in the American political system; definition and measurement; sociological and psychological influences; mass media; linkages to government; the role of public opinion in other nations; voting and presidential elections. A major segment of the course will be devoted to the construction, implementation, and analysis of a public opin-
Congress, the courts, interest groups, the presidency poll. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor. Cr 3.

**POS 259 Psychology and Politics**
This course is an introduction to the psychology of political behavior. It will examine various theories of personality and motivation that explain why people act as they do in politics. It will focus on such questions as: Can “national character” explain political differentiations? What are the psychological causes of political extremism and mass movements? Are there “authoritarian” and “democratic” personalities? What are the needs or drives that lead people into full-time political activity? The bulk of the course will focus on elite, rather than mass, behavior. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor. Cr 3.

**POS 265 Environmental Politics**
An analysis of the political issue of environmental quality. The role of public opinion, Congress, the courts, interest groups, the presidency and bureaucracy in environmental policy formulation and implementation will be examined in historical perspective. Specific issue areas in environmental policy at national, state, and local levels of government will be surveyed with discussion of intergovernmental relations and jurisdictional questions. Alternative approaches for dealing with ecological problems will be discussed. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor. Cr 3.

**POS 275 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; the role of non-governmental influences. The course is designed to evaluate current policy goals and practices within the context of long-range goals. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor. Cr 3.

**POS 283 The American Judicial System**
The role of the judiciary in American politics, with emphasis on the United States Supreme Court. A series of case studies will cover such topics as economic regulation, civil rights, reapportionment, and war powers. Attention will also be given to the impact of judicial philosophies on decision-making. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor. Cr 3.

**POS 284 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. Prerequisites: POS 101J, POS 102J, and POS 283, or permission of the instructor. Cr 3.

**POS 286 Administrative Law**
The law made by and for administrative agencies. Topics include delegation, standing, judicial review, and the merits and demerits of “discretionary justice.” Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor. Cr 3.

**POS 289 Political and Social Thought I**
An intensive study of ancient political and social philosophies. A textual criticism of the works of Plato and Aristotle is emphasized. Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor. Cr 3.

**POS 290 Political and Social Thought II**
A study of selected political theories from Machiavelli to modern political philosophers. The basic approach is historical, but an attempt is made to relate theories of politics to the environments in which they developed. Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor. Cr 3.

**POS 307 Statistical Methods for Social Research**
Emphasis on uses of statistics in the organization, interpretation, and presentation of research data. Measures of association and correlation; testing of hypotheses, probability, and sampling. Includes one hour per week of laboratory exercises. Also listed as SOC 307D. Prerequisite: POS 102J or SOC 100J. Cr 4.

**POS 332 Comparative Political Behavior**
This course provides an introduction to the study of government and politics from a comparative perspective. It is designed to help students gain knowledge of the world's diverse political structures and behavior, and to expose them to a number of approaches to understanding political phenomena in different national contexts. This course will address topics related to political socialization, political culture, regime types, problems of political change and revolution, and the role of the military in the politics of new states. Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor. Cr 3.

**POS 351 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. The course is open only to selected students. Participation in a seminar is required. Cr 6.
POS 352 Internship in Private and Semi-Public Organizations
Provision may be made to gain professional experience in administration and research. The course is open only to selected students; see department chairman for details. Students will meet for a series of internship seminars, for which readings and research reports will be required. Cr 6.

POS 353 Municipal Administration Internship
Provision may be made to gain professional experience in a local government. The course is open only to selected students; see department chairman for details. 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. Cr 6.

POS 354 State Internship
Provision may be made to gain professional experience in a department or agency of state government. The course is open only to selected students; see department chairman for details. 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. Cr 6.

POS 355 Congressional Internship
Provision may be made to gain professional experience in the local offices of Maine's U.S. Congressmen and Senators. The course is open only to selected students; see department chairman for details. Students will meet for a series of internship seminars, for which readings and research reports are required. The course will study the history, theoretical significance, and practical implications of attempts to control international political interaction through law and organization. This course will examine arms capabilities both in relation to the growth of tensions and the creation of stability in the world arena. The management of arms will be considered in the light of political processes attendant to war, peace, and the indeterminate condition of neither war nor peace. Prerequisites: POS 101], POS 102] and POS 103 or permission of the instructor. Cr 3.

POS 356 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. The course is open only to selected students; see department chairman for details. Readings and research reports are required. Cr 9.

POS 357 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. Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor. Cr 3.

POS 358 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. Prerequisites: POS 101], POS 102J and POS 103 or permission of the instructor. Cr 3.

POS 359 Peace and National Security
An analysis of the requirements for a reduction of global tensions in relation to national security needs. The politics of war and conflict, as well as peace and stability, will be considered. How might we maximize the means of international stability and minimize the risks to national protection? The course will discuss methods of achieving order in a nuclear era and develop relevant tools of analysis for assessing national security policies. Prerequisites: POS 101], POS 102J and POS 103 or permission of the instructor. Cr 3.

POS 360 Arms and Negotiation
The proliferation of arms, especially the increase and diversification of nuclear capabilities, makes us hostage to the probability of global destruction. Yet, arms control, superpower detente, and peace movements do not appear to be effective avenues of minimizing the preparations for war. This course will examine arms capabilities both in relation to the growth of tensions and the creation of stability in the world arena. The management of arms will be considered in the light of political processes attendant to war, peace, and the indeterminate condition of neither war nor peace. Prerequisites: POS 101], POS 102J and POS 103 or permission of the instructor. Cr 3.

POS 381 International Law and Organization
Law and order in the international system present a range of problems both similar to and different from law and order in domestic society. Public international law and international organization are attempts to control the violence and anarchy of international society. While these approaches are open to criticism for being ineffective, they cannot be ignored as integral to the international political process. This course will study the history, theoretical significance, and practical implications of attempts to control international political interaction through law and organization. Prerequisites: POS 101], POS 102J and POS 103 or permission of the instructor. 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.

Psychology

Chair of the Department: Joseph F. Hearns, 512 Science Building, Portland
Professors: Gayton, Paradise; Associate Professors: Hearns, Sytsma; Assistant Professors: Broida, Brown, Thornton

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.

Bachelor of Arts in Psychology

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 43.

Required Courses:
- PSY 101J and 102 General Psychology (3 credits each semester) to be taken as a two-semester sequence
- PSY 201D Statistics in Psychology
- PSY 205 Experimental Methodology
- PSY 223 Child Development
- PSY 330 Social Psychology
- PSY 333 Psychopathology
- PSY 350 Psychology of Learning
- PSY 351 Learning Laboratory
- PSY 360 Cognitive Processes
- PSY 361 Sensation and Perception
- PSY 365 Physiological Psychology
- PSY 371 History and Systems

Other courses offered by the Department can be taken as electives to complete the 43-hour minimum. PSY 101J and 102 are prerequisites for all additional psychology courses.

In addition, successful completion of the following three non-psychology courses is required for certification as a psychology major. These courses should be completed by the end of the sophomore year:
- MAT 100 College Algebra (Prerequisite for PSY 201)
- BIO 105K Biological Principles
- BIO 211 Human Anatomy and Physiology (Prerequisite for PSY 365)

Psychology 101J and 102 should be elected no later than the sophomore year by students who plan to major in psychology. All majors are required to elect PSY 201D and PSY 205 no later than their junior year. PSY 201D may be taken concurrently with PSY 102. No grade of D in any psychology course will count toward fulfillment of the major requirement.

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 consulta-
tion with their major advisor, further courses in psychology and also include in their programs study in related fields, such as mathematics, biology, philosophy, sociology, anthropology, and computer programming.

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.

PSY 101J 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 101J. Cr 3.

PSY 201D 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. Prerequisites: PSY 101J and MAT 100D or permission of the instructor. 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: PSY 201D. Cr 3.

PSY 220 Developmental Psychology
A study of the factors in human psychological growth traced from genetic predisposition through the prenatal and postnatal periods, childhood, adolescence, adulthood and aging to death. The major theorists relevant to each developmental period are considered. Prerequisites: PSY 101J and 102. NOTE: This course does not count toward major credit. Cr 3.

PSY 223 Child Development

PSY 224 Adolescent Development
A systematic study of the behavioral and psychological development of the adolescent. The adolescent personality and problems of adjustment in relation to the family, the school, and the community. Prerequisites: PSY 101J and 102. 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: PSY 101J and 102. NOTE: This course does not count toward major credit. 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: PSY 101J and 102. Cr 3.

PSY 311 Industrial Psychology
Critical treatment of research methods in personnel selection and evaluation and current theories of individual behavior in complex organizations such as government and business. Prerequisites: PSY 101J and 102. Cr 3.

PSY 320 Psychology of Personality
Consideration of current issues and findings in personality. Current research in such areas as locus of control, anxiety, field dependence, interpersonal trust, repression-sensitization, sensation-seeking, authoritarianism, need for achievement, and extroversion. A group research project is required. Prerequisites: PSY 101J and 102. Fall semester only. Cr 3.

PSY 330 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: PSY 101J and 102. Cr 3.

PSY 333 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. Prerequisites: PSY 101J and 102. Cr 3.

PSY 335 Deviations of Childhood
Intensive readings and discussion of the etiology and manifestation of deviant patterns...
of behavior and functioning in children. Problems relating to the identification and management of such deviations are considered. Prerequisites: PSY 101J and 102 or permission of the instructor. Spring semester only. 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: PSY 101J, 102. 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: PSY 101J and 102. Cr 3.

PSY 343 Psychological Test Theory
The theoretical and statistical concepts underlying the development of various psychological tests. Individual and group tests of intelligence, personality, aptitude, and interest are examined and evaluated in terms of these concepts. Uses and abuses of psychological tests are considered. Prerequisite: PSY 201D or instructor's permission. Fall semester only. 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: PSY 101J and 102. Cr 3.

PSY 351 Learning Laboratory
An introduction to laboratory experiences designed specifically to demonstrate the basic principles of behavior conveyed in PSY 350. Topics include positive reinforcement, extinction, shaping, discrimination, schedules of reinforcement, generalization, and others. Prerequisites: PSY 101J and 102. PSY 350 must be taken either prior to or concurrently with PSY 351. Cr 1.

PSY 352 Psychology of Motivation
A survey of theory, research methods, and experimental findings related to the search for the determinants of human and animal behavior. The course requires a research paper on a topic of interest to the student, and the planning of an experiment growing out of that interest. Laboratory. Prerequisites: PSY 101J and 102. Cr 3.

PSY 355 Research in Personality and Social Psychology
Examination of current research in personality and social psychology. Intensive experience in designing, executing, reporting, and evaluating research in personality. This will include a research project. Prerequisite: PSY 320 or permission of instructor. Spring semester only. Cr 3.

PSY 360 Cognitive Processes
A review of contemporary experimental and theoretical work on human information processing. Topics include Pattern recognition, memory, attention, mental imagery, decision making, language, problem solving, and creativity. Emphasis will be placed on research methodology and on the interpretation of experimental findings. Prerequisites: PSY 101J and 102 or permission of the instructor. Cr 3.

PSY 361 Sensation and Perception
An examination of perceptual processes in selected sensory systems. Emphasis on experimental methodology, research findings, and theoretical interpretations. Prerequisites: PSY 201D and 205. 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: BIO 105K and 111; PSY 101J, 102. Cr 3.

PSY 366 Drugs, Mind, and Behavior
The physiological effects of drugs in relation to their behavioral and mental effects are examined in light of current research. A major focus is what such agents indicate about the workings of the mind and body. 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.

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: 15 hours in psychology and/or instructor's permission. 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 101J, 102, 333 and/or permission of the instructor. Spring semester only. Cr 3.
PSY 385 Contemporary Psychotherapies
A survey of contemporary psychotherapies including Gestalt therapy, logotherapy, bioenergetics, reality therapy, transactional analysis, and rational-emotive therapy. Seminar format. This course is designed for advanced psychology majors planning to go on to graduate school in clinical or counseling psychology. Prerequisite: permission of the instructor. Fall semester only. Cr 3.

PSY 390 Selected Topics in Psychology
A critical in-depth investigation of one of various topics and issues in different areas of psychology (e.g., experimental, social, clinical, child-developmental, etc.) Each student is expected to complete a research project on the topic for the semester. Consult the Psychology Department for topics offered. Prerequisite: permission of the instructor. Cr 3.

Social Work

Chair of the Department: Vincent E. Faherty, 316 Masterton Hall, Portland
Professors: Faherty, Romanyshyn (emeritus), Steinman (emeritus); Associate Professors: Deprez, Kreisler (emeritus), Lazar, Lieberman, Rich; Assistant Professors: Strom, Wagner; Field Work Coordinator: Asen

The program in social work prepares the student for the professional practice of social work at the entry level.

The social work curriculum of the Department is accredited by the Council on Social Work Education at the baccalaureate level. 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. If accepted the student may complete an M.S.W. degree program in approximately one year instead of two.

Admission to the Social Work Department is initially on a provisional basis. Formal admission occurs after the student has completed the Department's admission application and has had an admission conference with his or her faculty advisor. This normally takes place in the second semester of the sophomore year. Transfer students who select social work as their major should meet with their faculty advisor as soon as possible after they are admitted to the University.

Included in the social work course requirements is one academic year of field work. During this year the student interns for 480 hours in his or her field assignment, which takes place in a community agency. 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 Department and in making available field instruction resources including supervision for students of the Department. All students should refer to Departmental guidelines governing field work for more information.

In planning their program, provisional and admitted students must regularly consult with their faculty advisor. Such consultation is designed to help the student explore career objectives, review Departmental requirements, design the best possible combination of required courses and electives, determine proper course sequencing, and facilitate a productive relationship between the student and the Department.

The students of the Department have organized a Social Work Student Association. The organization seeks to facilitate communication between students and faculty, ensure student involvement in Departmental deliberations, provide for professional growth, and respond to issues and problems in the community. Student representatives attend faculty meetings and serve as advisory members on the Department's peer and curriculum committees.
Bachelor of Arts in Social Work

The minimum number of credits (exclusive of the University’s Core curriculum) required for the major: 40.

The major in social work consists of 40 credits in required social work courses. In addition, 40 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.

Required Social Work Courses

- SWO 101J Introduction to Social Welfare
- SWO 201 Introduction to Social Work
- SWO 352, 353 Methods of Social Work Practice I and II
- SWO 354, 355 Field Work I and II
- SWO 361 Dynamics of Organizations, Professions and Consumers
- SWO 370 Human Behavior in the Social Environment
- SWO 433 Social Work Research
- SWO 434 Social Work Research Laboratory
- SWO 450 Social Problems and Social Welfare Policy
- SWO 456 Issues in Social Welfare and Social Work

Required Foundation Courses in Other Departments

Substitutions for, or waivers of any of these courses, require the written approval of a student’s advisor.

- ENG 100C College Writing
- ECO 201 Principles of Macroeconomics
- BIO 100K Biological Basis of Human Activity
  OR
- BIO 101K Biological Foundations
  OR
- BIO 105K Biological Principles I
- BIO 102K Biological Experiences
  OR
- BIO 106K Laboratory Biology I
- POS 101J Introduction to Government
  OR
- POS 102J People and Politics
- PHI (Any introductory philosophy course)
- PSY 101J, 102 General Psychology I and II
- SOC 100J Introduction to Sociology
- SOC 371 Sociology of Minorities

Four other advanced level sociology and/or psychology courses. These four other courses are selected with the advice and approval of the student’s advisor.

Students are required to achieve a grade of C− or better in all required Social Work and required foundation courses.

SWO 101J 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 201 Introduction to Social Work
An introduction to the practice of social work focusing on the nature of intervention, the roles and functions of social workers in the delivery of services in various settings, and beginning practice skills. The course enables a student to make a more informed decision about his or her entry into the profession. Field observation by student required. Prerequisite: SWO 101J. Cr 3.

SWO 265 Women—Social Change
Examines the ways our culture affects and is affected by women in the areas of physical and mental health throughout their lifespan. Emphasis will be placed on an assessment of the problems women face in today’s world as well as personal and political approaches to these problems. Cr 3.

SWO 266 Concept of Self and the Handicapped Person
To enhance effective interaction and communication with handicapped persons, issues are examined from the perspectives of society and
of the individual (handicapped and non-handicapped). Topics include basic human needs and self-image, independence-dependence, anger-frustration, failure, the power of guilt and shame. All students participate in sensory exercises. Cr 3.

SWO 267 Relating Professionally to Homosexuality
Provides an understanding of varying concepts of homosexuality. Employs recent theoretical, empirical and clinical literature to assess attitudes toward homosexuality. Examines motivation and skills to achieve constructive interaction between the professional and the homosexual. Cr 3.

SWO 274 Aging and Social Policy: A Cross-Cultural View
Examines similarities and differences between simple and complex societies in their treatment of processes of aging. Against this background the position of older Americans is considered in relation to various social institutions, together with the origin and implementation of social policies affecting them. Cr 3.

SWO 275 Developmental Services to the Aging
Policy, administration, and implementation of human services to older people are studied from a developmental standpoint. Examines implications of age bias (and its modification) for the nature of service. SWO 274 recommended but not required. Cr 3.

SWO 278 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. Cr 3.

SWO 279 Skills for Serving the Frail Elderly
Enhances values and skills for guiding families to plan with (rather than for) older relatives; for performing periodic, differential functional assessments of clients' remaining strengths as well as their limitations; for utilizing the network of community supports; for discerning appropriate institutionalization and for discharge planning; and for advocacy and assertiveness with and on behalf of the frail elderly. Cr 3.

SWO 288 Substance Use and Abuse: Alcohol and Other Drugs
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 affects of each substance. Exploration of prevention and treatment models, with special reference to those in use locally. Cr 3.

SWO 352 Methods of Social Work Practice I
An introduction to basic concepts and skills in social work interviewing and in the problem-solving approach within the framework of systems theory. The course includes a study of the values and knowledge base of social work skills. Class discussion and assignments are based on field work experience (SWO 354) which must be taken concurrently. Fall semester only. Prerequisites: SWO 101J, 201. Cr 3.

SWO 353 Methods of Social Work Practice II
A continuation of SWO 352 covering application of basic social work skills to areas of practice such as community organization, crisis intervention, group work. Class discussions and assignments are based on field work experience (SWO 355) which must be taken concurrently. Spring Semester only. Cr 3.

SWO 354 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. Prerequisites: SWO 101J, 201; 352 (concurrent). Cr 3.

SWO 355 Field Work II
A continuation of SWO 354. Spring term only. Prerequisites: SWO 352 and 354; SWO 353 concurrently. Cr 6.

SWO 361 Dynamics of Organizations, Professions and Consumers
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. Prerequisites: SWO 352, SWO 354 or permission of instructor. Cr 3.

SWO 364 Comparative Social Welfare Systems
A study of social welfare programs in advanced industrial and in developing societies, in market and non-market economies and in democratic and authoritarian political systems. Prerequisite: SWO 450 or permission of instructor. 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 101J, 201; PSY 101J, 102 and introductory course in biology. Cr 3.
SWO 380 Child Welfare
A study of the policy and practice issues affecting children in current society, including implications for social services and institutional change. Prerequisite: SWO 101J or permission of the instructor. Cr 3.

SWO 385 Sexual Abuse of Children and Adolescents
This course will examine the application of social work skills and knowledge to the issue of sexual abuse of children and adolescents. An up-to-date review of the latest research and clinical findings will be presented. Attention will be given to a variety of issues as well as the value dilemmas presented by client situations. Prerequisite: junior standing or permission of the instructor. 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 faculty. Prerequisite: Department permission and application prior to registration. Cr var.

SWO 410 Management of Social Services
This course provides a general introduction to the major theories, principles, and methods of management of social service agencies in the public, voluntary, and private sectors. The four essential functions of management (planning, organizing, influencing, and controlling) are discussed in detail with specific examples drawn from social service contexts. The unique roles and responsibilities of the various levels of management (supervisor, consultant, executive) are explored. Finally, current and emerging issues facing the social welfare system in the United States, such as accountability, marketing, volunteerism, etc., are introduced. Prerequisite: senior standing or permission of instructor. Cr 3.

SWO 433 Social Work Research
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-researcher." Prerequisites: SWO 101J, MAT 100D or MAT 105D; any introductory statistics course (MAT 120, or PSY 201D, or SOC 207D); senior standing or permission of instructor. Cr 3.

SWO 434 Social Work Research Laboratory
The application of research methods to actual social problems or issues relevant to the profession of social work. May be taken concurrently with, or after the completion of SWO 433. Cr 1.

SWO 450 Social Problems and 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 which determine the organization and direction of social welfare programs. Prerequisites: SWO 352, SWO 354, ECO 201J, POS 101J or 102J, or permission of instructor. Cr 3.

SWO 452 Methods of Social Work Practice III
Provides further exploration of the theoretical knowledge and practice skills involved in utilization of particular interventive methods (e.g., child advocacy, organizational change and/or the more focused knowledge, methods, and skills needed for effective intervention with a particular population at risk: adolescents, the frail elderly, substance abusers). Prerequisite: permission of instructor. Cr 3.

SWO 455 Field Work IV
A continuation of SWO 454. Cr 3.

SWO 456 Issues in Social Welfare and Social Work
Senior seminar for social work majors that seeks to integrate class and field work experience. Open to others by permission only. Must be taken in student's final semester. Cr 3.
Sociology

Chair of the Department: David C. Fullam, 120 Bedford St., Portland
Professors: Beirne, Monsen; Associate Professors: Anspach, Fullam, Grzelkowski, Lehman, Messerschmidt; Assistant Professors: Bowditch, Kingsland; Adjunct Associate Professor: Fortinsky

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. Although teaching remains the dominant activity among the more than 15,000 sociologists today, other forms of employment are growing. An undergraduate major in sociology offers valuable preparation for careers in social work, social research, politics, public administration, law, business, and education.

The Department offers degree programs in both sociology and criminology.

General Sociology The general sociology curriculum provides students with a broad background and exposure to a range of substantive areas in the discipline. This curriculum affords the greatest degree of flexibility in the selection of courses within the major.

Minor in Sociology 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 the schools of Nursing and Business, the College of Education, and non-social science disciplines in the College of Arts and Sciences.

Criminology Program

The Department of Sociology and Criminology also offers a bachelor of arts degree and a minor in criminology. The program provides an integrated and coherent curriculum focusing on the structures, institutions, and activities that define certain social behavior as criminal in modern society. The minor is intended for those students majoring in other areas of study but who desire systematic exposure to essential aspects of the field of criminology. For more information please see the catalog entry for Criminology or contact the Department.

Alpha Kappa Delta

Juniors and seniors who have demonstrated an interest and involvement in sociology, who have completed at least four sociology courses, and who have accumulated at least a 3.0 grade point average in sociology courses at the University are eligible for nomination to Alpha Kappa Delta, the national sociology scholarship and honor society.

Student Involvement

Student involvement is a high priority for the Department. Students are involved in the research projects of the Department as well as the everyday administrative and advising life of the Department. Representatives of the Sociology Students' Association and the Criminology Students' Association are involved in all departmental activities and decisions as full voting members of the Department. These student representatives are elected by members of the Student Associations each April, although vacancies sometimes occur during the year. Students who are interested in this kind of involvement are encouraged to talk to departmental faculty.

Internships

The Department of Sociology and Criminology offers a strong and ongoing internship and work experience program. The expanded program helps place students in community agencies and organizations, including neighborhood organizations and a variety of agencies dealing with youth
services. Credit internships actively seek to bring together student academic work and community involvement. Students interested in an internship placement are encouraged to meet with Professor Fullam, internship coordinator.

Colloquia
The Department of Sociology and Criminology sponsors a colloquium series that seeks to bring together faculty and students in active discussion around a variety of topics. Several colloquia are scheduled each semester with faculty, students, or visiting scholars making presentations that serve as the focus of discussion. A schedule of current colloquia is available from the departmental office.

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 and Sciences, and the University's Core curriculum.

Bachelor of Arts in Sociology
The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 36.

- Majors are encouraged to complete their courses in Methods of Social Research (SOC 205), Statistical Methods (SOC 207D), Sociological Theory I (SOC 300) and Sociological Theory II (SOC 301) relatively early in their academic careers.

Common Requirements
- SOC 100J Introduction to Sociology
- SOC 205 Methods of Social Research
- SOC 207D Statistical Methods for Social Research
- SOC 300 Sociological Theory I
- SOC 301 Sociological Theory II

Distribution Requirements (three hours from each of the following areas)
- SOC 310-319 Social Processes
- SOC 330-339 Social Institutions
- SOC 350-369 Units of Social Life
- SOC 370-379 or SOC 215, SOC 216 or SOC 270 Social Problems

Electives in Sociology (9 hours)

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

- Nine credit hours are required courses; the remainder are electives.
- Required Courses: SOC 100J; SOC 205; SOC 300; sociology electives*
- Each student minoring in sociology elects a minimum of three upper-division courses from those offered by the Department. These courses, chosen in consultation with the minor advisor, reflect the preprofessional or other interests of the student.

Note: Advisor to sociology minors: Professor David Fullam.

Major Credit and Grade Policy
There are prerequisites for most major credit courses. See the departmental course listings for particulars. 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.
Introducing the Discipline

SOC 100J 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.

Tools of the Discipline

SOC 205 Methods of Social Research
Conceptualization and research design, data collection and analysis, logic of inquiry and research techniques. Prerequisite: SOC 100J or permission of instructor. Offered each semester. Cr 3.

SOC 207D Statistical Methods for Social Research
Emphasis on the uses of statistics in the organization, interpretation, and presentation of research data. Measures of association and correlation; testing of hypotheses, probability and sampling. Prerequisite: completion of mathematics proficiency. Offered spring semesters. Cr 4.

SOC 300 Sociological Theory I
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. Prerequisites: SOC 100J and two other SOC courses, or permission of instructor. Offered fall semesters. Cr 3.

SOC 301 Sociological Theory II
An investigation of contemporary sociological theory. Traces descent of the classical statements through to the present, and identifies both linkages and discontinuities in sociological analysis. Attention is also given to the socio-cultural settings within which various schools of sociological theorizing presently flourish. Prerequisites: SOC 300 and two additional SOC courses, or permission of the instructor. Offered spring semesters. Cr 3.

SOC 310 Social Change
Analysis of sociocultural factors related to social change and the dynamics of the change process. Prerequisite: SOC 100J or permission of instructor. Cr 3.

SOC 312 Class and Inequality
A systematic assessment of structured social inequalities in wealth, power, and status in industrialized societies. Emphasis is placed on assessing social policies employed to reduce, ameliorate, or sustain such inequalities. Prerequisite: SOC 100J or permission of instructor. Offered spring semesters. Cr 3.

SOC 315 Self and Society
This course focuses on the intersection of biography, history, and social structure. In doing so it attempts to help us define the individual as a product of society and society as a product of human interaction. The linking of private life with public issues is a central objective of the course. Topics include but are not limited to symbolic interactionism, socialization, dramaturgy, the power of social groups, charisma, and definitions of "normality" through an exploration of the politics of experience. Prerequisite: SOC 100J or permission of instructor. Cr 3.

SOC 316 Sociology of Gender
This course investigates gender as a social process which is continually created and reinforced in social life. It explores the often subtle relationship between gender and life chances, and an analysis of gender in economic and cultural history. Sexuality, work, and the feminization of poverty, gender socialization, and feminist utopias will also be topics of investigation. Prerequisite: SOC 100J or permission of investigation. Prerequisite: SOC 100J or permission of instructor. Offered fall semesters. Cr 3.

CRM/SOC 317 Gender and Crime
This course provides a feminist analysis of gender as related to the criminality of both males and females. The course focuses on gender and inequality, the gender bias of criminological theory, and the role gender plays in various forms of criminality, from interpersonal violence to syndicated and corporate crime. Prerequisites: SOC 100J and CRM/SOC 215. 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. Prerequisites: SOC 100 and junior or senior standing. This course is limited to 25 students. Cr 3.
Social Institutions

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 100J 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 100J or permission of instructor. Cr 3.

SOC 332 Industrial Sociology
Social factors involved in the development of industry; social consequences of technological change; social organization within industry; problems encountered within the social structure(s) of industry. Prerequisite: SOC 100J or permission of instructor. Cr 3.

SOC 333 Sociology of Health
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 100J 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 100J or permission of instructor. Cr 3.

SOC 335 Sociology of Sport
A critical examination and analysis of the sports culture in American society. Particular emphasis will focus on the manifest and latent functions of sport-related human social behavior as it relates to the promotion of particular social values, processes, and institutions. Prerequisite: SOC 100J or permission of instructor. Cr 3.

SOC 336 Law and Society
An examination of the interrelationships between law and society, focusing on law, custom, and morality as well as law in relation to social goals. Specific examples of how law functions in the context of the social structure will be used to highlight the major theoretical models used traditionally in this area. Prerequisite: SOC 100J or permission of instructor. Offered fall semesters. Cr 3.

SOC 337 Juvenile Justice
Examination and analysis of juvenile justice philosophies, processing, and treatment with an emphasis on historical and comparative materials. Prerequisite: SOC 100J or permission of instructor. Cr 3.

Units of Social Life

SOC 350 Urban Society
This course focuses on the sociological study of urban existence, urban policy, and planning. Urban life is examined in context of the political, economic, and organizational aspects of contemporary American society. Topics include approaches to the study of urban society, varieties of urban experience, use of urban space, urban institutions and social problems, selected issues in planning, and policy making. Comparative materials on urban life of other countries are used when appropriate. Prerequisite: SOC 100J or permission of instructor. Cr 3.

SOC 352 Demography
Fertility, mortality, and migration as they impact on every aspect of life whether political, economic, or social and the reciprocal impact of these on the population variables. Specific applications include: the relationship of population growth and aging; population growth and the status of women; population growth and urbanization; food and population policy; population growth and economic development; population characteristics and life changes; population characteristics in marketing; crime and the age structure; fertility changes and the labor market and the impact of immigration. Offered fall semesters. Cr 3.

SOC 353 Social Movements
The rise and developments of social movements emphasizing structuring and institutionalization. Social movements and socio-political change. Prerequisite: SOC 100J or permission of instructor. Cr 3.

SOC 355 Politics and Society
Possibilities and limitations of political democracy in industrial, bureaucratic society. Capitalism and socialism, their underlying ideologies, and the resulting political struc-
SOC 357 Organization: Individual 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 100J or permission of instructor. Cr 3.

SOC 358 Sociology of Women's Work
This course will introduce the student to the most recent theoretical and empirical research on women's work in the family and in the paid labor force. Sociological definitions of work, theories of discrimination, and the role of ideology will be examined. Students will evaluate contemporary strategies to equalize pay and employment opportunities. Prerequisite: SOC 100J or permission of instructor. Cr 3.

SOC 361 Sociology of Franco-Americans
Description and analysis of the development and present state of the culture, institutions and social structure of Americans of French-Canadian descent in the United States. Comparisons with Quebec and Acadia will be made when pertinent. Prerequisite: SOC 100J or permission of instructor. Cr 3.
**Topics in Sociology**

**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 100] or permission of instructor. Cr 3.

**SOC 381 Topics in Social Policy**
Occasional courses developed around substantive issues such as poverty, health care, or crime in the area of social policy. Through the examination of concrete policy areas, students can acquire a conceptual knowledge of social policies, their historical and ideological foundations, and an introduction to the techniques of social policy analysis. Prerequisite: SOC 100] or permission of instructor. Cr 3.

**SOC 385 The Sociology of Soviet Marxism**
This course provides analysis of the key theoretical texts of Bolshevism produced between 1917 and 1936. Against the background of both classical Marxism and the Russian revolutionary tradition, the course focuses on the reception of such concepts as class domination, the dictatorship of the proletariat, socialism, the withering away of the state, and communism. Prerequisite: SOC 100] or permission of instructor. Cr 3.

**Individualized Instruction and Internships**

**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 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. Offered each semester. Contact departmental internship coordinator for details. Cr 4 to 6.

**Theatre**

*Chair of the Department:* Walter Stump, Russell Hall, Gorham

*Professors:* Stump, Rootes; *Associate Professors:* Kading, Power, Steele; *Assistant Professor:* Picinich; *Technical Director:* Fauver; *Costumer:* Kinne

The Theatre Department offers a four-year program leading to a B.A. degree in theatre. An undergraduate degree in theatre offers valuable preparation for careers in the theatrical activities on an educational or professional level, as well as other nonrelated disciplines.

All students are reminded that, in addition to meeting departmental requirements for a major, they must also meet the requirements of the College of Arts and Sciences as well as the Core curriculum requirements.
Bachelor of Arts in Theatre

The minimum number of credits (exclusive of the University’s Core curriculum) required for the major: 64.

Students with the intent to major must complete the following courses during their first year:

First semester
- THE 120 Acting I
- THE 130 Theatre Workshop
- THE 134 Theatre Production

OR
- THE 135F Stagecraft I and THE 136F Stagecraft Lab

Second semester
- THE 121 Acting II
- THE 130 Theatre Workshop
- THE 150 Play Analysis
- THE 134 Theatre Production

OR
- THE 135F Stagecraft I and THE 136F Stagecraft Lab

THE 134 and THE 135F/136F are to be taken alternate semesters.

All majors or intended majors are required to take a half unit of theatre workshop (THE 130, 131, 132, 133) per semester.

Theatre students who fail to maintain a 2.5 GPA in Theatre courses and a 2.0 overall GPA will not be allowed to participate in any main stage productions in either an acting or technical capacity (except those lab duties or course requirements related to coursework) until the student has raised his/her grades to the required level.

Students are encouraged to meet with the faculty or staff whenever questions arise or problems occur.

The following courses are required:

- THE 120 Acting I
- THE 121 Acting II
- THE 130 Theatre Workshop (to be repeated once)
- THE 131 Theatre Workshop (to be repeated once)
- THE 132 Theatre Workshop (to be repeated once)
- THE 133 Theatre Workshop (to be repeated once)
- THE 134 Theatre Production
- THE 135F Stagecraft I
- THE 136F Stagecraft Lab
- THE 139 Make Up
- THE 150H Play Analysis
- THE 170F Public Speaking or THE 270 Oral Interpretation
- THE 220 Acting III
- THE 225 Directing I
- THE 231 Costuming
- THE 232 Costuming Lab
- THE 235 Stagecraft II
- THE 236 Stagecraft II Lab
- THE 330 Lighting Design or THE 331 Scene Design
- 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 354 Dramatic Literature and Theatre History IV

At the end of the sophomore year, students, after discussion with the faculty, must select an area emphasis by taking 9 additional units selected from one of the following tracks. Each track may have additional requirements (e.g., auditions or portfolios).

**Acting track:** select units from the following: Acting IV, Acting V, Acting VI, Dance, Acting for the Camera

**Directing track:** select units from the following: Directing II, Directing Project, any upper division Theatre course

**Literature track:** Playwriting, Journalistic Drama Criticism, Advanced Playwriting, Selected Topics in Dramatic Literature and Theatre History (may be repeated)
Design/Technical track: Lighting and/or Scene Design, Advanced Costuming, Topics in Design, Selected Topics in Dramatic Literature and Theatre History

Vocal Arts track: Oral Interpretation and/or Public Speaking, Reader's Theatre, Advanced Oral Interpretation, Acting for the Camera, Forensics, Professional Audition and Marketing Techniques

General track: 9 units of upper division Theatre courses to be chosen as advised.

Theatre Department Production Requirements

The Theatre Department requires each major to participate in Theatre Department functions by completing Theatre Workshop courses (University course credit) and Theatre Department Projects (Department credit only). Credit for these may be earned separately or concurrently according to departmental guidelines. Each Theatre major must complete 4 units of Theatre Workshop (THE 130, 131, 132, 133); 1/2 unit each for 8 semesters. Theatre Workshop courses require, in part, participation in an approved department project with a point value of 8 or more.

Theatre Department projects are assigned point values (relative to their complexity) by the Theatre Department. Theatre majors must accrue 80 points of project credit for graduation. These projects must be completed in a variety of discipline areas. To insure this variety, project points must be distributed as follows: acting area—24 points minimum; technical area—24 points minimum; and optional area—32 points minimum.

A listing of approved projects and their specific point values is available at the Theatre Department office.

In the event that a student repeatedly auditions or requests technical area positions for Department productions but is not given a role or a crew position, this effort will be considered a good faith effort on the part of the student and may fulfill the acting or technical area minimum point distribution requirement.

Presence at all strikes for all productions in which the students participate whether as a crew or cast member is required.

Student Participation

The theatre, like so many other disciplines, thrives and, indeed, succeeds in direct proportion to the quantity and quality of group effort. The best theatre "product," however, can exist only through the participation of all theatre majors, minors, and other interested students.

Many of the courses offered by the Department include laboratory hours in which students participate in the construction of costumes, scenery, properties, and the design of sound and lighting. Thus the student is able to incorporate and apply classroom theory to actual experience.

Southern Maine is fortunate to have any number of theatres producing entertainment at any given time. But, the theatre is a strict and demanding discipline, and the time consumed in production and rehearsal is extensive. Therefore, in order to safeguard students from over-extending themselves unwittingly, the Theatre Department strongly recommends that any major's involvement in theatre activities during the academic year other than those of the University Theatre Department be approved by the Department.

Minor in Theatre

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

The courses required are THE 134, THE 150, THE 120 or THE 220 on permission of instructor and four other courses chosen in consultation with a Theatre Department advisor in accordance with the interests of the student.
THE 101G Introduction to Drama
A lecture-discussion course designed to provide students with a conception of the development of the theatre and its literature. The course consists of a survey of Greek, medieval, Elizabethan, French neo-classic, and 18th, 19th and 20th century theatre and drama. Cr 3.

THE 102F Acting: Performance:
This course will introduce core students to theatre through the eyes of the performer. The student 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 103F Contemporary Dance I
Contemporary Dance I is designed for beginning dancers with no formal dance training or no dance training in recent years. This class introduces basic contemporary dance skills and vocabulary. The class is divided equally into two areas of study. Physical and technical development are learned through strengthening and stretching exercises and body isolations. Proper body alignment is stressed for the most energy-efficient and injury-free movement both in and out of class. Dance phrases are designed to teach rhythmic and locomotor skills. Equal time will be devoted to studying choreographic techniques wherein students will learn how dances are created by creating their own. The Art of Making Dances by Doris Humphrey, plus selected writings by more contemporary choreographers, will be used in the class. The class will be expected to attend several local dance performances during the semester. Prerequisite: THE 120 or THE 121 or permission of the instructor. Cr 3.

THE 120 Acting I
This is a practicum course designed to introduce students to basic elements of the creative process of acting. Students will be introduced to body awareness, methods of relaxation and physical elongation, exploration of creative process, freeing the vocal mechanism, elementary stage combat and improvisation. Course culminates with student presentation of a performance piece that has been developed through improvisation. No prerequisite. Cr 3.

THE 121 Acting II
This is a practicum course designed to continue exploring the body/voice relationship through the use of improvisation with emphasis on text. Prerequisite: THE 120. Cr 3.

THE 130 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 3.

THE 131 Theatre Workshop II
A continuation of THE 130. Prerequisite: THE 130. The course may be repeated for Cr 3.

THE 132 Theatre Workshop III
A continuation of THE 131. Prerequisite: THE 131. The course may be repeated for Cr 3.

THE 133 Theatre Workshop IV
A continuation of THE 132. Prerequisite: THE 132. The course may be repeated for Cr 3.

THE 134 Theatre Production
A survey/lab course designed to familiarize students with the organizational procedures of the theatre production process. Areas of study include stage management and the running of backstage crews in properties and wardrobe. Additional study in the acquisition and construction of stage properties as well as the operation of lighting and sound equipment will prepare students to take on a responsible role as a trained member of a stage production team. This course includes a crew requirement for a University theatre production. Cr 3.

THE 135F Stagecraft I
A lecture/discussion/lab 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 use of shop tools; basic methods of construction, rigging, and moving scenery for the stage. The lecture portion of the course will be supplemented by actual construction, painting and mounting of a major University theatre production. (Concurrent enrollment in THE 136F Stagecraft Lab required.) Cr 3.

THE 136F Stagecraft Lab
A lab course allowing practical application of theory discussed in THE 135F. (Concurrent enrollment in THE 135F required.) Cr 3.

THE 139 Make-up
The course will emphasize the fundamentals of design and application of theatrical make-up. Specific areas of study will include the use of painted highlight and shadow to alter facial features and the actual application of make-up, giving the student the opportunity to practice realistic and abstract make-up techniques. An additional 30 hours of production work will be required of each student provid-
ing the opportunity to apply classroom techniques to the actual performance experience. Cr 3.

THE 150H Play Analysis
Representative dramas for the stage are read, discussed and criticized using the Aristotelian elements of plot, character, thought, diction, music, and spectacle as analytical tools. Prerequisite: ENG 009. Cr 3.

THE 170F 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 171 Intercollegiate Forensics
A course designed to acquaint students with intercollegiate competition. Students will compete at various forensic tournaments throughout the East. Permission of instructor is required. Cr 1.

THE 172 Intercollegiate Forensics

THE 173 Intercollegiate Forensics

THE 174 Intercollegiate Forensics

THE 203F Contemporary Dance II
Contemporary Dance II is for a more experienced dance student. Expertise in executing basic dance skills (proper alignment, parallel and turned out positions, slides, triplets) and knowledge of dance vocabulary are assumed. Through practicing more complicated movement exercises and dance patterns students will increase their technical dance skills and understanding of kinesiology. Entire dances or portions of contemporary choreography will be taught in this class. Choreographic work will consist of movement character development using the effort-shape system of movement analysis. This study of movement qualities will be taken from Cecily Dell's work in A Primer for Movement Description. Students will be expected to attend several dance performances during the semester. May be repeated once for credit. Prerequisite: THE 103F or permission of instructor. Cr 3.

THE 220 Acting III
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. Prerequisites: THE 120 and 121 or permission of instructor. Cr 3.

THE 221 Acting IV
This is a practicum course focusing on methods of personalization, linear objective and plot objective, which are all tools used to explore characterization. Emphasis will also be given to preparation for audition. Prerequisite: THE 220 or permission of instructor. Cr 3.

THE 223 Mime
Class instruction emphasizes mime technique, basic illusions, body graphics, and silent character studies. Solo and group work integrates elements of these four (4) major areas. Students gain an understanding of the historical perspective of classical mime and its influence on contemporary approaches to the art form. Prerequisite: Fundamentals of Acting (THE 120 or THE 121) or permission of the instructor. Cr 3.

THE 225 Directing I
This course is designed to train students in theatrical organization and rehearsed techniques. It encompasses composition, picturization, movement, and rhythm. Some practicum is involved. Prerequisite: THE 150H or permission. 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. Cr 3.

THE 231 Costuming I
The course will consist of an introduction to costuming, the techniques and basic materials used in design and construction of an effective production. Costume design will be studied in terms of defining basic elements of line, color, and texture; fulfilling script requirements and analyzing characters; and coordinating with other designers. Sewing skills and rendering techniques will be introduced. The lecture portion of the course will be supplemented by actual construction and mounting of a University theatre production. (Concurrent enrollment in THE 232 Lab required.) Cr 3.

THE 232 Costuming I Lab
The course is a laboratory session that allows practical application of theory discussed in THE 231. (Concurrent enrollment required in THE 231). Cr 1.

THE 235 Stagecraft II
A lecture/discussion/lab course in basic theatrical drafting/graphic practices relating to theatrical construction and design techniques. The primary emphasis of the course will be the execution of various types of theatrical design and construction, painting and
mounting of a major University theatre production. (Concurrent enrollment in THE 236 Stagecraft Lab required.) Prerequisite: THE 135F or instructor consent. Cr 3.

THE 236 Stagecraft II Lab
A lab course allowing practical application of theory discussed in THE 235. (Concurrent enrollment in THE 235 required.) Cr 3.

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 150H. Cr 3.

THE 270F 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. Cr 3.

THE 271 Creative Dramatics
Study of problems in 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 272 Creative Radio Performance
A study in the creative and performance of material designed to be performed exclusively through the medium of radio. Cr 3.

THE 320 Acting V
This course is an in-depth examination of the use of the actor's voice, drawing particular attention to work with heightened verse, using Shakespearean source material. Emphasis will also be given to preparation for audition. Prerequisite: THE 221. Cr 3.

THE 321 Acting VI
This is a practicum course for advanced acting problems, making an in-depth study of the plays of one specific playwright (e.g., Chekhov, Ibsen, O'Neill). Emphasis will also be given to preparation for audition, using material from the specific playwright. Prerequisite: THE 221. Cr 3.

THE 325 Directing II
Designed to train directors in theatrical organization and rehearsal techniques. Encompasses composition, picturization, movement and rhythm. Course involves both contemporary theory and practical application. Prerequisites: THE 225, 135F Senior or junior with permission. Cr 3.

THE 330 Stage Lighting

THE 331 Scene Design
Lecture and practicum in stage scenic design. Emphasis on the visual art and drafting of designs. Prerequisites: THE 135F THE 235, and THE 150H or permission of instructor. Cr 3.

THE 332 Advanced Costuming
This course will continue the study of costume design begun in THE 231. 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 231 or permission of the instructor. Cr 3.

THE 336 Theatre Management
Investigation of educational and professional theatre management roles, including: managing director; business manager; box office manager; publicity director; house manager. Practicum required. Cr 3.

THE 351 Dramatic Literature and Theatre History I
A study of the development of theatre and drama from its origins through the medieval period, covering ancient Greek, Roman, and Oriental theatre and drama. Representative authors include Sophocles, Euripides, Plautus, Seneca, the Wakefield Master, and Chikamatsu. Critics include Aristotle and Horace. Prerequisite: THE 150H for majors, ENG 100 or ENG 101C for non-majors. Cr 3.

THE 352 Dramatic Literature and Theatre History II
A study of theatre and drama from the Renaissance, Neo-classical and Restoration periods to 1800. Representative authors include Machiavelli, de Vega, Shakespeare, Jonson, Racine, Moliere, and Goldoni. Critics include Castetvetro, Chapelain, Dryden, Johnson and Diderot. Prerequisite: THE 150H for majors, ENG 100C or ENG 101C for non-majors. Cr 3.

THE 353 Dramatic Literature and Theatre History III
A study of theatre and drama from Romantic period to World War II, covering early realist and anti-realist theatre. Representative authors include Goethe, Hugo, Ibsen, Chekhov,
Pirandello, Shaw and O'Neill. Critics include Wagner, Zola, Bergson, Brunetiere, and Nietzsche. Prerequisite: THE 150H for majors, ENG 100C or ENG 101C for non-majors. Cr 3.

THE 354 Dramatic Literature and Theatre History IV
A study of theatre and drama from the post-war Absurdist and Brechtian Epic theatres to the present day. Representative authors include Brecht, Beckett, Genet, Williams, Miller, Shepard, Stoppard, and Shaffer. Critics include Artaud, Brecht, Esslin, Schechner, and Eco. Prerequisite: THE 150H for majors, ENG 100C or ENG 101C for non-majors. 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 225 or by permission. Cr 3.

THE 370 Advanced Oral Interpretation
A continuation of THE 270F. Cr 3.

THE 371 Reader's Theatre
A study of principles and techniques utilized in the performance of a literary work in the Reader's Theatre style. Emphasis is on providing new insights into the material through oral performance. Cr 3.

THE 490 Independent Study
Students should contact the Department regarding information for independent study.

THE 491 Project I
Investigation of special topics, or execution of special projects that fall within the purview of theatre. Students may select an inter- or intra-departmental committee of three professors to approve, assist, and oversee the project. Prerequisites: junior and senior standing; precise definition of project and unanimous permission of committee. Students must obtain rules for this course from the department chairman. Credit hours arranged.

THE 492 Theatre Internship
Students will assume a full one-semester internship with a professional theatre or Reader's 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. To be arranged. Cr 3-15.
College of Education

Dean: Dorothy D. Moore, 119 Bailey Hall, Gorham
Assistant Dean: Irene Honey; Chair, Department of Human Resource Development: Willard Callender; Chair, Department of Professional Education: Richard E. Barnes; Director, Center for Professional Development: George Lyons; Director, Office of Clinical Experiences: Carolyn L. Holman

Department of Professional Education

Professors: Cohen, Hodgdon, Neuberger, O'Donnell; Associate Professors: Amoroso, Barnes, Bouchard, Colucci, Curry, Foster, Goldsberry, Kulawiec, Lyons, Milbury, Miller, Morrill, Silvernail, Smith, Wood; Assistant Professors: Austin, Broyles, Capelluti, Davis, Holman, Kimball, Rees

Department of Human Resource Development

Professors: Callender, Southworth, Sutton; Associate Professors: Brady, Davis, Moore; Assistant Professors: Atkinson, Painter, Steege, Stevens, VanZandt, Vess

The College of Education prepares individuals for teaching careers and related human service professions. The task of preparing teachers to meet the needs of learners in the twenty-first century is a complex and demanding one. The College of Education prepares teachers for this task through an extended five-year preparation program. Graduates of the program are well-grounded in an academic discipline, as well as in the developmental educational skills appropriate to new professionals within the field of education.

Students interested in teaching careers should pursue an undergraduate major appropriate to their long-term teaching goals. Prospective elementary teachers are encouraged to pursue a liberal arts major that builds upon their academic interests and strengths. Encompassed within this undergraduate degree should be academic coursework in disciplines including mathematics, sciences, history, and English. Prospective middle school and secondary teachers should pursue coursework in depth appropriate to the subject areas in which they intend to teach.

Within their undergraduate career, prospective teachers are encouraged to pursue an education minor. This minor will help students to explore teaching realities and to develop knowledge of self, the learner, and learning process. The education minor will lay the foundation for graduate-level education coursework and field experience designed to develop essential teaching skills.

Students are admitted to the College of Education only at the graduate level. Admission is highly selective and limited to individuals who have demonstrated strong academic and pre-professional performance. Completion of a baccalaureate degree and the education minor does not guarantee admission to the College of Education.

Once admitted to the College of Education, students will pursue an intensive academic year program of field-based experiences and coursework in professional education. Graduate credits earned during this year will be applicable to master's degree programs within the College of Education at USM. Students successfully completing this post-baccalaureate year will be recommended for a provisional teaching certificate (the initial certificate for all beginning teachers).

Minor in Educational Studies

The minor in educational studies is open to students in any major within the University. The minor highlights topics in the areas of human development, teaching as a career, learning, educational media/technology and schooling. Additionally, it provides special preparation for students planning to apply to the post-baccalaureate teacher certification program.
To gain admission to the minor in educational studies, students must be in good standing at the University with a cumulative grade point average of 2.50 or above. Applicants must complete and submit a signed Teacher Education Minor Application form. These forms are available in 500 Bailey Hall in the College of Education.

A total of 18 credits, which must be completed with a GPA of at least 2.50, are required in the minor in educational studies. Courses required in the minor are listed below:

- **EDU 100 Exploring Teaching as a Profession**
  - An exploration of teaching as a professional career through field-based experiences and faculty-led seminars. Cr 3.

- **EDU 200 Education in the United States**
  - An examination of issues and problems in education and schooling in the United States from social, historical, political, and philosophical perspectives. Cr 3.

- **EDU 210 Theoretical Foundations of Learning**
  - An examination of theories of learning and their application to motivation, concept development, classroom management, methodology and evaluation. 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.

Three EDU elective credits approved by the program advisor. These elective credits may be EDU 336 Children's Literature, EDU 390 Topics in Education, or EDU course approved by the program advisor.

*Please Note:* Completion of the minor in educational studies does not guarantee admission to the fifth year teacher preparation program.

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**Certificate Program in Athletic Coaching for Men and Women**

In addition to an extended teacher preparation program, the College of Education continues to offer a certificate program in athletic coaching.

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.

A certificate will be presented to students completing the minimum 15-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.

**Course of Study in Athletic Coaching (15-credit program)**

<table>
<thead>
<tr>
<th>Required</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHE 203</td>
<td>3</td>
</tr>
<tr>
<td>PHE 302</td>
<td>3</td>
</tr>
<tr>
<td>PHE 314</td>
<td>3</td>
</tr>
<tr>
<td>PHE 391</td>
<td>1-3</td>
</tr>
<tr>
<td>HRD 333</td>
<td>Cr 3</td>
</tr>
</tbody>
</table>

**HRD 333 Human Growth and Development**

Please refer to the course description in the Department of Human Resource Development section that follows. Cr 3.

**EDU 336 Children's Literature**

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 390 Topics in Education**

A seminar devoted to the examination of a single topic selected because of its significance to the field of education and schooling. Topics may change each semester. Cr 3.
Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHE 209</td>
<td>Officiating Basketball</td>
<td>2</td>
</tr>
<tr>
<td>PHE 210</td>
<td>Officiating Field Hockey</td>
<td>2</td>
</tr>
<tr>
<td>PHE 211</td>
<td>Officiating Soccer</td>
<td>2</td>
</tr>
<tr>
<td>PHE 212</td>
<td>Officiating Baseball/Softball</td>
<td>2</td>
</tr>
<tr>
<td>PHE 303</td>
<td>Coaching Basketball, Philosophy and Methods</td>
<td>2</td>
</tr>
<tr>
<td>PHE 311</td>
<td>Coaching Soccer, Philosophy and Methods</td>
<td>2</td>
</tr>
<tr>
<td>PHE 312</td>
<td>Coaching Football, Philosophy and Methods</td>
<td>2</td>
</tr>
<tr>
<td>PHE 315</td>
<td>Coaching Field Hockey, Philosophy and Methods</td>
<td>2</td>
</tr>
<tr>
<td>PHE 316</td>
<td>Coaching Volleyball, Philosophy and Methods</td>
<td>2</td>
</tr>
<tr>
<td>PHE 318</td>
<td>Coaching Gymnastics, Philosophy and Methods</td>
<td>2</td>
</tr>
<tr>
<td>PHE 335</td>
<td>Coaching Baseball and Softball, Philosophy and Methods</td>
<td>2</td>
</tr>
<tr>
<td>PHE 389</td>
<td>Advanced First Aid and CPR</td>
<td>3</td>
</tr>
</tbody>
</table>

**Physical Education Courses**

**PHE 102 Independent Activities**  
This course will allow students to earn credit for doing physical education activities outside the University. Students may select any activity which can be done independently or may enroll in a structured program, such as Y classes, aerobic dance classes, etc. Instructor permission required.  
Cr 1 or 2.

**PHE 103 Physical Fitness**  
An aerobic fitness class utilizing any of a number of aerobic activities such as jogging, aerobic dance, calisthenics, etc. These activities are designed to place an aerobic demand on the participants and help promote a general improvement in cardiovascular fitness.  
Cr 1.

**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**  
Care and prevention of athletic injuries; the use of proper field equipment, support methods, therapeutic modalities, pharmacology in athletics, and training techniques.  
Cr 3.

**PHE 209 Officiating Basketball**  
Study and discussion of the rules with limited practical experience in the techniques of officiating basketball. Course is designed to prepare student for the National Federation Examination.  
Cr 2.

**PHE 210 Officiating Field Hockey**  
Study and discussion of the rules of field hockey as well as practical experience in the techniques of officiating. Practical and written tests will be given. Opportunity to become a rated official.  
Cr 2.

**PHE 211 Officiating Soccer**  
Study and discussion of the rules of soccer as well as practical experience in the techniques of officiating. Opportunity to become a rated official.  
Cr 2.

**PHE 212 Officiating Baseball/Softball**  
Study and discussion of the rules of baseball and softball as well as practical experience in the techniques of officiating. Practical and written tests will be given. Opportunity to become a rated official.  
Cr 2.

**PHE 221 Experiential Education—The Outward Bound Experience—Hurricane Island Outward Bound School (Winter)**  
Instruction in the basic and enabling skills in the art of safe mountain travel and winter camping. Course content includes cross-country skiing, snowshoeing, map and compass reading and shelter building. The Outward Bound experience strongly emphasizes leadership development, interpersonal communication, team-building, and group problem-solving. Fee course. 5-day program.  
Cr 2.

**PHE 232 Experiential Education—The Outward Bound Experience—Hurricane Island Outward Bound School (Summer)**  
The course has two major parts: (1) training period and (2) final expedition. During the training period students are instructed and participate in sail theory, navigation, seamanship, first aid, rock climbing, camping skills and environmental awareness. The final expedition is designed to allow the student an
opportunity to demonstrate the application of each newly learned skill. All students will participate in a solo, (an experience of self-isolation in a natural environment, designed for reflection into yourself). In addition, the mission of Outward Bound is to develop respect for self, care for others, responsibility to the community and sensitivity to the environment. Fee course. 10-day program. Cr 3.

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 Basketball, Philosophy and Methods
Emphasis on the methods of teaching and coaching basketball. Offense and defense, coach-player relationship, team selection, planning of practice sessions, game situations, and the fundamental skills will be areas of concentration. Cr 2.

PHE 304 Health and Physical Education for Elementary Teachers
A basic course for prospective teachers to develop knowledge and skills to acquaint them with essentials for sound program planning in the various areas of health and physical education. Topics include teaching methods and materials, curriculum, class organization, and lesson planning and evaluation in health and physical education. Observation and practical experience with children will be included. Cr 3.

PHE 305 Practicum in Health and Physical Education
A field-based methodology course conducted in an elementary school. Topics include teaching methods and materials, curriculum, class organization, and lesson planning and evaluation in health and physical education. Observation, peer teaching, and practical experience with children will be included. Cr 2.

PHE 310 Experiential Learning in Outdoor Education
Ropes/Initiative Course Construction and Use
Participants can expect to gain first-hand knowledge and experience through actual participation in all phases of initiative course construction and operation. Of primary importance will be the understanding one receives from the experience for constructing a similar course in his/her own educational program.

Mountaineering
Designed to gain knowledge in technical mountaineering and to improve capabilities in technical rock climbing.

Orienteering
Designed to gain knowledge in expedition planning and route finding. Cr 3.

PHE 311 Coaching Soccer, Philosophy and Methods
Emphasis on the methods of teaching and coaching soccer. Offense and defense, player-coach relationship, team selections, planning of practice sessions, and game situations will be areas of concentration. Cr 2.

PHE 312 Coaching Football, Philosophy and Methods
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. Cr 2.

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 Field Hockey, Philosophy and Methods
Analysis of the techniques and methods of coaching field hockey with emphasis on stick work, team strategy, and practice organization. Cr 2.

PHE 316 Coaching Volleyball, Philosophy and Methods
Fundamentals of individual skills, team strategy, practice organization, and team play are emphasized. Cr 2.

PHE 318 Coaching Gymnastics, Philosophy and Methods
Analysis of skills fundamental to competitive gymnastics with emphasis on techniques of coaching floor exercise, uneven parallel bars, vaulting, and balance beam. Judging skills are also developed. Cr 2.

PHE 325 Workshop in Experiential Education
Using the Gorham campus as a base, the student will embark on a unique wilderness experience, designed toward self-discovery through participation in challenging activities. A group of 12 students will participate in a general orientation on campus, then be taken off to start expeditions of backpacking, canoeing, rock climbing, rappelling, mountain rescue, and survival. Wilderness skills will be integrated with experience in self-discovery, and process of experiential outdoor education which can be later channeled into everyday life and future teaching situations. Permission of instructor. A fee course. Cr 3.
PHE 335 Coaching Baseball and Softball, Philosophy and Methods
Emphasis on the methods of teaching and coaching baseball and softball. Offense and defense, player-coach relationship, team selection, planning of practice sessions, and game situations will be areas of concentration. Cr 2.

PHE 343 Experiential Education—The Outward Bound Experience—Hurricane Island Outward Bound School (Summer)
The course has two major parts: (1) training period and (2) final expedition. During the training period students are instructed and participate in sail theory, navigation, seamanship, first aid, rock climbing, camping skills and environmental awareness. The final expedition is designed to allow the student an opportunity to demonstrate the application of each newly learned skill. All students will participate in a solo, (an experience of self-isolation in a natural environment, designed for reflection into yourself). In addition, the mission of Outward Bound is to develop respect for self, care for others, responsibility to the community and sensitivity to the environment. Fee course. 26-day program. Cr 6.

PHE 353 Teacher Training—Experiential Education—Hurricane Island Outward Bound School
A 28-day course for educators designed to blend the lessons of experiential education with more traditional forms of learning. Students will participate in a sailing expedition with instruction in developing teaching styles, methods of experiential education in inside/outside the classroom, improving student/teacher relationship and leadership training. Fee course. 28-day program. Cr 6.

PHE 389 Advanced First Aid and CPR
This course will cover the topics prescribed by the American Red Cross and the advanced first aid and emergency care course, including respiratory emergencies, artificial respiration, wounds, poisoning, water accidents, drugs, burns, emergency child birth, emergency rescue and transfer, and CPR. Successful completion of the course requirements will lead to Advanced Red Cross First Aid and CPR certification. Cr 3.

PHE 391 Field Experience in Coaching
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 1-3.

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 1-3.
Department of Human Resource Development

The Department is responsible for courses in human development and family studies. It provides graduate programs in adult education, counselor education, and school psychology. For information regarding graduate programs, please consult the Graduate Catalog. Undergraduate courses offered by the Department include courses in human development and educational psychology.

HRD 331 Group Dynamics
An experimental study of the nature of group process and one's own functioning in a group. The developing awareness of self in relation to others in a group will be of primary importance. Specific techniques will include reading and participation in a seminar planned to aid in the exploration of self and others. Prerequisite: upperclass or graduate status and permission of the instructor. Cr 3.

HRD 333J Human Growth and Development
This course introduces developmental theory and research which encompasses the entire life span. Emphasis will be on prenatal development through adolescence, with an overview of adult development. A multidisciplinary view of human development will be taken which considers stability as well as change throughout the life cycle. The interaction of hereditary and environmental factors will be considered in studying physical, cognitive, and psychosocial development. Prerequisite: sophomore level standing. Cr 3.

HRD 334 Psychology of the Self
An exploration into the development of the self, exploring self-knowledge and personal growth. Approaches cover the self alone, the self in society, and the self in the world. Learning techniques will include readings, small group interaction, autobiographical exercises, guided meditation, dream work, and simulated vision guests. Prerequisite: permission of instructor. Cr 3.

HRD 335 Educational Psychology
Basic principles, techniques, and research in educational psychology. A special consideration given to the learning process, perception, motivation, individual differences, and measurement, with reference to the facilitation of effective teaching and learning. Prerequisite: upperclass status. Cr 3.

HRD 339 Adult Learning and Development
This course explores various areas of adulthood, including topics in adult learning theory and adult development. Topics covered include: how adults learn and the motivation to learn, life cycle theories and maturity myths, learning styles and experiential learning. Learning is facilitated through a framework of small group interaction. Participants are encouraged to share ideas and experiences of adulthood and to determine how relevant themes apply to their own lives. Cr 3.
School of Business, Economics and Management

Dean: Richard J. Clarey; Associate Dean: Robert W. Findlay
Assistant to the Dean: Sally M. Paterson; Academic Counselor: Sharon Bannon;
Staff Associate for Undergraduate Advising: Cynthia A. Young; Director, MBA Program: Bruce H. Andrews; Director, Center for Business and Economic Research: Richard J. Clarey; Research Associates: Bruce H. Andrews, D. Bradlee Hodson; Senior Editor: Robert C. McMahon; Managing Editor: Alice Persons; Director, Maine Small Business Development Centers Program: Robert H. Hird; Director, Institute for Real Estate Research and Education: Valarie C. Lamont; Associate Director: Susan M. Jones

Department of Accounting

Chair: Philip Jagolinzer, 216 Luther Bonney, Portland;
Professors: Findlay, Jagolinzer, Potts; Associate Professor: Hodson; Assistant Professors: Ketcham, Violette, West

Department of Business Administration

Chair: Charles N. Greene, 219 Luther Bonney, Portland
Professors: Greene, Neveu, Sturmer; Associate Professors: B. Andrews, Boyle, Clarey, Houlihan; Assistant Professors: Artz, Grover, Krenzin, Lombardo, H. Parsons, Richardson, T. Sanders, Voyer

Department of Associate Business Administration

Chair: Joel I. Gold, 213 Luther Bonney, Portland
Professor: McKeil; Associate Professors: Aiello, S. Andrews, Gold, Gutmann, Purdy; Assistant Professors: Kucsma, MacDonald, Manny, Palmer, J. Sanders, Westfall

Department of Economics

Chair: Joseph E. Medley, 316 Luther Bonney, Portland
Professor: Durgin; Associate Professors: Bay, McMahon, Medley, Phillips; Assistant Professors: Goldstein, Hillard

Programs and Requirements

The School of Business, Economics and Management offers a number of different programs to meet student needs. The School offers a program in business administration leading to an associate of science in business administration degree. Undergraduate programs leading to the degree of bachelor of science in business administration or economics are available in three areas of study: accounting, business administration, and economics. The School also offers a bachelor of arts in economics. In addition, the School also provides a graduate program leading to the degree of master of business administration (see Graduate Catalog for information).

Associate of Science in Business Administration

The associate program in business administration is designed to prepare students who wish to complete their education in two years for employment in junior management positions in several different careers; and to provide
a sound foundation for those students who perform well and who wish to transfer to a baccalaureate program in business administration at this University or other institutions.

Associate degree graduates are prepared for employment at the junior management level in many fields of business. Some fields of business that graduates have entered are accounting, bookkeeping, business computers/data processing, sales, retailing, banking, finance, real estate, hospitality services, and management trainee programs.

While the program emphasizes business, it contains courses in liberal arts including English, fine arts, social science, humanities, and mathematics. All concentrations within the associate program include accounting; business computers; management; marketing; hotel, motel and restaurant management; and real estate and transfer into SBEM baccalaureate program. Also available is a pre-baccalaureate concentration for those students planning to enter a baccalaureate program in business administration immediately after completion of the associate degree program. This concentration requires more mathematics and liberal arts courses than the career concentrations.

The hotel, motel, and restaurant management option is a cooperative, two-year program developed jointly by Southern Maine Technical College and the A.B.A. program. The fourth semester is offered on the SMTC campus in their Culinary School. Students are enrolled at the University but attend classes at SMTC and must provide their own transportation.

Admission Requirements
Any high school student may seek admission to the associate degree program. A college preparatory background, while desirable, is not necessary. Applicants should complete the University of Southern Maine application and specify the associate in business administration program. Candidates also must complete the Scholastic Aptitude Test.

Transfer Policy
All of the concentrations within the associate program are transferable to the baccalaureate program providing a grade of C- or better is obtained. Grades earned in the associate program for courses transferred to the baccalaureate program are not computed in the cumulative GPA average for graduation purposes.

To be admitted from the associate degree program to the baccalaureate status within SBEM, an individual must have completed at least 15 semester credit hours with an accumulative grade point average of at least 2.40 in all associate business (ABU) courses and in all associate level courses and at least a 2.00 in all baccalaureate level courses.

Associate business courses (ABU) must be completed with a minimum grade of C- to be considered the equivalent to:
- ABU 111 and 112 = ACC 201
- ABU 280 = BUS 280
- ABU 101 = ECO 201J
- ABU 102 = ECO 202J

For any baccalaureate courses which have been completed, an accumulated grade point average of at least 2.00 must be earned.
- ABU 220, Introduction to Business Finance; ABU 240, Principles of Management; and ABU 260, Marketing must be validated. Other associate level courses not mentioned above do not have baccalaureate equivalency and therefore transfer as general electives.

From the time of admission to baccalaureate status within SBEM, an individual must fulfill the remaining criteria for admission to a major in the same manner as any other baccalaureate student.

Other Policies
Students who have not been admitted to an associate degree program within the School will be allowed to enroll in associate business courses on a space-available basis according to the following criteria:
1. They have declared a major which requires the course in its curriculum.
2. They have been admitted as baccalaureate degree students in the School of Business, Economics and Management. (SBEM baccalaureate students will *not* receive credit for these courses towards their major requirements unless prior approval has been received from the Dean.)
3. They are admitted to the University as degree candidates.
4. They are non-degree students.

**Associate of Science in Business Administration**

The minimum number of credits required for the degree is 60 (including 15 credits of ABU courses completed at the University of Southern Maine).

**Basic Requirements (18 credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 100C</td>
<td>College Writing (3)</td>
</tr>
<tr>
<td>ENG 019</td>
<td>Written Business Communication (3)</td>
</tr>
</tbody>
</table>

Mathematics (6) – two courses selected from the following with approval of an advisor: MAT 010, MAT 011B, MAT 100D, MAT 110D, MAT 211.

From courses approved for Core curriculum (6)
1. Either one Humanities from a) Literature or b) Other Times/Other Cultures
2. Social Science

**Required Courses in Business for all concentrations, except pre-baccalaureate concentration (27 credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABU 101</td>
<td>Principles of Economics I</td>
</tr>
<tr>
<td>ABU 102</td>
<td>Principles of Economics II</td>
</tr>
<tr>
<td>ABU 111</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>ABU 112</td>
<td>Principles of Accounting II</td>
</tr>
<tr>
<td>ABU 190</td>
<td>Introduction to Computers in Business</td>
</tr>
<tr>
<td>ABU 220</td>
<td>Introduction to Business Finance</td>
</tr>
<tr>
<td>ABU 240</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>ABU 260</td>
<td>Marketing</td>
</tr>
<tr>
<td>ABU 280</td>
<td>Legal Environment of Business</td>
</tr>
</tbody>
</table>

**Associate Business Administration Program Concentration (15 credits)**

**Accounting Concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABU 211</td>
<td>Tax Accounting for the Small Business</td>
</tr>
<tr>
<td>ABU 212</td>
<td>Fundamentals of Managerial Accounting</td>
</tr>
<tr>
<td>ABU 213</td>
<td>Accounting with Computers</td>
</tr>
<tr>
<td>ABU Program Elective</td>
<td>Program Elective</td>
</tr>
</tbody>
</table>

**General Elective (3)**

### Business Computer Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABU 191</td>
<td>Introduction to Structured Programming</td>
</tr>
<tr>
<td>ABU 294</td>
<td>Introduction to Microcomputer Data Bases</td>
</tr>
</tbody>
</table>

Select three computer electives from the following list, one of which must be ABU 297 or ABU 285 (in computers):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 071</td>
<td>Microcomputer Architecture and Applications</td>
</tr>
<tr>
<td>ABU 213</td>
<td>Accounting with Computers</td>
</tr>
<tr>
<td>ABU 291</td>
<td>COBOL Applications and Documentation</td>
</tr>
<tr>
<td>ABU 292</td>
<td>Operating Systems and Networks</td>
</tr>
<tr>
<td>ABU 295</td>
<td>Data Design and Handling</td>
</tr>
<tr>
<td>ABU 296</td>
<td>Business Information Systems</td>
</tr>
<tr>
<td>ABU 297</td>
<td>Advanced Database Systems</td>
</tr>
<tr>
<td>ABU 285</td>
<td>ABA Work Internship (in computers)</td>
</tr>
</tbody>
</table>

### Business Management Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABU 243</td>
<td>Small Business Management</td>
</tr>
<tr>
<td>ABU 253</td>
<td>Human Relations in Business</td>
</tr>
<tr>
<td>ABU Program Electives (6)</td>
<td>Program Electives (6)</td>
</tr>
</tbody>
</table>

**General Elective (3)**
Business Marketing Concentration

Retailing Option:
- ABU 262 Introduction to Market Research
- ABU 264 Principles of Retailing
- ABU 265 Merchandising and Sales Promotion
- ABU 285 Retail Internship or ABU 271 Independent Study
  or ABU 243 Small Business Management
- ABU Program Elective

Sales Option:
- ABU 262 Introduction to Market Research
- ABU 266 Salesmanship
- ABU 268 Principles of Advertising
- THE 170F Public Speaking
- ABU 285 Sales Internship or ABU 271 Independent Study

Hotel, Motel and Restaurant Concentration (spring semester at SMTC)
- HMR 101 Food Fundamentals
- HMR 104 Hotel Law
- HMR 200 Food and Beverage Management
- HMR 201 Quantity Food Fundamentals
- HMR 202 Front Office Management

Real Estate Concentration
- ABU 221 Principles of Real Estate
- ABU 222 Real Estate Law
- ABU 223 Real Estate Methods
- ABU 225 Practicum — Real Estate Brokerage
- ABU 226 Principles of Real Estate Finance

ABU Program Electives
To fulfill the ABU electives required in the above concentrations, students may select from the following courses:
- Any ABU course (check prerequisites)
- ACC 202 Principles of Management Accounting
- ACC 301 Intermediate Accounting I
- BUS 190 Personal Finance
- MAT 109D Linear Systems
- MAT 110D Business Calculus
- MAT 211 Probability
- MAT 212 Statistics

Pre-Baccalaureate Concentration
This concentration is designed for those associate degree students who wish maximum transfer flexibility into a baccalaureate degree program. Upper-level business courses (marketing, finance, and management) are replaced with general elective courses. Basic requirements (18 credits) are listed under Associate of Science in Business Administration.

Required Courses in Business (18 credits)
- ABU 101 Principles of Economics I
- ABU 102 Principles of Economics II
- ABU 111 Principles of Accounting I
- ABU 112 Principles of Accounting II
- ABU 190 Introduction to Computers in Business
- ABU 280 Legal Environment of Business
- ABU Program Electives (6)
  Select two from the following: ABU 100, ABU 211, ABU 212, ABU 221,
  ABU 222, ABU 226, ABU 240, ABU 260, ABU 271, ABU 285, ABU 291,
  ABU 292, ABU 294, ABU 295, ABU 296, ABU 297, ABU 299, ACC 202,
  BUS 190

Mathematics (6)
Select two courses from the following sequence depending upon mathematics courses taken to satisfy Basic Requirements above: MAT 100D, MAT 110D, MAT 211, MAT 212 (Students who complete MAT 110D, MAT 211, and MAT 212 in their first nine hours of mathematics should select a course to fulfill the Core curriculum requirement in Reasoning.)

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From courses approved for Core curriculum (12 credits)
Students should take no more than one course from any four of the five designated areas.
1. Natural Science with Lab
2. Social Science
3. Humanities from either a) Literature or b) Other Times/Other Cultures
4. Fine Arts from either a) History-Centered or b) Performance-Centered
5. Interdisciplinary COR designated course

Baccalaureate Programs in Business Administration, Accounting, and Economics

The primary objective of the undergraduate baccalaureate program in business administration is to develop the student's abilities to assume the responsibilities of management. The program aims at developing skills and an attitude of mind that will enable the student to cope successfully with the changing problems of management in the years ahead.

The program is implemented in three phases. First, the student acquires broad training in the arts and sciences for the necessary foundation upon which his or her future education will build. Second, the student pursues a program of study designed to provide an understanding of the major functional areas common to most business operations and knowledge of certain fields which are particularly relevant to the study of management. Courses in this phase may not be taken until the student achieves sophomore standing (23 credits or more). Third, the student undertakes to acquire a deeper knowledge of the selected major field, either accounting or business administration. This is accomplished by taking 18-21 credit hours beyond the common requirements in business and economics.

The undergraduate program in economics provides a broad preparation for a variety of careers as well as for graduate study in economics, business administration, or law. Economics is a social science and as such must be studied in the perspective of a broad training in the liberal arts and sciences. Within the economics program, courses are available in such fields as: economics analysis, quantitative methods, international economics, and the economics of monetary and fiscal policy.

Internship Program

The School of Business, Economics and Management and the Departments of Accounting and Business Administration, with the assistance of Career Counseling and Career Services, offer an internship program. Students with junior or senior standing (or special status) may earn from one to three academic credits for any fall, spring, or summer semester (but not to exceed six total credits). A grade point average (GPA) of 2.5 or better is required for participation in the internship program. Students with a GPA between 2.0-2.5 may petition the Department of Accounting or Business Administration for a waiver of the 2.5 requirement. The accounting internship will be applied to general elective credits only. The first 3 credits in a business internship may be used to fill a 300-level business elective. The second 3 credits in a business internship will count only as general electives.

The student, with the assistance of the Departments of Accounting or Business Administration and/or the Office of Career Counseling, secures a paid work experience of at least 14 weeks of full-time employment (30 hours or greater per week) that utilizes the skills being learned in the academic program. Each internship position must be a new experience under supervision approved by the internship coordinator. (No internship positions will be approved for current or past work experience.) Because this is an academic program, meetings amongst internship coordinator, job supervisor, and student will be held periodically to ensure that a new learning experience is obtained. The student will be responsible for a term paper. The course is taken on a pass/fail basis only (refer to ACC or BUS 395, 396). For further information, consult with an SBEM academic counselor.
Double Majors

Students may elect to complete the requirements for a double major in accounting and economics or in business administration and economics. Students may not seek a double major in accounting and business administration.

Admission Requirements for Majors

Students admitted to the University will enter a baccalaureate program at the School of Business, Economics and Management as pre-accounting, pre-business or pre-economics. To attain full standing in a major a student must have completed at least 53 semester hours with a minimum grade point average of 2.0, and have completed one of the following subsets of courses, depending upon the designated major, with a minimum accumulative grade point average of 2.00. Accounting majors must earn a grade of C— or better in each of the courses listed below (for accounting majors) in addition to the overall accumulative grade point average of 2.0.

Accounting Major: ENG 100C, ACC 201, ACC 202, BUS 280, BUS 290, ECO 201J, ECO 202J, MAT 110D, MAT 211, MAT 212

Business Administration Major: ENG 100C, ACC 201, ACC 202, BUS 280, BUS 290, ECO 201J, ECO 202J, MAT 110D, MAT 211, MAT 212

B.S. in Economics Major: ACC 201, ECO 201J, ECO 202J

An application for full standing in a baccalaureate or major in the School of Business, Economics and Management should be completed and returned to the dean's office.

Although the application will not be approved until completion of at least 53 semester hours, the required set of courses and achievement of required grade point averages, students may apply and approval will be made contingent upon completion of the semester's work in which they will have earned 53 or more credits. If admissions requirements are not met, their admission will be revoked and any enrollments in 300-level or above courses in the School of Business, Economics and Management will be cancelled.

To enroll in a 300- or 400-level ACC, BUS, or ECO course, a SBEM degree candidate must have attained junior standing (53 credits) and have completed the required subset of courses for the major.

Other Policies

Students who are not candidates for baccalaureate majors within the School may be allowed to enroll in 300-level or above courses on a space-available basis according to the following priorities:

1. They have declared a major which requires the course in its curriculum.
2. They have been admitted to the minor in business administration or the minor in economics (applies to economics courses only).
3. They are admitted to the University as degree candidates.
4. They are non-degree students.

Validation of Upper-Division SBEM Course Requirements Taken as a Lower Division Student

Courses in the School of Business, Economics, and Management which are numbered 300 or higher shall be taken only by juniors and seniors. In order for a student to receive credit toward an SBEM degree for a 300-level or 400-level SBEM course taken while a person is a freshman, sophomore, or associate degree student, it must be validated by a method which conforms to the policies established by the American Assembly of Collegiate Schools of Business (AACSB). The validation procedures listed below are applicable to all students who complete upper-division SBEM courses or their equivalents while they are freshmen, sophomores, or associate degree students at either USM, other University of Maine System institutions, or other community/junior colleges and baccalaureate degree granting institutions from which transfer credit may be requested. The School of Business, Economics, and Management normally accepts transfer credit from institutions which have regional accreditation (e.g., New England Association, North Central, WICHE, etc).
1. BUS 320 Business Finance may only be validated by passing the departmental competency exam developed at USM.
2. BUS 327 Investment Management may not be validated at this time, but a method for validation is being studied.
3. BUS 340 Management may be validated by either
   (1) obtaining a passing score on the College Level Equivalency Program (CLEP) subject exam Introduction to Management designed by the Educational Testing Service, or
   (2) earning a grade of C=2.00 (A=4.00 system) or higher in BUS 452 Organizational Behavior.
4. BUS 360 Marketing may be validated by either
   (1) obtaining a passing score on the CLEP subject exam Introductory Marketing or
   (2) earning a C=2.00 (A=4.00 system) or higher in BUS 367, or
   (3) by passing the departmental competency exam developed at USM.
5. BUS 380 Business Law I may be validated by obtaining a passing score on the College Level Equivalency Program (CLEP) subject exam Intro to Business Law designed by the Educational Testing Service.
6. ACC 301 Intermediate Accounting I may be validated by earning a grade of C=2.00 (A=4.00 system) in ACC 302 Intermediate Accounting II.

Other 300-level or 400-level courses in SBEM cannot be validated at this time. Courses similar in title with comparable course descriptions may be accepted as general electives, but will not be applied toward major or minor requirements in SBEM.

If a student does not succeed in validating a 300-level or 400-level SBEM course taken as a freshman, sophomore, or associate degree student, then that course cannot be applied toward fulfilling a SBEM requirement and the appropriate SBEM course must be completed.

The SBEM validation policies stated above pertain to all students admitted to the University of Southern Maine since the fall of 1986. These validation policies are subject to change in ensuing USM catalogs.

Bachelor of Science in Accounting — Degree Requirements

All students must complete at least 120 credit hours of coursework. To be eligible for the B.S. degree, a student must have attained an accumulative grade point average of 2.00 or higher in coursework taken in baccalaureate programs at the University and in all baccalaureate courses in accounting (ACC), business (BUS), and economics (ECO). Accounting majors also must attain a 2.00 or higher cumulative grade point average in all ACC designated courses (including ACC 201 and ACC 202). If a student fails to meet the above 2.00 average requirements, the most recent courses with a grade of D may be repeated to increase the average to 2.00, subject to approval by the dean's office. Transfer students majoring in accounting normally will need to complete at least 12 credits of 300-level or 400-level ACC designated courses at USM to obtain a B.S. degree. Students may petition the Department for exceptions.

Course Requirements

The minimum number of credits (including the University's Core curriculum) required for the degree: 120 (A minimum of 48 credits must be taken from courses outside the disciplines of accounting, business, or economics. Students are encouraged to take more than the minimum).

Core Curriculum Requirements (31 credits)

Basic Competence

1. English Composition (3)
   Students who fulfill the English Composition Competence of the Core curriculum without earning credits must complete 3 credits of electives from CJA, ENG, FRE, GER, GRE, IAT, or SPA courses.
2. Skills of Analysis/Philosophy (3)
3. Quantitative Decision Making
   This requirement may be fulfilled by taking a mathematics course stipulated below under the supplementary requirements.
Methods of Inquiry / Ways of Knowing

1. Fine Arts
   a. Performance-centered arts (3)
   b. History-centered arts (3)

2. Humanities
   a. Literature (3)
   b. Other Times/Other Cultures (3)

3. Social Science (not to include ECO courses) (6)

4. Natural Science (4)

5. Interdisciplinary COR course (3)

Supplementary Requirements Required by SBEM

1. Mathematics (9)
   a. MAT 110D Calculus for Business
   b. MAT 211 Probability
   c. MAT 212 Statistics

Basic Requirements for Accounting (36)

ACC 201 Principles of Financial Accounting
BUS 280 Legal Environment of Business
BUS 290 Introduction to Management Information Systems and Computer Applications
ECO 201 Principles of Macroeconomics
ECO 202 Principles of Microeconomics
*ECO 300

*To satisfy this requirement select one of the following: ECO 350 Comparative Economic Systems; ECO 351 Economic Systems of the Soviet Union; ECO 360 Economic Development; ECO 361 Applied Economic Development; ECO 370 International Trade.

BUS 320 Business Finance
BUS 340 Management
BUS 360 Marketing
BUS 371 Operations Research/Management Science
BUS 375 Production/Operations Management
BUS 450 Business Management and Policy

2. Major Field (21)

ACC 202 Principles of Management Accounting
ACC 301 Intermediate Accounting I
ACC 302 Intermediate Accounting II
ACC 305 Cost Accounting
ACC 313 Federal Tax Reporting

Select two of the following four 1.5 credit hour courses:
ACC 431 Mergers and Consolidations
ACC 432 Advanced Accounting I
ACC 433 Advanced Accounting II
ACC 434 Advanced Accounting III

Select one of the following two courses:
ACC 410 Auditing
ACC 415 Internal Auditing

Certain accounting courses are offered only once a year. Students should inquire about these when developing their academic program.

General Electives: (23) No more than 21 credit hours in this category may be taken in accounting, business, or economics courses.

Bachelor of Science in Business Administration — Degree Requirements

All students must complete at least 120 credit hours of coursework. To be eligible for the B.S. degree, a student must have attained an accumulative grade point average of 2.00 or higher in coursework taken in baccalaureate programs at the University and in all baccalaureate courses in accounting (ACC), business (BUS), and economics (ECO). If a student fails to meet the above 2.00 average requirements, the most recent courses with a grade of D may be repeated to increase the average to 2.00, subject to approval by the dean's office.

Course Requirements

The minimum number of credits (including the University's Core curriculum) required for the degree: 120 (A minimum of 48 credits must be taken from courses outside the disciplines of accounting, business or economics. Students are encouraged to take more than the minimum).
Core Curriculum Requirements (31 credits)

Basic Competence
1. English Composition (3)
   Students who fulfill the English Composition Competence of the Core curriculum without earning credits must complete 3 credits of electives from CLA, ENG, FRE, GER, GRE, LAT, or SPA courses.
2. Skills of Analysis/Philosophy (3)
3. Quantitative Decision Making
   This requirement may be fulfilled by taking a mathematics course stipulated below under the supplementary requirements.

Methods of Inquiry/Ways of Knowing
1. Fine Arts
   a. Performance-centered arts (3)
   b. History-centered arts (3)
2. Humanities
   a. Literature (3)
   b. Other Times/Other Cultures (3)
3. Social Science (not to include ECO courses) (6)
4. Natural Science (4)
5. Interdisciplinary COR course (3)

Supplementary Requirements Required by SBEM
1. Mathematics (9)
   MAT 110D  Calculus for Business
   MAT 211  Probability
   MAT 212  Statistics
2. Social Science (6)
   To be selected from ANT, CRM, COM, GEO, HTY, POS, PSY, SOC, and SWO courses.
3. Basic Requirements for Business Administration (36)
   ACC 201  Principles of Financial Accounting
   BUS 280  Legal Environment of Business
   BUS 290  Introduction to Management Information Systems and Computer Applications
   ECO 201  Principles of Macroeconomics
   ECO 202  Principles of Microeconomics
   ECO elective (300-level or above)
   BUS 320  Business Finance
   BUS 340  Management
   BUS 360  Marketing
   BUS 371  Operations Research/Management Science
   BUS 375  Production/Operations Management
   BUS 450  Business Management and Policy
4. Major Requirements (18)
   ACC 202  Principles of Management Accounting
   BUS 327  Investment Management
   BUS 452  Organizational Behavior
   Six credits from ACC, BUS, ECO electives (300-level or above)
   Three credits of these six credits must be taken from the following courses:
   ECO 350  Comparative Economic Systems
   ECO 351  Economic Systems of Soviet Union
   ECO 360  Economic Development
   ECO 361  Applied Economic Development
   ECO 370  International Trade
   BUS 330  International Financial Management
   BUS 361  International Marketing
   Three credits from BUS electives (300-level or above)
   General Electives (20)

Minor in Business Administration
A minor in business administration (21 credit hours) is available to any baccalaureate student in the University. The general requirements for admission to the minor in business administration are completion of at least 21 credit hours with a grade point average of 2.00 or higher. Students have
the option of taking a general business administration or a self-designed
minor. The general business administration minor is strongly recommen­
ded for students who do not have any prior business education or expe­
rience.

To fulfill the requirements for the general business administration minor, 
students must complete the following courses with an overall grade point 
average of at least 2.00.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 290</td>
<td>Introduction to Management Information</td>
<td>3</td>
</tr>
<tr>
<td>BUS 327</td>
<td>Systems and Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Investment Management (prerequisite: ACC 201)</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 360</td>
<td>Marketing (prerequisites: ACC 201 and BUS 290)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>plus 6 additional credit hours earned from</td>
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<tr>
<td></td>
<td>successfully completing two courses selected</td>
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<tr>
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<td>from the following: ACC 202, BUS 280 or any BUS</td>
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<td>300-400 level course. (Prerequisites must be</td>
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<td>satisfied.)</td>
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The self-designed business administration minor is available for students 
who have specialized needs and interests based on prior business education, 
work experience or unique career goals. Students wishing to pursue the 
self-designed business administration minor must prepare a typed state­
ment indicating (a) the courses to be included in the minor (minimum of 21 
credit hours earned from successfully completing seven courses selected 
from the following: ACC 201, ACC 202, BUS 280 or higher BUS courses) and 
(b) the rationale supporting the overall design of the minor. The proposed 
self-designed business administration minor must be approved first by a 
member of the business administration faculty teaching in the area of the 
student's interest and second by the chairperson of the Department of 
Business Administration. A minimum overall grade point average of 2.00 in 
minor area courses is required to complete successfully the self-designed 
minor in business administration.

**Bachelor of Science in Economics**

**Business Orientation**

The minimum number of credits (including the University's Core curric­
ulum) required for the degree: 120 (at least 48 credits must be taken from 
courses outside SBEM).

**Core Curriculum Requirements (31 credits)**

**Basic Competence**

1. English Composition (3)

   Students who fulfill the English Composition Competence of the Core 
curriculum without earning credits must complete 3 credits of electives 
from CIA, ENG, FRE, GER, GRE, IAT, or SPA courses.

2. Skills of Analysis/Philosophy (3)

3. Quantitative Decision Making

   This requirement may be fulfilled by taking a mathematics course stip­
ulated below under the supplementary requirements.

**Methods of Inquiry/Ways of Knowing**

1. Fine Arts

   a. Performance-centered arts (3)
   b. History-centered arts (3)

2. Humanities

   a. Literature (3)
   b. Other Times/Other Cultures (3)

3. Social Science (not to include ECO courses) (6)

4. Natural Science (4)

5. Interdisciplinary COR course (3)

**Supplementary Requirements (12)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
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<tbody>
<tr>
<td>MAT 110D</td>
<td>Calculus for Business or MAT 152D/153</td>
</tr>
<tr>
<td>MAT 211</td>
<td>Probability</td>
</tr>
<tr>
<td>MAT 212</td>
<td>Statistics</td>
</tr>
</tbody>
</table>

An optional, more rigorous mathematics sequence is available to those 
students who desire it. They may take MAT 152D Calculus A and MAT 153
Calculus B instead of MAT 110D, but these students must still take MAT 211 and MAT 212.

Basic Requirements for Economics (9)

- ACC 201 Principles of Financial Accounting
- ECO 201J Principles of Macroeconomics
- ECO 202J Principles of Microeconomics

Major in Economics (27)

- ECO 301 Intermediate Macroeconomics
- ECO 302 Intermediate Microeconomics
- ECO electives which may include GEO 303 and HTY 371

General Electives (44)

Bachelor of Arts in Economics

Social Science Orientation

The minimum number of credits (excluding the University's Core curriculum) required for the major: 36

Students interested in receiving a bachelor of arts degree in economics may not take more than 42 hours of economics courses or 21 hours of business courses for credit toward a bachelor of arts degree.

Students in this program are required to take MAT 110D, or MAT 152D/153, MAT 120D, and POS 101J, and SOC 100J or ANT 101J. Successful completion of either of the mathematics courses and of the POS 101J and SOC 100J or ANT 101J course will satisfy parts of the Core curriculum requirement.

In fulfilling the Core curriculum social science requirement, students may not take an ECO course. Students who fulfill the English Composition Competency requirement of the Core curriculum without earning academic credit must complete three credits of ENG or PHI electives.

Requirements in Economics and Business (36 credits)

Basic Requirements for Economics (6)

- ECO 201J Principles of Macroeconomics
- ECO 202J Principles of Microeconomics

Major in Economics (27)

- ECO 301 Intermediate Macroeconomics
- ECO 302 Intermediate Microeconomics
- ECO electives which may include: GEO 303 and HTY 371

General Electives (50)

Minor in Economics

A minor in economics is available to students in any major within the University. To gain admission, students must be in good standing at the University and submit a signed Economics Minor Authorization Form to the Dean of the School of Business, Economics and Management. The 21 credit hours below must be completed with at least a 2.00 accumulative grade point average: ECO 201J; ECO 202J; ECO 301; ECO 302; either MAT 120D, or MAT 212, or MAT 362; and six additional credits of 300-level or above ECO electives.

Minor in Mathematics

In cooperation with the Department of Mathematics, a minor in mathematics is available to all economics majors. The optional mathematics minor is 21 credit hours (not to include statistics courses), with 12 of the credit hours in MAT 152D, 153, and 252. The remaining 9 credit hours are to be selected from the following: MAT 290, MAT 352, MAT 354, MAT 366, MAT 380, MAT 460; COS 260.

Master of Business Administration

The School offers a master of business administration degree. For those interested in this program a separate brochure is available at the School of Business, Economics, and Management office. Please refer to the Graduate Catalog for further information.
ABU 100 Introduction to Business
An examination of the significant relationships between business and the social, political, and economic environment of our society for the purpose of evaluation of goals, values, ethics, and practices in the business world. Historical development of business and capitalism is covered. The industrial and commercial structures and functions in our society are described. Social relationships internal to the firms are explored. Special problems concerning mass production, automation, and employment are discussed along with other current and future issues and problems related to business and our society. Cr 3.

ABU 101 Principles of Economics I
A theoretical analysis of the basic characteristics, institution, and operational activities of a modern capitalistic economy which is involved in the transformation of scarce economic resources into the goods and services demanded by consumers. Topics discussed include inflation, unemployment, government monetary and fiscal policy to achieve full employment, and economic growth. (Cannot be applied toward Core curriculum requirement in Social Science.) Cr 3.

ABU 102 Principles of Economics II
A theoretical analysis of the firm, and its role in the transformation of scarce economic resources into the goods and services demanded by consumers. Special attention is focused on the development of a market mechanism for the exchange of goods, services, and resources within a capitalistic economy. Topics discussed include consumer preferences and consumer behavior, production theory and production costs, the monopoly firm, and resource pricing. (Cannot be applied toward Core curriculum requirement in Social Science.) Cr 3.

ABU 111 Principles of Financial Accounting I
An introduction to the accounting cycle through financial statements. A practical emphasis on accounting methodology with coverage of cash, accounts receivable, and inventory. Cr 3.

ABU 112 Principles of Financial Accounting II
A study of the procedures of accounting, in accordance with Generally Accepted Accounting Principles (GAAP), for property plant and equipment, long-term investments, and bonds. In addition, the following entities of proprietorships, partnerships and corporations are covered from a practical approach. Analysis of financial statements concludes this course. Prerequisite: ABU 111. Cr 3.

ABU 190 Introduction to Computers in Business
This course provides an introduction to the use of computer technology within business applications, using IBM compatible microcomputers. Applications software is introduced through word processing, followed by an emphasis on spreadsheets, graphics, and problem solving. Additionally, there is some exposure to data base management systems, MS-DOS, and computer hardware, as well as integration of the application packages. This is a lecture/demonstration course with extensive hands-on computer work required outside of class. Prerequisite: MAT 010. Cr 3.

ABU 191 Introduction to Structured Programming
This course is an introduction to modern structured programming on a microcomputer using a state-of-the-art compiler language. It covers all standard control and logic structures, arrays, functions, subroutines, and data files. Major emphasis is given to an ongoing consideration of problem solving techniques as they apply to simple and complex programming situations. Prerequisite: ABU 190 or BUS 290, or permission of the instructor. Cr 3.

ABU 211 Tax Accounting for the Small Business
Students will be introduced to federal taxation with a primary emphasis for the self-employed individual. Areas covered include business profit (loss), depreciation, capital gains and losses, disposition of business property, estimated taxes, self-employment tax, and overall taxation for individuals. Payroll reporting requirements will also be included in this course. Prerequisites: ABU 111 and 112. Cr 3.

ABU 212 Fundamentals of Managerial Accounting
The purpose is to introduce students to areas of managerial accounting. Topics covered include cost-volume profit analysis, job order cost, standard cost, capital budgeting, cash flow, economic order quantities, and financial reporting for manufacturing concerns. Prerequisites: ABU 111 and 112. Cr 3.

ABU 213 Accounting with Computers
This course provides the student with a practical introduction to accounting applications as accomplished with a computer. General ledger, payroll, accounts receivable, accounts payable, and inventory are explored through a computer. Microcomputers and a complete accounting software package are used to provide practical experience with implementation, data entry, and report generation. The topics of system selection factors, implementation planning, acquisition, audit trails, and report analysis are also included. Prerequisites: ABU 112 and 190 or equivalent. Cr 3.

ABU 220 Introduction to Business Finance
A study of the promotion, organization, and financing of the single proprietorship, partnership, and corporation. Such topics as fund
flows, ratio analysis, breakeven analysis and leverage, time value of money concepts, cost of capital and capital budgeting are examined. Prerequisites: ABU 101, ABU 102, ABU 111, ABU 112, and MAT 011. Cr 3.

**ABU 221 Principles of Real Estate**
An overview of the fundamentals of real estate that includes rights and interest in land, forms of ownership, contracts, mortgages, ethics, home construction components, elements of listing and selling, as well as the comparative market analysis. This course will also include the state and federal rules and regulations that apply to license law, law of agency and the transfer of real property. Cr 3.

**ABU 222 Real Estate Law**
A study of real estate law in general and Maine law in particular. Topics include property rights, fixtures, co-ownership, land descriptions, landlord tenant law, easements, adverse possession, land use regulation including zoning and environmental law, eminent domain, transfers by deed and at death, mortgages and other financial interests, the recording system, fair housing law, condominiums and contracts. The course will also cover various legal matters relating to Maine real estate brokerage including agency law, anti-trust law and required disclosures connected with brokerage transactions. Cr 3.

**ABU 223 Real Estate Methods**
A study of the application of concepts and procedures involved in the practice of real estate. Topics include: the listing process, valuation, sale process, negotiating, contracts, mortgages, disclosures, closings, real estate as an investment, ethics, Maine license law and its application as well as describing real estate and application of land use regulations. This course will also include sales techniques, interviewing skills and personal business plans. Prerequisite: ABU 221 or permission of the instructor. Cr 3.

**ABU 225 Brokerage Practicum**
This course emphasizes those principles specifically related to real estate brokerage. Topics include: Maine license law, contracts, disclosures, ethics, trust accounts, state and federal regulations, training and supervision, alternative financing, Maine Real Estate Commission, and closings. This course will also include areas relating to office operation. Instruction will be received through classroom lectures and field work. Prerequisites: ABU 221, 222 and 223 or Maine associate brokers license. Cr 3.

**ABU 226 Principles of Real Estate Finance**
Methods of financing various types of real estate including sources of funds, analysis of lenders, risks, types of loans, government influences and participation, financing instruments, loan processing, defaults and foreclosures. Offered only in the Spring semester in the evening. Cr 3

**ABU 227 Introduction to Stocks and Bonds**
Provides the planning and management of investment programs for all types of investors. Evaluates the various media of investments in terms of their risks and profits. The functions of the stock market and its behavior are examined. Prerequisites: ABU 101, ABU 102, ABU 111, ABU 112, MAT 011. Cr 3.

**ABU 240 Principles of Management**
A comprehensive survey of all phases of the management of industrial and business enterprises. The influence of industrial relations is interspersed with the treatment of management's technical problems. Prerequisites: ABU 101, ABU 102. Cr 3.

**ABU 243 Small Business Management**
A study of the aspects of management that relate most specifically to the management of small business. The course covers areas of business planning, development, and operation which the prospective owner/operator must consider seriously early in his/her thinking. During the course each student will develop a comprehensive small business plan. Prerequisites: ABU 102, ABU 111, ABU 112, ABU 260. Cr 3.

**ABU 253 Human Relations in Business**
Introduction to the behavioral sciences, emphasizing typical behavioral problems faced in business by employees and management. Lectures, case analysis, and outside readings are supplemented by involving the student in role playing and analyzing collected data. Prerequisite: ABU 240. Cr 3.

**ABU 260 Marketing**
A study of the marketing organization with a focus on product policies, distribution policies, promotional and pricing policies. Market research is implemented by getting students involved in casework, controversial issues, and local business community projects. Prerequisite: ABU 102. Cr 3.

**ABU 262 Introduction to Market Research**
Secondary sources of data, sampling, analysis, and applications of marketing research. Survey design and data collection are discussed. Not a statistical or mathematical orientation. Prerequisite: ABU 260. Cr 3.

**ABU 264 Retailing**
Study of the retail distribution structure and of the problems involved in successful store operation under current conditions. Prerequisite: ABU 260. Cr 3.

**ABU 265 Merchandising and Sales Promotion**
Theories and principles of product planning and promotional selling of various product lines in retail stores. Prerequisite: ABU 264. Cr 3.
ABU 266 Salesmanship
A study of the basic theories, skills, and techniques required for effective selling. Cr 3.

ABU 267 Sales Management
Analysis of the problems facing marketing management in formulating sales policy and in managing the sales organization. Prerequisite: ABU 260. Cr 3.

ABU 268 Principles of Advertising
The advertising field and career opportunities are surveyed. Significance to business and industry; study of various media in relation to costs and results. Cr 3.

ABU 271 Independent Study
Selected business topics relating to the student's degree program may be studied and researched on an independent basis. Prerequisites: GPA 2.5, sophomore standing and permission of the instructor and chair of the department. Cr Variable.

ABU 280 Legal Environment of Business
This course introduces students to the legal system, consumer law, securities regulation, antitrust law, labor law, equal employment law, and environmental law. The course stresses the social responsibility of business and the legal and ethical framework in which business must function. Cr 3.

ABU 285 ABA Work Internship
This is our students' opportunity to apply their academic training to work experiences in the business world. Students apply their coursework and library study to their jobs; Group meetings with internship peers and faculty advisor; students must work an average of 8 hours weekly or 120 hours per semester. Students are contacted first week of class for orientation meeting schedule. This is open only to second year students in the ABA Program. ABU 286 may be taken after ABU 285 for a maximum of 6 credits in ABA Internship. Cr 3.

ABU 291 COBOL I: Applications and Documentation
An introduction to programming in the COBOL language, it includes practice in the structure, rules, and vocabulary of COBOL using exercises in structured problem analysis, program specification techniques, and coding. Programs will focus on simple business problems and generally accepted business procedures. Prerequisite: A grade of B (3.00) or better in ABU 191 or permission of the instructor. Cr 3.

ABU 292 Operating Systems and Networks
A combination of theory and hands-on use of modern computer operating systems and networks. Included are: examination of various microcomputer and mainframe operating systems; development of batch operating system procedures and utilities; hard disk management; computer networks; and electronic mail. Prerequisite: ABU 191 or permission of the instructor. Cr 3.

ABU 294 Introduction to Microcomputer Data Bases
This course is an introduction to modern relational data base and fourth generation languages on a microcomputer. It includes single and multiple file data bases, structured and non-procedural queries and reports, relating of multiple files, and the development of multi-step procedures. Prerequisite: ABU 190 or BUS 290 or permission of the instructor. Cr 3.

ABU 295 Data Design and Handling
A course in the design, use and management of advanced data file structures and elementary databases. Content includes data storage, file and database concepts, the actual development and use of direct access methods such as hashing and keys, and the development of primitive databases using both pointer and inversion organization. Prerequisite: A grade of B or better in ABU 191 and ABU 294. Cr 3.

ABU 296 Business Information Systems
The purpose of this course is to develop an understanding of the interrelationships and requirements for an integrated business data processing system in order to provide accurate and timely management information. It examines the most common business applications. Prerequisites: ABU 191 and ABU 294. Cr 3.

ABU 297 Advanced Database Systems
This course examines the design, use and management of modern database systems. The concept of 3-level databases, along with the difference between production database systems and 4th generation languages, is studied. A state-of-the-art 4th generation language is extensively used to demonstrate query and non-procedural languages, MIS and DSS concepts, and distributed workstation processing. Prerequisites: ABU 191 and ABU 294. Cr 3.

ABU 299 Special Topics
This course will be offered on an irregular basis to present special topics relevant for the ABA major. Cr 13.
Hotel, Motel and Restaurant Concentration Courses
Offered at SMTC

HMR 101 Food Fundamentals
Food Fundamentals is the first of two sequential cooking labs. It is designed to provide management students with knowledge and skill in fundamental commercial food production. At the completion of this course students will be able to demonstrate skills in the following area.

HMR 104 Hotel Motel Law
Hotel Law takes an in-depth look at a practical working knowledge of law for people in the hospitality field. This course leads to certification by the Education Institute of the American Hotel/Motel AFC. Topics covered are: hotel's right to refuse guest and evict guest, tenant, restaurant patron, or others, duty to protect guests, liability regarding property loss, fire safety laws, the hotel and its employees, general liability for unwholesome food, common law liability for serving alcoholic beverages to intoxicated persons, taxes, franchises, convention and group contacts.

HMR 200 Food and Beverage Management
This course examines in depth the entire food and beverage operation from purchasing, receiving, and storage to preparation and service. A detailed study of the primary functions of a food and beverage manager are a critical part of this course. This study will include purchasing of food and beverage, control procedures, operational analysis, bar controls/service and other significant areas.

HMR 201 Quantity Food Fundamentals
Quantity food preparation is a continuation of food production skills presented in HMR 101 Food Fundamentals. It is designed to provide further knowledge and skill development in culinary procedures. At the conclusion of this course the students will prepare and execute a buffet for friend, faculty, and advisory committee members.

HMR 202 Front Office Procedures
A systematic study of the operation of the front and night audit. Emphasizes the crucial human and public relations responsibilities of the front office. This course covers the services, accounting controls, and salesmanship involved in the operation of an efficient front desk.

Baccalaureate Program
Certain accounting courses are offered only once a year. Students should inquire about these when developing their academic program.

ACC 201 Principles of Financial Accounting
An introduction to accounting principles and concepts. Emphasis is placed on understanding financial statements and the accounting for assets, liabilities, equities, revenue, and expenses.

ACC 202 Principles of Management Accounting
This course deals with the selection and preparation of information which will serve to support and assist management in planning and controlling a firm's operations: the emphasis is on information needs for management decision making. Included are: fundamentals of cost accounting, cost-volume-profit analysis, budgeting, statement of cash flows, income tax considerations, and quantitative techniques integrated with more traditional approaches. Prerequisite: ACC 201.

ACC 301 Intermediate Accounting I
A study of accounting theory and practice applicable to the recording and reporting of liabilities and owners' equity. Includes selected special problem areas related to financial reporting. Prerequisite: ACC 301.

ACC 305 Cost Accounting
Concepts and analytical procedures necessary to the generation of accounting data for management planning and control and product costing. Emphasis is on job costing, process costing, standard costs and variance analysis, and quantitative decision-making. Prerequisite: ACC 202.

ACC 313 Federal Tax Reporting
An overview of federal income tax laws as they affect individuals. Minor emphasis on partnerships, corporations, and related topics. Prerequisites: ACC 201 and junior standing.

ACC 395 Internship I
This is the first internship course (junior or senior standing; special students with permission). See description of internship program in catalog text.

ACC 396 Internship II
This is the second internship course. Prerequisite: ACC 395.
ACC 431 Mergers and Consolidations  
A study of accounting theory and practice applicable to mergers, consolidations, combinations, and related topics. Prerequisite: ACC 302.  
Cr 1.5.

ACC 432 Not-For-Profit Accounting  
A study of accounting theory and practice applicable to organizations which operate using fund accounting. Prerequisite: ACC 302.  
Cr 1.5.

ACC 433 Partnership and International Accounting  
A study of accounting theory and practice applicable to partnership entities, and international accounting issues. Prerequisite: ACC 302.  
Cr 1.5.

ACC 434 Advanced Financial Reporting  
A detailed study of accounting theory and practice applicable to selected special problem areas in financial reporting. Prerequisite: ACC 302.  
Cr 1.5.

ACC 410 Auditing  
A study of auditing philosophy and theory relative to the examination of financial statements and other data. Coverage includes internal control, auditing standards and procedures, and the legal and ethical responsibilities of the independent auditor. Prerequisites: ACC 302 and junior standing.  
Cr 1.5.

ACC 415 Internal Auditing  
A study of the nature of internal auditing, professional standards, organizational controls, operational auditing, and internal audit reporting. Prerequisite: ACC 303  
Cr 3.

ACC 420 Senior Seminar in Accounting  
A review of APB opinions, FASB statements, SEC role in accounting, and other current issues. Prerequisites: ACC 302 and senior standing.  
Cr 3.

ACC 490 Independent Readings and Research in Accounting  
Selected topics in the various areas of accounting; auditing; and income taxes may be studied and researched on an independent basis. Prerequisite: senior standing.  
Cr 1—3.

BUS 190 Personal Finance  
In dealing with the problems of managing personal finances, primary emphasis is placed on methods of measuring and evaluating expenditures to assure optimal benefit from the income. It includes an evaluation of typical occupations and incomes; of life insurance with the various types, investments and mutual funds; of the borrowing of money and use of credit; of taxes and estate planning. The course work will be a series of readings with brief case problems in each of the major areas. (When taken by business or accounting majors, this course will give general elective credit.)  
Cr 3.

BUS 280 Legal Environment of Business  
This course introduces students to the legal system, consumer law, agency law, administrative law, antitrust law, labor law, equal employment law, environmental 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 290 Introduction to Management Information Systems and Computer Applications  
This course provides an introduction to the principles and concepts of Management Information Systems. A general background concerning the role of Management Information Systems in business organizations is presented. Specific topics include computer hardware and software, information systems life cycle, and user computing, systems analysis and design, database concepts, information systems development, and decision support systems. Additionally, the student will be introduced to word processing, spreadsheets and graphics, and databases by successfully completing projects using the IBM compatible microcomputer.  
Cr 3.

BUS 320 Business Finance  
This course introduces the student to the theories and techniques of managing capital sources and uses within the framework of shareholder wealth maximization. Lecture, problems, cases. Prerequisites: BUS 290, ECO 201J, ECO 202J, ACC 202 or MAT 212 and junior standing.  
Cr 3.

BUS 327 Investment Management  
Provides the planning and management of investment programs for all types of investors. Evaluates the various media of investments in terms of their risks and profits. The functions of the stock market and its behavior are examined. Prerequisites: ACC 201 and junior standing.  
Cr 3.

BUS 328 Commercial Banking  
This course involves both lending and borrowing money on a commercial basis and the management of a bank's assets and liabilities, liquidity position, cost of bank funds, capital acquisitions, and how to measure and manage interest sensitivity and margin. Approximately half of the course concerns determining the bankability of commercial loan applicants. Students learn to establish whether there is an adequate source of repayment and if the balance sheet has sufficient debt capacity or collateral. Prerequisites: ACC 202 and junior standing.  
Cr 3.

BUS 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: ACC 201, ECO 201, ECO 202 and junior standing. Cr 3.

BUS 340 Management
A comprehensive introductory survey of the problems encountered by managers and the practices they employ in planning, organizing, leading, and controlling organizations. The role of the general manager in business is explored, as is the behavior of other individuals and groups within business organizations. Among the various topics covered are: development of management as a discipline, motivation, power, leadership, strategic management, decision making, organizational design, job design, information and control systems, and other areas related to the functions and process of management. Prerequisite: junior standing. Cr 3.

BUS 346 Personnel Management and Human Resources
The selection, training, and management of personnel in private and public sectors, including elements of wage and salary administration, testing, training, and labor relations. Designed for the student interested in administration, office management, or personnel work in education, business, engineering, public service, and other fields. Prerequisite: junior standing. Cr 3.

BUS 348 Industrial Relations
A study of industrial relations patterns in the U.S. Major focus is on the relationship between management and labor (organized and unorganized), and the bargaining, administration, and interpretation of contracts, the problem of dispute settlement, and a comparison of methods used in the U.S. and abroad. Attention is also given to industrial relations in unorganized firms and in the Civil Service. Prerequisites: BUS 340 and junior standing. Cr 3.

BUS 349 Women in Management
For both men and women in business, education, and other work settings. It explores the changing business and organizational environment created by the increase of women in professional and managerial positions. The course examines theoretical concepts pertaining to women in management. Both women and men who are or aspire to be managers will benefit from this course. Prerequisites: BUS 340 and junior standing. Cr 3.

BUS 350 Career Planning and Development
An intensive exploration of career outlets and options based on an analysis of one's own personal and professional profile: life transitions, skills and abilities, interests, motivations, and behavioral styles. Models, readings, case studies, and experiential exercises will help participants analyze their patterns and preferences, anticipate life/work developmental stages, and design action programs to obtain and update their immediate and long-range plans regarding professional focus, function and position, work environment and organizational fit, on-the-job socialization and adaptation, and related life issues of self-concept, values and purpose. Cr 3.

BUS 360 Marketing
An introduction to the field of marketing normally through the use of a computer simulation game. The concepts of market segmentation, marketing mix strategy, and market systems development are presented along with an analysis of consumer behavior and the need for marketing research. Prerequisites: ACC 201, BUS 290 and junior standing. Cr 3.

BUS 361 International Marketing
This course examines the marketing function in the international arena. Representative topics include the following: pricing, distribution, advertising, marketing research, cultural and political considerations, international marketing planning, trade barriers, liberalization, product life cycles and international trade, analysis of economic environments, marketing opportunities in developing countries, and political risk assessment. Prerequisites: BUS 360 and junior standing. Cr 3.

BUS 363 Advertising
Students will explore the evolution of advertising: forms and medium used and their relationship to the product, the climate, the target market, all within the framework of the marketing concept. Prerequisites: BUS 360 and junior standing. 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. Prerequisite: BUS 360 or permission of the instructor. Cr 3.

BUS 367 Managerial Marketing
Students gain experience making marketing decisions as managers of a computer-simulated firm. The emphasis is on applying a "systems" approach to marketing decision making and on integrating knowledge gained in the
other functional business areas into a strategic market planning framework. Prerequisites: BUS 360 and junior standing. Cr 3.

BUS 369 Marketing Research
Consideration of market research as a management planning and evaluative tool. Emphasis on problem formulation, exploratory research, research design, basic observational and sampling requirements, data analysis, interpretation and sampling. Prerequisites: BUS 360 and junior standing. Cr 3.

BUS 371 Operations Research/Management Science
A survey of quantitative methods and tools which are commonly used in sophisticated managerial decision making. Mathematical models are constructed and applied, with the computer's aid, to a wide range of real world business situations. Topical coverage includes decision analysis, inventory models, network analysis, simulation, queuing models, applied stochastic processes, dynamic programming and non-linear programming. Prerequisites: BUS 290, MAT 212 and junior standing. Cr 3.

BUS 375 Production/Operations Management
An introduction to the problems and topics associated with the management of production operations and the delivery of services. The primary emphasis is upon the design of model-based planning and control systems. Specific applications of such systems are used to illustrate general concepts as well as implementation difficulties. Prerequisite: BUS 371. Cr 3.

BUS 380 Business Law I
This course, an introduction to the study of business law, includes a thorough survey of contracts, agency, negotiable instruments, partnerships, corporations, secured transactions, bankruptcy, and other topics. This course is intended to provide a broad overview of business law and the Uniform Commercial Code. Prerequisite: BUS 280, junior standing, or permission of instructor. Cr 3.

BUS 381 Business Law II
An opportunity to continue the study of business law and to evaluate thoroughly selected topics such as corporate reorganizations and combinations, antitrust law, sales of goods, securities regulations, property and the legal aspects of business planning. This course is designed for students who want to do in-depth analysis of selected areas in business law. Prerequisites: BUS 280 and junior standing. Cr 3.

BUS 391 Computer-Based Decision Modelling and Simulation
A more in-depth examination of the role of the computer as an aid in managerial decision making. Emphasis is placed upon strengthening the student's ability to build and properly utilize computer-based decision models and simulation for problem solving in the public and private sectors. Prerequisites: BUS 290 or COS 160, MAT 211, MAT 212, junior standing and completion of admissions requirements for majors. Cr 3.

BUS 395 Internship I
This is the first internship course (junior or senior standing; special students with permission). See description of internship program in catalog text. Cr 3.

BUS 396 Internship II
This is the second internship course. Prerequisite: BUS 395. Cr 3.

BUS 445 Compensation Administration
It provides a basic understanding of the tasks, responsibilities, and objectives of compensation and managing compensation programs. Techniques for determining wages, salaries, and benefits and their application to actual situations in order to design, develop, and administer compensation programs will be covered. The implications of process and policies on parties internal and external to the organization will be investigated. Prerequisites: BUS 346 and junior standing. Cr 3.

BUS 450 Business Management and Policy
Administrative practice at the higher levels of business management through case analysis and discussion. The course attempts to coordinate the background of business majors in the formulation and administration of sound business policy. Prerequisites: BUS 320, BUS 340, BUS 360, BUS 371 and senior standing. Cr 3.

BUS 452 Organizational Behavior
An analysis of the interplay between individual and group behavior, leadership styles and the culture of an organization. The findings of behavior science are applied to such processes as motivation, influence, the structure of work, organizational design, leader-group relations and organizational change. Models, case studies, simulations, and applications. Prerequisites: BUS 340 and junior standing. Cr 3.

BUS 490 Independent Readings and Research
Selected topics in the various areas of accounting, finance, management, and marketing may be studied and researched on an independent basis. Prerequisite: junior standing. Cr 1-6.

BUS 491 Small Business Institute
This course is designed to allow the student to apply the concepts of business administration, economics, and accounting to operational problems in the field. Assignments are arranged by the School of Business, Economics and Management in conjunction with agencies such as the Small Business Administration for an off-campus consulting experience in a
BUS 499 Special Topics in Business and Management

EDC 300 Economic Concepts and Research Materials for Educators
A study of the simplification of economic concepts for presentation at elementary and secondary grade levels; also the study and preparation of various resource materials used in presenting economic concepts at these levels. Prerequisite: permission of the instructor. Cr var 1—3.

ECO 201J Principles of 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. Cr 3.

ECO 202J Principles of 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. 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 201], ECO 202], and junior standing. 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 201], ECO 202], and junior standing. Cr 3.

ECO 305 Mathematical Economics
This course will cover the development and application of contemporary quantitative methods to the analysis of economic theory. Primary emphasis will be placed upon optimization theory and techniques for solving systems of simultaneous equations. These tools will be developed within the framework of economic models. Prerequisites: ECO 201], ECO 202], MAT 109D and 110D or MAT 152D and MAT 153, and junior standing. Cr 3.

ECO 306 Econometrics
Econometrics is a special field of economics in which models are used to test the validity of hypothesized theoretical relationships against actual data. Topics covered include: the bivariate linear regression model, heteroscedasticity, multicollinearity, serial correlation of errors, and two-stage least squares. Econometric forecasting and simultaneous equation estimation will be discussed. Prerequisites: ECO 201], ECO 202], MAT 212, and junior standing. Cr 3.

ECO 310 Money and Banking
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 201], ECO 202], and junior standing. Cr 3.

ECO 315 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 treated include: inequality and discrimination; crisis and state intervention; growth and the environment; military spending, productivity and growth; the U.S. and the world economy; and policies for the future. Prerequisites: ECO 201], and junior standing. Cr 3.

ECO 320 Labor Economics
This course emphasizes the application of economic analysis and concepts to a variety of labor problems such as the supply and demand for labor, wage determination, wage differentials and structures, and wages and inflation. In addition, there will be a brief review of the evolution of the American labor movement and public policy toward labor. Prerequisites: ECO 201], ECO 202], and junior standing. Cr 3.

ECO 322 Economics of Gender and Discrimination
This course examines the very different postwar economic experiences of women, men and minority groups, for example, their differential access to high-paying jobs and career ladders in labor markets. The class will assess a range of theories designed to explain these differences. In addition, students will consider the effectiveness of a variety of public policies designed to create greater labor market equity. Prerequisites: ECO 201], ECO 202], and junior standing. 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—inter-
nationalization, technological change, and competitiveness problems. Prerequisites: ECO 201, ECO 202, and junior standing. Cr 3.

ECO 330 Urban Economics
This course seeks to introduce the study of urban economics through a three phase approach. Phase one provides a conceptual and historical background for analyzing the urban economy. Phase two outlines basic theoretical models of urban spatial structure, land use, transportation needs, demographic change, economic activity and employment analysis linking urban economics to the content of micro and macro economics courses. Phase three applies the tools of analysis developed in part two and the background presented in part one to several of the most urgent urban problems of the 1980s. Prerequisites: ECO 201J, ECO 202J, and junior standing. Cr 3.

ECO 340 History of Economic Thought
A survey of the development of basic economic principles and theories from pre-industrial times to the present. Major emphasis is on the Classical School (Smith, Ricardo, and Malthus), and its critics, the development of the Austrian School, the synthesis of Neo-Classicism, and the emergence of macro-economics. Prerequisites: ECO 201J, ECO 202J, and junior standing. Cr 3.

ECO 350 Comparative Economic Systems
The structures and operating principles of the major contemporary economic systems are examined and compared. Prerequisites: ECO 201J, and junior standing. Cr 3.

ECO 351 Economic System of the Soviet Union

ECO 360 Economic Development
The theories and practices of interregional and international economic development. Special attention is given to developmental problems of emerging nations. Prerequisites: ECO 201J, and junior standing. Cr 3.

ECO 361 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. Prerequisites: ECO 201J and junior standing. 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 201J, ECO 202J, and junior standing. 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 201J, ECO 202J, and junior standing. 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 201J, ECO 202J, and junior standing. Cr 3.

ECO 385 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. Topics including the proper role of government, determinants of productivity change, domestic and foreign investment, and foreign competition are examined as sources of problems. Free market, traditional monetary and fiscal, as well as industrial policies are considered as potential solutions. Prerequisites: ECO 201J, and junior standing. Cr 3.

ECO 450 Readings in Economics
A series of readings and discussions of important books of a socio-economic and politico-economic nature books with which the well-informed economics major should be familiar but which, due to time constraints, have not been integrated into the study hours of economics. Prerequisites: ECO 201J, and junior standing. Cr 3.

ECO 490 Independent Readings and Research in Economics
Independent study and research of various student-selected areas of economics. Prerequisites: senior standing and a completed independent study form (available from SBEM Dean’s office). Cr 1-3.
School of Applied Science

Dean: Brian C. Hodgkin, 106 Science Building, Portland
Assistant Dean: Richard H. Carter, 103 Technology Center, Gorham

The School of Applied Science is an academic unit of the University delivering science, engineering, computer science, and technology programs. The School is organized into four departments: the Department of Computer Science, the Department of Technology, the Department of Engineering, and the Department of Applied Medical Sciences. Through these departments, the School offers bachelor's degrees, including the B.S. in computer science, electrical engineering, industrial technology, vocational technology, technology education, and vocational/occupational education. In addition to the B.S. in electrical engineering, some courses in other engineering disciplines are available. The School also works closely with the University's Department of Continuing Education for Business to provide courses and programs serving the needs of the region. A Technology Center provides for ongoing liaison with industry.

The School offers the M.S. degree in computer science, and through the Center for Engineering Studies, the M.S. degree in electrical engineering is extended from the University of Maine. The M.S. degree in applied immunology is offered in collaboration with the Maine Medical Center and the Foundation for Blood Research. Further information regarding the School's graduate programs may be found in the Graduate Catalog.

General Information

Admission to an undergraduate program in the School of Applied Science is initiated through the University Admissions Office. Candidates for admission must be graduates of an approved secondary school and meet such other admissions requirements as are set out in the Admissions section of this catalog and individual program descriptions.

General academic policies will be found in the Academic Policies section of this catalog. Specific policies and requirements are set forth in the sections dealing with the individual departments of the School. All students are reminded that, in addition to meeting departmental requirements for a major, they must also meet the requirements of the University Core curriculum.
Department of Computer Science

Chair of the Department: Charles Welty, 224 Science Building, Portland
Professors: Heath, Welty; Assistant Professors: Briggs, MacLeod, Vijaykumar

The Department of Computer Science offers a four-year program leading to a B.S. in computer science. In cooperation with the Department of Mathematics, it offers an additional major in computer science and mathematics. Students may receive either a B.S. in computer science with an additional major in mathematics or a B.A. in mathematics with an additional major in computer science.

All students are reminded that, in addition to meeting departmental requirements for a major, they must also meet the University Core curriculum requirements.

Bachelor of Science in Computer Science

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 56. Total minimum credits to graduate: 120.

The curriculum prepares students for graduate study or professional careers in the computer field. Course requirements ensure that students receive instruction in both practical and theoretical aspects of computer science.

To fulfill a major requirement a course 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.

The specific course requirements are as follows.
A. Successful completion of the following courses:
   - COS 160 Structured Problem Solving: PASCAL
   - COS 161 Algorithms in Programming
   - COS 250 Computer Organization
   - COS 251 Software Systems
   - COS 280 Discrete Structures
   - COS 285 Data Structures
   - COS 360 Programming Languages
   - COS 480 Introduction to Theory of Computing
   - MAT 152D Calculus A
   - MAT 153 Calculus B
   - MAT 380 Theory of Probability and Statistics

B. Successful completion of five additional COS courses numbered 300 and above.

C. Successful completion of two additional mathematics courses with second digit 5 or greater, excluding MAT 290 and MAT 390.

The following schedule of mathematics and computer science courses is typical for the freshman and sophomore years.

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>Freshman year</td>
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<tr>
<td>COS 160</td>
<td>COS 161</td>
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<tr>
<td>MAT 152D</td>
<td>MAT 153</td>
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<tr>
<td>Sophomore year</td>
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<tr>
<td>COS 250</td>
<td>COS 251</td>
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<tr>
<td>COS 280</td>
<td>COS 285</td>
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Bachelor of Science in Computer Science with an Additional Major in Mathematics

Requirements for this degree are identical to those listed in the Mathematics Department under the heading, "Double Major in Mathematics and Computer Science." See that section of this catalog.

Minor in Computer Science

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 18.
A minor in computer science may be obtained by successfully completing the courses listed below with an accumulative grade point average of 2.0 in these courses: COS 160; COS 161; COS 250; COS 280, COS 285, and one additional COS course with first digit 2 or greater.

**COS 101D Quantitative Decision Making Using Computers**
The primary objective of this course is to teach students how to use logical reasoning and quantitative methods to solve problems. Students will practice quantitative skills using database and statistical analysis software programs on microcomputers. This class requires no previous computer experience. Prerequisite: two years of high school algebra. Cr 3.

**COS 140 Programming in FORTRAN**
A study of programming techniques and applications using FORTRAN. Prerequisites: Two years of high school algebra or equivalent. Cr 3.

**COS 160 Structured Problem Solving: PASCAL**
An introduction to the use of digital computers for problem solving, employing the PASCAL programming language as a vehicle. Content includes elementary control structures and data representation methods provided by PASCAL and the top-down programming methodology. Course requirements include a substantial number of programming projects. Prerequisite: two years of high school algebra or equivalent. 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. Prerequisite: COS 160 (PASCAL). Cr 3.

**COS 230 Programming in COBOL**
A study of the programming language used primarily in business. Prerequisite: COS 140 or COS 160. 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 instructor. Cr 3.

**COS 250 Computer Organization**
The course covers the basic hardware and software that make up a computer system. Subjects include logical design, micro programming, machine languages, assembly languages, and operating systems. Prerequisite: COS 161. Normally only offered in the fall semester. Cr 3.

**COS 251 Software Systems**
This course is a continuation of COS 250. The course examines the software layers that comprise a computer system in the context of specific programming environments. Topics will include UNIX, MS-DOS and C. Prerequisite: COS 250. Cr 3.

**COS 280 Discrete Structures**

**COS 285 Data Structures**
Basic concepts of data, strings, stacks, arrays, and lists. Representations of trees and graphs. Storage systems and structures, searching and sorting techniques. Multi-linked structures. Performance comparison of algorithms for sorting and searching. Course requirements include a substantial programming component. Prerequisites: COS 250 and COS 280 or permission of instructor. Normally offered only in spring semester. Cr 3.

**COS 355 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. Prerequisites: COS 280 or MAT 290, and COS 250. Cr 3.

**COS 357 File Organization**
Study of various external storage media including magnetic tape, disk and bubble memory. Various file organizations such as sequential, direct, and indexed sequential will be studied in detail. Some concepts of how file organization supports data base systems may also be included. Prerequisite: COS 285. Cr 3.

**COS 360 Programming Languages**
An examination of basic concepts and special facilities in higher-level programming languages via the consideration of several representative languages. Emphasis on scope of declarations, storage allocation, data structure variety, binding time of constituents, and control organization. Introduction to the formal definition of programming languages. Prerequisites: COS 251, COS 285. Normally offered only in the fall semester. Cr 3.
COS 370 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. Prerequisite: COS 285 or permission of the instructor. Cr 3.

COS 372 Software Engineering
A study of methods applied to large-scale software development, including topics such as project management, software design, verification and validation. Students will apply methods to a large programming project. Prerequisites: COS 251, COS 285. Cr 3.

COS 374 Numerical Analysis I
A study of the theory and application of computational algorithms for interpolation, equation solving, matrix methods, integration; error analysis. Prerequisites: MAT 252, COS 160, and permission of instructor. Cr 3.

COS 450 Operating Systems
Computer resource management. Topics include an in-depth study of concurrent cooperating processes; virtual systems; segmentation and paging; I/O device handling; protection and security; deadlock; race conditions. Prerequisite: COS 285. 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. Prerequisites: COS 251, COS 285. Cr 3.

COS 457 Database Systems
Introduction to the basic methods and principles of database management systems (DBMS). Topics covered: DBMS objectives and architecture, data models, data definition and manipulation languages, query languages, database application and design development tools. Prerequisite: COS 285. Cr 3.

COS 469 Introduction to Compiler Construction
Definition of a language, context-free grammars, rigorous definition of a typical small language in BNF; design and implementation of a compiler for programs within this language. Prerequisites: COS 251, COS 285. Cr 3.

COS 472 Artificial Intelligence
An introduction to the underlying concepts and applications of intelligent systems. Topics include computer representations of knowledge; heuristic search techniques and computer problem solving; learning; game playing; automatic theorem proving; pattern recognition; natural language question-answering. Prerequisite: COS 285. Cr 3.

COS 480 Theory of Computation
Introduction to the basic concepts of finite automata and Turing machines; finite state acceptors and regular sets; linear sequential circuits, complexity results for finite networks, elementary notions of recursive and recursively enumerable sets. Prerequisite: COS 280 or MAT 290. 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. Prerequisites: junior or senior standing and permission of the department chairman and instructor. Cr 1-3.
Department of
Engineering

Chair of the Department: James W. Smith, 106 Science Building, Portland;
Associate Professors: Guvench, Hodgkin, Knudsen, Smith; Adjunct Assistant Pro-
fessor: Most

Engineers apply the principles of chemistry, mathematics and physics to
design and create instruments, structures, machines and systems. Virtually
every physical part of modern society was designed, developed and tested by
engineers. The computer, an engineering accomplishment itself, is now a
valuable engineering tool.

Engineering programs include the bachelor of science degree program in
electrical engineering, the University of Maine master of science degree
program in electrical engineering offered at the University of Southern
Maine through the Center for Engineering Studies, and first-year engineer-
ing curricula for several engineering specialties.

Preparation for an undergraduate engineering program should include
high school chemistry, physics, and mathematics including algebra and trig-
onometry. Courses are available at the University of Southern Maine for
those students needing to make up prerequisites.

I. Bachelor of Science in Electrical Engineering

Electrical engineering is a challenging profession concerned with the
design, development, fabrication, and control of electrical and electronic
devices and systems. The undergraduate program is built on a foundation
of physics, chemistry, and mathematics. It is broad-based but there are
opportunities to specialize, particularly in digital systems and solid state
device electronics and microelectronics. The goal of the program is that
students will be technically competent and will have good communications
skills, be able to work as part of a team or independently, function well in a
multi-skills setting, and be prepared for a lifetime of learning and profes-
sional growth.

Requirements

Requirements for the bachelor of science degree in electrical engineering
at the University of Southern Maine include:

Mathematics
MAT 152D Calculus A
MAT 153 Calculus B
MAT 252 Calculus C
MAT 350 Differential Equations
One advanced mathematics course selected from an approved list

Computer Science
COS 140 Programming in FORTRAN
COS 150 Structured Problem Solving: PASCAL

Basic Science
CHY 113, 114, 115, 116 Principles of Chemistry I and II
PHY 121K, 122K, 123, 124 General Physics I and II

Electrical Engineering
ELE 100 Introduction to Engineering
ELE 171 Introduction to Microprocessors
ELE 172 Digital Logic
ELE 210, 211 Electric Circuits I and II
ELE 262 Physical Electronics
ELE 300 Seminar
ELE 314 Linear Circuits and Systems
ELE 323 Electromechanical Energy Conversion
ELE 342, 343 Electronics I and II
ELE 351 Electromagnetic Fields
ELE 362 Materials Science
ELE 401, 402, 403 Design Project I, II and III
ELE 425 Control Systems
OR
ELE 483 Communications Engineering

Mechanical Engineering
MEE 230 Thermodynamics

Technical Electives
At least 2 electrical engineering elective courses are required. The third required technical elective can be chosen from physics, chemistry, mathematics, computer science, electrical engineering, and other engineering disciplines as available.

Other
ENG 100C College Writing
THE 170F Public Speaking

Core curriculum courses in the following categories:

E Skills of Analysis/Philosophy 1
G History-Centered Arts 1
H Humanities 1
I Other Times/Other Cultures 1
J Social Sciences 2
COR Interdisciplinary 1

The Core curriculum courses must provide both breadth and depth and not be limited to a selection of unrelated introductory courses.

Credits to graduate: 134
Grade point average: 2.0 overall and 2.0 in 300-level and higher electrical engineering courses.

Minor in Electrical Engineering
A minor in electrical engineering may be obtained by successfully completing the courses listed with an accumulative grade point average of 2.0: ELE 100, ELE 171, ELE 172, ELE 210, ELE 211, ELE 262, ELE 323, ELE 342, ELE 343, ELE 351. Science and mathematics prerequisites for these courses must also be completed successfully.

II. Transfer Programs for Several Engineering Disciplines
The transfer engineering program prepares students to complete the degree at the University of Maine or elsewhere. All University of Southern Maine students who have satisfactorily completed their first year or more at the University of Southern Maine are eligible to transfer to the University of Maine for the completion of the program. The following curricula are offered at the University of Maine: agricultural engineering, chemical engineering, chemistry, civil engineering, computer engineering, electrical engineering, engineering physics, forest engineering, mechanical engineering, pulp and paper technology, and surveying engineering.

III. Master of Science in Electrical Engineering
At the graduate level, the University of Maine master of science and master of engineering in electrical engineering degree programs are available through the Center for Engineering Studies. The University of Southern Maine graduate catalog should be consulted for details.
ELE 100 Introduction to Engineering
Provides basic understanding of engineering methods and use of computers as engineering tools. Word processing, engineering calculations, data processing, graphics, computer-aided drafting, principles of design, and report writing. Learning of computer skills associated with each topic. Simple design project and report. Prerequisites: none. Typing skills are useful. Lecture 1 1/4 hrs., Lab 3/4 hrs. Cr 3.

ELE 171 Introduction to Microprocessors
The microcomputer and its component parts including microprocessors, registers, memory and I/O. Programming and applying the microprocessor in engineering systems. Lecture 3 hrs., Lab. 2 hrs. Cr 4.

ELE 172 Digital Logic
Introduction to the design of logic systems; combinatorial and sequential logic; extensive use of SSI and MSI in design of logic systems. Lecture 3 hrs., Lab. 2 hrs. Cr 4.

ELE 210 Electric Circuits I
Basic circuit laws and theorems, natural and forced responses of first order systems, phasor concepts, application of basic circuit theorems to steady-state a-c networks including steady-state power. Characteristics and proper use of basic circuit instruments. Prerequisites: MAT 153, PHY 123. Lecture 3 hrs., Lab./Comp. 2 hrs. Cr 4.

ELE 211 Electric Circuits II

ELE 262 Physical Electronics
Basic characteristics and properties of materials of importance in solid-state engineering. Particular emphasis is placed on atoms, crystal structures, electronic conductivity, semiconductor theory and bipolar and field effect transistors. Prerequisites: CHY 113K, PHY 123. Lecture 3 hrs. Cr 3.

ELE 300 Seminar
Exploration of career opportunities, organizational structure of industry, professional ethics and responsibilities. Prerequisite: ELE 211. Lecture 1 hr. (Pass/fail grade only). Cr 1.

ELE 314 Linear Circuits and Systems
Analysis of continuous and discrete-time systems, Fourier and Laplace transforms, state variables, convolution, z-transforms. Prerequisites: ELE 211, MAT 350, and COS 140 or equivalent. Lecture 3 hrs. Cr 3.

ELE 323 Electromechanical Energy Conversion
Basic concepts related to electrical machines, transformers, and measurements. Prerequisite: ELE 210. Lecture 2 hrs., Lab. 2 hrs. Cr 4.

ELE 342 Electronics I
Fundamentals of electronic circuits with emphasis on digital concepts. Ideal and non-ideal operational amplifiers and typical applications; diodes, BJTs and FETs in basic circuits and in logic applications. NMOS and CMOS inverters; DTL and TTL logic. Prerequisites: ELE 211, ELE 262. Lecture 3 hrs., Lab. 2 hrs. Cr 4.

ELE 343 Electronics II

ELE 351 Electromagnetic Fields
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. Prerequisites: MAT 350, PHY 123. Lecture 3 hrs. Cr 3.

ELE 362 Materials Science
Concepts of relationships between structure, composition and thermal, optical, magnetic, electrical and mechanical properties of metals, ceramics, glasses and polymers. Prerequisites: MAT 153, CHY 115 or permission. Cr 3.

ELE 394 Electrical Engineering Internship
Work experience in electrical engineering. May be taken more than once. Prerequisite: permission. (Pass/fail grade only.) Cr 1-3.

ELE 401, 402, 403 Design Project I, II, III
Proposal, implementation, and reporting on a device or system to perform an engineering function. May be done individually or in small groups. Student selects or is assigned an advisor and with that advisor defines the project. Under the supervision of the advisor, the project is researched, designed, developed, and implemented. Oral and written reports are required. This is a three-semester sequence. Prerequisites: permission of department. (Semester 1) Completion of at least two 300-level electrical engineering courses (not counting ELE 300). (Semester 2) Completion of at least five 300- and/or 400-level electrical engineering courses. Cr 6.

ELE 425 Control Systems
Feedback control systems, modeling, analysis, transfer functions, continuous and digital control. Prerequisite: ELE 323 or permission. Lecture 3 hrs. Lab. 2 hrs. Cr 4.

ELE 444 Analog Integrated Circuits
Topics in the internal circuit design and system applications of analog integrated circuits; current sources, differential amplifiers, level shifters, operational amplifiers, regulators,
high frequency considerations; digital-to-analog and analog-to-digital converters, phase-locked loops. Prerequisites: ELE 314 and ELE 343. Lecture 3 hrs. Cr 3.

ELE 463 Solid State Electronic Devices
The theory of solid state electronic devices and an introduction to device fabrication technology. Devices studied include Schottky diodes, solar cells, light emitting diodes, metal oxide semiconductor field effect transistors (MOSFETS) and capacitors and junction field effect transistors (JFETS). Prerequisite: ELE 262. Lecture 3 hrs. Cr 3.

ELE 464 Microelectronics

ELE 465 Digital Integrated Circuits

ELE 471 Microprocessor Applications Engineering
Application of microprocessors to the solution of design problems, including hardware characteristics, peripheral control techniques and system development. Prerequisites: ELE 171, 172, Lecture 2, Lab. 3. Cr 3.

ELE 475 Sequential Logic Systems
Methods of design and test for logic systems with memory. Sequential machine flow charting and algorithmic approaches to design. Test procedures and the design of system tests. Prerequisite: ELE 172. Lecture 3 hrs. Cr 3.

ELE 483 Communications Engineering
Basic principles of modern communication engineering; methods of analysis; baseband communications; modulation techniques; effects of noise; information transmittal. Prerequisites: MAT 350, ELE 314. Lecture 3 hrs. Cr 3.

ELE 484 Digital Signal Processing
The basic principles of processing signals in discrete form. Review of z-transforms, discrete Fourier series and transforms. Flow graph and matrix representations of digital filters, digital filter design techniques, fast Fourier transforms, windowing, two-dimensional, DFT, and homographic signal processing. Emphasis is placed on using the computer to both design and realize various signal processors. Prerequisites: COS 140 or COS 160 and ELE 314. Lecture 3 hrs. Cr 3.

ELE 498 Selected Topics in Electrical Engineering
Topics in electrical engineering not regularly covered in other courses. The content can be varied to suit current needs. The course may, with permission of the department, be taken more than once. Prerequisite: Permission of the department. Cr 1-3.

The following mechanical engineering course is offered as part of the electrical engineering program.

MEE 230 Thermodynamics I
Energy and energy transformations; the First and Second Laws applied to systems and to control volumes; thermodynamic properties of systems, availability of energy. Prerequisite: MAT 133. Lecture 3 hrs. Cr 3.
Department of Technology

Chair of the Department: Richard Carter, Technology Center, Gorham
Associate Professors: Anderson, Carter, Faulkner, Kirk, W. Moore, Nannay, Zaner; Assistant Professors: Bazinet, O'Connor

Technology is the study of the creation and utilization of adaptive systems including tools, machines, materials, techniques and technical means, and the relation of the behavior of these elements and systems to human beings, society, and the civilization process. Technological concepts are presented through a variety of approaches including the lecture, technical laboratories, field experiences, industrial visitations, and cooperative programs.

The curricula of the Department of Technology provide a blend of cultural, technical, and professional courses designed to prepare individuals for teaching or industrial positions. Recognition is given to prior learning, where appropriate. Four degree programs are offered.

The undergraduate program in technology education is designed to prepare students to organize, manage, and teach programs of technology education in elementary and secondary schools. Laboratory courses in energy power systems, technical communications, and materials and processes provide a technical/conceptual background.

Vocational/occupational education recognizes prior learning and skill obtained through occupational experience. It is designed to prepare students for teaching in vocational/technical education or other occupational training programs and requires a minimum of three years of occupational experience as a prerequisite for the degree program. Emphasis is placed on the development of cultural and professional education.

Industrial technology is a management-oriented curriculum designed to prepare an individual for supervisory/technical/managerial roles in industry. Two options are available. For the individual without technical skills, shop/laboratory experiences provide for development of technical proficiency. For those with prior learning through occupational training/experience, trade and technical competencies are evaluated and credit granted. Both options, in cooperation with the School of Business, Economics and Management, provide a basic preparation in business administration.

The vocational technology program is an occupationally oriented curriculum designed for individuals who desire to prepare for managerial/supervisory roles. The program recognizes nontechnical occupational experience, assesses prior learning, and offers three areas of concentration in business management. A minimum of three years of occupational experience is required as a prerequisite for the degree program.

Admission Requirements

Applicants for technology education, or those without occupational experience desiring to pursue the industrial technology program, must visit the Technology Center for a tour of the facility and interviews with the faculty. Applicants will be notified of the appropriate procedure to follow and the dates available for on-campus visits.

Applicants with a minimum of three years of occupational experience who desire to pursue the industrial technology, vocational/occupational education, or vocational technology programs must submit evidence of a minimum of three years of occupational experience and appear for a personal interview. Candidates should contact the Department office for an appointment to discuss the evaluation of prior work experience in the vocational/technical field.
Bachelor of Science in Technology Education

The number of credits (including the University's Core curriculum) required for the degree: 128.

Core Curriculum (34 credits)

Basic Competence  9

Methods of Inquiry/Ways of Knowing  
  a. Fine Arts  6  
    1. Performance-centered  
    2. History-centered  
  b. Humanities  6  
    1. Literature  
    2. Other Times/Other Cultures  
  c. Social Sciences  6  
    (Students must take HRD 333J Human Growth and Development in addition to another Social Science course.)  
  d. Natural Sciences  4  

COR course  3

Departmental Requirements

Science/Math  6 credits
  a. Math/Computer Science  3  
  b. Physics or Chemistry  3

In addition, students must take 6 credits of electives.

Technical (57 credits)

Required courses

ITP  100 Modern Industry  
ITT  102 Introduction to Industrial Technology  
ITT  103 Materials Properties and Testing  
ITT  211 Electronics Technology  
ITT  221 Power Systems  
ITT  231 Technical Graphics  
ITT  241 Graphic Reproduction  
ITT  251 Material Processes—Metal  
ITT  261 Material Processes—Wood  
ITT  281 Computers in Industry and Technology  
ITT  311 Communications Electronics  
ITT  323 Control Systems  
ITT  331 Engineering Design Graphics  
ITT  342 Photo Offset Lithography  
ITT  351 Machining and Fabrication  
ITT  361 Production Manufacturing in Wood  
ITT  371 Plastics Technology  

Technical Electives (select any two)

Energy and Power Systems

ITT  313 Electrical Construction  
ITT  321 Automotive Systems  
ITT  322 Automotive Diagnosis and Tuneup  
ITT  383 Robotics  
ITT  413 Instrumentation  
ITT  414 Digital Electronics  
ITT  423 Fluid Power  
ITT  424 Fluid Power Systems  
EET  51 Analog Systems  
EET  61 Digital Systems  
EET  71 Microcomputer Architecture and Applications

Communication

ITT  332 Architectural Drawing and Design  
ITT  333 Descriptive Geometry  
ITT  334 Energy Efficient Residential Design  
ITT  343 Communication Design  
ITT  382 CAD-CAM Technology  
ITT  434 Industrial Production Illustration  
ITT  435 Systems Analysis and Design
Materials and Processes

ITT  444  Photographic Reproduction
ITT  445  Color Reproduction Theory

Professional Education (25 credits)

IET  190  Preprofessional Field Experiences
IET  290  Contemporary Teaching in Industrial Education
*IET  380  Curriculum Materials in IA Education
IEV  312  Teaching Students with Special Needs
*IET  381  Methods of Teaching IA Education
IET  324  Student Teaching/Seminar

*Minimum 2.5 cumulative index required and must be maintained in order to register for IET 380, IET 381, and IET 324 and for graduation from the program. Satisfactory completion of IET 380 and IET 381, a prerequisite to registration for IET 324.

Bachelor of Science in Industrial Technology

The number of credits (including the University's Core curriculum) required for the degree: 130.

**Option #1: Skill Development**

Core Curriculum (34 credits)

Basic Competence  9

Methods of Inquiry/Ways of Knowing
  a. Fine Arts  6
     1. Performance-centered
     2. History-centered
  b. Humanities  6
     1. Literature
     2. Other Times/Other Cultures
  c. Social Sciences  6
     (Students must take ECO 201 Economics I in addition to another social science course.)
  d. Natural Sciences  4

COR course  3

Departmental Requirements

Science/Math  12 credits
Mathematics  3
Statistics  3
Computer Science  3
Physics or Chemistry  3

In addition, students must take 6 credits of electives.

Technical (39 credits)

Required courses

ITT  102  Introduction to Industrial Technology
ITT  103  Materials Properties and Testing
ITT  211  Electronics Technology
ITT  221  Power Systems
ITT  231  Technical Graphics
ITT  241  Graphic Reproduction
ITT  251  Material Processes—Metal
ITT  261  Material Processes—Wood
ITT  281  Computers in Industry and Technology

Technical Electives—12 credit hours

Energy/Power Systems

ITT  311  Communication Electronics
ITT  313  Electrical Construction
ITT  321  Automotive Systems
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ITT 322</td>
<td>Automotive Diagnosis and Tuneup</td>
</tr>
<tr>
<td>ITT 323</td>
<td>Control Systems</td>
</tr>
<tr>
<td>ITT 383</td>
<td>Robotics</td>
</tr>
<tr>
<td>ITT 413</td>
<td>Instrumentation</td>
</tr>
<tr>
<td>ITT 414</td>
<td>Digital Electronics</td>
</tr>
<tr>
<td>ITT 423</td>
<td>Fluid Power</td>
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<tr>
<td>ITT 424</td>
<td>Fluid Power Systems</td>
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</tbody>
</table>

### Technical Communication

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ITT 331</td>
<td>Engineering Design Graphics</td>
</tr>
<tr>
<td>ITT 332</td>
<td>Architectural Drawing and Design</td>
</tr>
<tr>
<td>ITT 333</td>
<td>Descriptive Geometry</td>
</tr>
<tr>
<td>ITT 334</td>
<td>Energy Efficient Residential Design</td>
</tr>
<tr>
<td>ITT 342</td>
<td>Photo Offset Lithography</td>
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<tr>
<td>ITT 343</td>
<td>Communication Design</td>
</tr>
<tr>
<td>ITT 382</td>
<td>CAD-CAM Technology</td>
</tr>
<tr>
<td>ITT 434</td>
<td>Industrial Production Illustration</td>
</tr>
<tr>
<td>ITT 435</td>
<td>Systems Analysis and Design</td>
</tr>
<tr>
<td>ITT 444</td>
<td>Photographic Reproduction</td>
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<tr>
<td>ITT 445</td>
<td>Color Reproduction Theory</td>
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</tbody>
</table>

### Materials and Processes

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ITT 351</td>
<td>Machining and Fabrication</td>
</tr>
<tr>
<td>ITT 352</td>
<td>Fabrication and Forming</td>
</tr>
<tr>
<td>ITT 361</td>
<td>Production Manufacturing in Wood</td>
</tr>
<tr>
<td>ITT 362</td>
<td>Residential Construction</td>
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<tr>
<td>ITT 363</td>
<td>Wood Science</td>
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<tr>
<td>ITT 371</td>
<td>Plastic Technology</td>
</tr>
<tr>
<td>ITT 402</td>
<td>Materials Testing</td>
</tr>
<tr>
<td>ITT 452</td>
<td>Metallurgy and Metrology</td>
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</tbody>
</table>

### Optional Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ITT 400</td>
<td>Occupational Experience (Verified)</td>
</tr>
<tr>
<td>ITT 440</td>
<td>Related Occupational Experience/Internships</td>
</tr>
<tr>
<td>ITT 490</td>
<td>Special Problems in Technology</td>
</tr>
</tbody>
</table>

### Professional (38–39 credits)

#### Required courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ITP 100</td>
<td>Modern Industry</td>
</tr>
<tr>
<td>ITP 300</td>
<td>Motion and Time Study</td>
</tr>
<tr>
<td>ITP 310</td>
<td>Plant Layout and Material Handling</td>
</tr>
<tr>
<td>ITP 320</td>
<td>Occupational Safety and Health</td>
</tr>
<tr>
<td>ITP 330</td>
<td>Production Control</td>
</tr>
<tr>
<td>ITP 340</td>
<td>Quality Control Fundamentals</td>
</tr>
<tr>
<td>ITP 350</td>
<td>Conference Leading</td>
</tr>
<tr>
<td>ITP 370</td>
<td>Job/Work Analysis</td>
</tr>
<tr>
<td>ITP 380</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>ITP 390</td>
<td>Cost Analysis and Control</td>
</tr>
<tr>
<td>ABU 111</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>ECO 202f</td>
<td>Principles Economics II</td>
</tr>
</tbody>
</table>

### Technical Writing (ENG 209 Business and Report Writing or ITP 210 Technical Writing may be taken to satisfy this requirement)

#### Option #2: Occupational Experience

Core Curriculum (34 credits)

Basic Competence 9

Methods of Inquiry/Ways of Knowing

- a. Fine Arts 6
  - 1. Performance-centered
  - 2. History-centered
- b. Humanities 6
  - 1. Literature
  - 2. Other Times/Other Cultures
- c. Social Sciences 6
  (Students must take ECO 201 Economics I in addition to another social science course.)
- d. Natural Sciences 4

COR course 3
Departmental Requirements
Science/Math 12 credits
Mathematics 3
Statistics 3
Computer Science 3
Physics or Chemistry 3
In addition, students must take 6 credits of electives.

Technical (39 credits)

Technical Assessment (39 credit hours maximum)
ITT 400 Occupational Experience
ITT 440 Related Occupational Experiences/Internships (two options, total credits to be no more than the difference between those granted for ITT 400 and 39 credits)

Option # 1: This course option is designed to permit attendance at an approved industry-sponsored school or seminar for the purpose of providing the student with advanced related occupational or technical training. Courses provided by organizations such as General Motors Training Centers or International Typographical Union qualify under this option.

Option # 2: Approved employment with a company may qualify a student under this option. Arrangements must be approved by the advisor in advance. The experiences should provide opportunities for updating occupational technical skills and knowledge. Credit will be determined on the basis of one credit for each two full weeks of employment with a maximum of three credits for each period of approved continuous full-time employment. A daily log, summary, report, and evaluation by a supervisor will constitute part of this option.

For additional information concerning either option of ITT 440, consult your advisor.

Professional (39 credits)
Required courses (18 credit hours)
ITP 100 Modern Industry
ITP 300 Motion and Time Study
ITP 310 Plant Layout and Material Handling
ITP 320 Occupational Safety and Health
ITP 330 Production Control
ITP 340 Quality Control Fundamentals
ITP 350 Conference Leading
ITP 370 Job/Work Analysis
ITP 380 Principles of Management
ITP 390 Cost Analysis and Control
ABU 111 Principles of Accounting I
ECO 202 Principles of Economics II
ABU 111 Principles of Accounting I
ITP 210 Technical Writing (ENG 209 Business and Report Writing or ITP 210 Technical Writing may be taken to satisfy this requirement)

Bachelor of Science in Vocational/Occupational Education
The number of credits (including the University's Core curriculum) required for the degree: 123.

Core Curriculum (34 credits)
Basic Competence 9
Methods of Inquiry/Ways of Knowing
a. Fine Arts 6
   1. Performance-centered
   2. History-centered
b. Humanities 6
   1. Literature
   2. Other Times/Other Cultures

c. Social Sciences 9
   (Students must take HRD 333 Human Growth and Development in addition to two other social science courses.)
d. Natural Sciences 4
   
COR course 3

Departmental Requirements

Science/Math 9 credits
Electives 3

Technical Assessment (45 credits maximum)

ITT 400 Occupational Experience
ITT 440 Related Occupational Experiences/Internships
   (two options, total credits to be no more than the difference between those granted for ITT 400 and 45 credits)

Option # 1: This course is designed to permit attendance at an approved industry-sponsored school or seminar for the purpose of providing the student with advanced related occupational or technical training. Courses provided by organizations such as General Motors Training Centers or International Typographical Union qualify under this option.

Option # 2: Approved employment with a company may qualify a student under this option. Arrangements must be approved by the advisor in advance. The experiences should provide opportunities for updating occupational technical skills and knowledges. Credit will be determined on the basis of one credit for each two full weeks of employment with a maximum of three credits for each period of approved continuous full-time employment. A daily log, summary, report, and evaluation by a supervisor will constitute part of this option.

For additional information concerning either option of ITT 440, consult your advisor.

Professional Education (30 credit hours)

Required Courses: All courses 3 credits except as noted
IEV 300 Occupational and Trade Analysis
IEV 305 Curriculum Development in Vocational Education
IEV 310 Methods and Materials of Instruction in Vocational Education
IEV 312 Teaching Students with Special Needs
IEV 340 Shop Organization and Management
IEV 350 Philosophy of Vocational Education
IEV 411 Measurement and Evaluation (vocational)
ITP 100 Modern Industry
EDU 324 Student Teaching/Clinical Experiences—6 credits

OR

IEV 402 Student Teaching

Recommended Electives (all 3 credit courses)—May be elected to meet credit requirement for degree, if needed
IEV 312 Teaching Students with Special Needs
IEV 315 Learning and Programmed Instruction
IEV 320 Coordination of Cooperative Education
IEV 330 Principles and Practices of Vocational Guidance
IEV 382 Preparation of Instructional Materials
IEV 420 Trends in Vocational Education
IEV 450 Local Administration and Supervision of Vocational Education
IEV 455 Development of Technical Education
IEV 460 Independent Study in Vocational Education
ITP 350 Conference Leading
Bachelor of Science in Vocational Technology

The number of credits (including the University's Core curriculum) required for the degree: 120.

Core Curriculum (34 credits)

Basic Competence 9

Methods of Inquiry/Ways of Knowing

a. Fine Arts 6
   1. Performance-centered
   2. History-centered
b. Humanities 6
   1. Literature
   2. Other Times/Other Cultures
c. Social Sciences 6
   (Students must take ECO 201J Economics I in addition to another social science course.)
d. Natural Sciences 4

COR course 3

Departmental Requirements

Science/Math 9 credits

Electives 3

Technical Assessment (45 credits maximum)

ITT 400 Occupational Experience

ITT 440 Related Occupational Experiences/Internships (two options, total credits to be no more than the difference between those granted for ITT 400 and 45 credits)

Option # 1: This course is designed to permit attendance at an approved industry-sponsored school or seminar for the purpose of providing the student with advanced related occupational or technical training. Courses provided by organizations such as General Motors Training Centers or International Typographical Union qualify under this option.

Option # 2: Approved employment with a company may qualify a student under this option. Arrangements must be approved by the advisor in advance. The experiences should provide opportunities for updating occupational technical skills and knowledge. Credit will be determined on the basis of one credit for each two full weeks of employment with a maximum of three credits for each period of approved continuous full-time employment. A daily log, summary, report, and evaluation by a supervisor will constitute part of this option.

For additional information concerning either option of ITT 440, consult your advisor.

Professional (30 credits)

Required Courses (18 credit hours)

ITP 100 Modern Industry

ITP 350 Conference Leading

ITP 370 Job/Work Trade Analysis

ABU 111 Principles of Accounting I

ABU 240 Principles of Management

ECO 202J Principles of Economics II

Professional Concentration (select one area) (12 credits)

Area 1—General

ABU 112 Principles of Accounting II

ABU 190 Introduction to Computers in Business

ABU 220 Business Finance I

ABU 260 Marketing

Area 2—Personnel Management

ABU 112 Principles of Accounting II

BUS 346 Personnel Management
ITT 102 Introduction to Industrial Technology
An introductory study of industry and technology. Emphasis on developing an understanding of the basic concepts and functions of industry, the application of technology, and the life cycle of goods and services. Basic conceptual models and skills relating to production, communications, and power systems defined and developed. Lecture and lab. Cr 3.

ITT 103 Materials Properties and Testing
A study of the basic properties of industrial materials, structures and testing procedures used to determine those properties. Studies include physical, mechanical, optical, chemical, thermal, and electrical properties. Testing and associated literature and reporting procedures, calculation and measurement are also included. Cr 3.

ITT 211 Electronics Technology
A study of the fundamental concepts, devices, and applications of AC and DC theory with an introduction to semiconductor theory. Use of laboratory test equipment in defining circuit status is included. Computer aided instruction in the laboratory is emphasized. Cr 3.

ITT 221 Power Systems
An introduction to the broad field of power. Power is examined from its relationship to energy and electro-mechanical devices. Laboratory experiences include design and construction, servicing and maintenance, testing and evaluation of electro-mechanical devices and systems. Cr 3.

ITT 231 Technical Graphics
Concepts of spatial relationships and visualizations with related techniques. Basic skill development and understanding taught through freehand illustrations as well as conventional instruments and devices. Multiview projections, pictorial techniques, primary and secondary auxiliaries, detail and assembly working drawings, and reproduction techniques. Contemporary industrial practices and processes. Cr 3.

ITT 241 Graphic Arts Technology
A comprehensive study of the common reproduction systems with significance in the graphic arts industries and technology. Design, generation, conversion, reproduction, and finishing of graphic materials utilizing current and emerging industrial techniques. Emphasis on relief, lithographic, and stencil transfer methods. Lecture and lab. Cr 3.

ITT 251 Material Processes—Metals
A laboratory course consisting of the study of manufacturing processes that are common in today's metal manufacturing industries. Processes covered include: material identification, material removal, forming/shaping, deformation, casting, fastening/joining, heat treatment, finishing and associated measurement/calculations. Lab activity involves these processes in manufacturing of products. Prerequisites: ITT 102, ITT 103, ITT 231 or permission. Cr 3.

ITT 261 Material Processes—Woods
The processing of wood and wood related composites as they relate to manufacturing and construction. Laboratory experiences will follow assigned sets of problem-solving criteria provided by the instructor. In turn the student will design around the provided criteria and develop prototypes using standard methods and processes utilized in industry. Prerequisites: ITT 102, ITT 103 or permission. Cr 3.

ITT 281 Computers In Industry And Technology
An introduction to current and emerging computer applications utilized in industry and technology. Basic computer operation, programming fundamentals, and the use of general industrial applications software and hardware will be included. Emphasis on computer terms, concepts, and uses as they relate to industrial management, computer-aided design, computer-aided manufacturing, graphics, and related industrial applications. Lecture and lab. Cr 3.

ITT 311 Communication Electronics
A detailed study of communication circuits and applications; including AC-DC fundamentals for communication, device theory and circuits, power supplies and communication systems. Laboratory sessions focus on equipment use and measurement of circuit parameters on student assembled receivers. Prerequisite: ITT 211 or permission. Cr 3.

ITT 313 Electrical Construction
A study of electrical wiring, control circuits and motors, as they relate to industrial and residential applications. Laboratory experiences and field study are used to enhance the student's learning. Prerequisite: ITT 211 or permission. Cr 3.
ITT 321 Automotive Systems
Automotive Systems is an extension of the basic concepts of power technology as they are applied to the automobile. Automotive technology is examined through analysis, operation, and service of electrical and fuel systems. Experiences include testing and measurement as well as overhaul procedures. Includes theory of design, construction, and operation of basic systems in automotive products. Prerequisite: ITT 221 or permission. Cr 3.

ITT 322 Automotive Diagnosis and Tuneup
Automotive Diagnosis and Tuneup is designed as an in-depth study of automotive ignition and carburetion systems. Theory, operation, and testing of ignition, carburetion, and pollution control systems is included. Opportunities for independent research and problem solving are provided. Prerequisite: ITT 321 or permission. Cr 3.

ITT 323 Control Systems
The study of instruments, controls, and sensory devices used to monitor and control industrial processes. Emphasis is placed on design, construction, operation, installation, and troubleshooting of industrial control systems. Cr 3.

ITT 331 Engineering Design Graphics
Contemporary industrial practices and techniques of advanced spatial and dimensional theory utilizing orthographic and pictorial techniques. Emphasis will be on design criteria selection and implementation employing standard scientific procedures. Both individual and team assignments will be used. Prerequisite: ITT 251 or permission. Cr 3.

ITT 332 Architectural Drawing and Design
Basic architectural design and drawing as related to residential and light construction. A detailed set of plans for a single home will be executed. Construction techniques, environmental considerations, building materials, specifications, costs and financing, codes and zoning, schedules, and architectural models. Prerequisite: ITT 331 or equivalent or permission. Cr 3.

ITT 333 Descriptive Geometry
A basic course in descriptive geometry with discussions and practice in advanced projection analysis, vector geometry and graphical mathematics. Theoretical and practical problems shall be solved utilizing standard graphic techniques and concepts and through the use of line, point and plane models. Cr 3.

ITT 334 Energy Efficient Residential Design
Contemporary residential design criteria and practices, logically presented in both conceptual and practical format with emphasis on energy efficiency without sacrificing aesthetics. Problems will be worked in class as well as outside. Final design results will be analyzed using a special computer program. Topics will include: several solar strategies with emphasis on super-insulation techniques, insulation types and levels, air-vapor retarders, indoor air quality, heating systems, glazing, economics. Cr 3.

ITT 342 Photo Offset Lithography
A study of communication industries utilizing photographic offset lithography in the preparation and production of graphic materials. Emphasis on design, copy preparation, photographic conversion, stripping, platemaking, and press operation. Photographic techniques relating to line and halftone conversion, copy preparation and cost analysis are also included. Lecture and lab. Prerequisite: ITT 241 or permission. Cr 3.

ITT 343 Communications Design
An introduction to the principles of layout and design in preparing camera copy for graphic reproduction. Emphasis on design elements and fundamentals, manuscript, and illustration preparation, graphic and photographic techniques, and production specifications. Prerequisite: ITT 241 or permission. Cr 3.

ITT 351 Machining and Fabrication
A study of metal industries concerned with electric and gas welding and machining techniques. Emphasis on process engineering. Laboratory and maintenance practices. Prerequisite: ITT 251 or permission. Cr 3.

ITT 352 Fabrication and Forming
Concepts, principles, and activities in TIG welding, sheet metal fabrication, and casting techniques as they relate to the manufacturing and construction industries. Group and individual problems and activities. Prerequisite: ITT 251 or permission. Cr 3.

ITT 361 Production Manufacturing in Wood
Production and wood manufacturing problems including production planning, mass production, jigs, fixtures, special machine operations, and advanced finishing techniques. General maintenance procedures on production equipment. Group and individual research assignments and related technical problems. Prerequisite: ITT 261 or permission. Cr 3.

ITT 362 Residential Construction
A study of the residential construction industries including construction principles; layout, foundation, framing, exterior covering, and finish. Related areas of services, plot planning, earth-moving principles considered in research activities. Group and individual problems. Prerequisite: ITT 261 or permission. Cr 3.

ITT 363 Wood Science
Wood anatomy and identification experiences leading into a study of the properties of wood, wood-liquid relations, bonding and finishing
of wood, and machining as they relate to the manufacturing processes. Prerequisite: ITT 261 or permission.

**ITT 371 Plastics Technology**
A study of plastics as a material and the basic industrial process used to produce plastic products. Included are basic polymer chemistry, injection molding, extrusion, blow molding, compression and transfer molding, thermoforming, roll forming, lamination, casting, expansion, thermofusion, fabrication and bonding, product design, mold design and construction. Cr 3.

**ITT 382 CAD/CAM Technology**
A study of computer utilization in the areas of designing, engineering, manufacturing, and documenting as they relate to production processes. Emphasis on the utilization of computer-aided drafting and design (CADD) and computer-aided manufacturing (CAM) hardware and software. Lecture and lab. Prerequisite: ITT 281 or equivalent. Cr 3.

**ITT 383 Robotics**
An introduction to the technology, nomenclature, integration and application of robots and their associated systems in manufacturing and industrial applications. This course should provide a 'working knowledge' background for any individual interested in entering the field of automated manufacturing/robotics. Cr 3.

**ITT 400 Occupational Experience**
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 University's portfolio assessment procedures. (See your advisor for further information) Cr 1-45.

**ITT 402 Materials Testing**
Industrial techniques involved in the analysis of the physical properties of materials and their utilization in the manufacturing and construction industries. Emphasis on research and experimentation. Individual and team activities. Prerequisite: ITT 103 or permission. Cr 3.

**ITT 413 Instrumentation and Process Control**
A study of instruments and sensing devices used to observe and/or control processes in our industrial society. Laboratory and field experiences to research and/or construct an instrument of interest to the student. Prerequisite: ITT 211 or permission. Cr 3.

**ITT 414 Digital Electronics**
A study of the fundamentals of digital logic and logic systems. Laboratory experiences with typical circuits using semiconductor devices, including diodes, transistors and integrated circuits. Prerequisite: ITT 211 or permission. Cr 3.

**ITT 423 Fluid Power**

**ITT 424 Fluid Power Systems**
Application of fluid power and fluidic systems to manufacturing and construction industries. Prerequisite: ITT 423 or permission. Cr 3.

**ITT 434 Industrial Production Illustration**
Principles and techniques employed by contemporary industry to graphically describe industrial products, technical concepts, and service information. The media range will include chalk, ink, pencil, charcoal, water color, tempera, pressure sensitive transfer symbols, and various methods of graphic reproduction. Engineering and architectural problems. Prerequisite: ITT 231 or permission. Cr 3.

**ITT 435 Systems Analysis and Design**
Research applied to solving basic engineering problems. Contemporary systems of analysis and design. Economic factors, resource utilization, planning, design, model construction, follow-up studies and evaluation techniques applied to specific practical problems. Prerequisite: ITT 331 or permission. Cr 3.

**ITT 440 Related Occupational Experiences/Internships**
Two options,

**OPTION NO. 1**
This course option is designed to permit attendance at an approved industry-sponsored school or seminar for the purpose of providing the student with advanced related occupational or technical training. Courses provided by organizations such as General Motors Training Centers, or International Typographical Union, qualify under this course option.

Cr 1-6.

**OPTION NO. 2**
Approved employment with a company may qualify a student under this option. Arrangements must be approved by the advisor in advance. The experiences should provide opportunities for updating technical skills and knowledge. Credit will be determined on the basis of one credit for each two full weeks of employment (80 hrs) with a maximum of three credits for each period of approved continuous full-time employment. A daily log, summary report and evaluation by an industrial supervisor will constitute part of this option.

Cr 1–3.

For additional information concerning either option of ITT 440, consult your adviser.

**ITT 444 Photographic Reproduction**
Photographic concepts, processes, and techniques utilized in graphic reproduction.
Experience in contact printing, continuous tone enlarging, duotones, posterization, and color separation. Prerequisite: IIT 241 or permission. Cr 3.

**IIT 452 Metallurgy and Metrology**
The technology of metallurgy and metrology. Heat treatment, powdered metals, machining and inspection of metal parts. Individual and group activity. Prerequisite: IIT 103 or permission. Cr 3.

**IIT 455 Color Reproduction and Theory**
Advanced study in the additive and subtractive theories of color reproduction. Experiences in photographic separation and offset press printing of color originals. Emphasis on understanding physiological and psychological responses to color. Lecture and lab. Prerequisite: IIT 444 Cr 3.

**ITT 490 Special Problems in Technology**
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. Cr 1.

**EET 51 Analog Systems**
Linear and non-linear operation of solid-state electronic devices with emphasis on the operation and applications of the operational amplifier. Prerequisite: course in basic electronics. Cr 4.

**EET 61 Digital Systems**
An introduction to the design of digital systems including combinatorial logic, sequential machines and the use of MSI and LSI circuits. No prerequisites, however, designed for students with a basic electrical background. Classroom and lab experiences. Cr 4.

**EET 71 Microcomputer Architecture and Applications**
The microcomputer and its component parts including microprocessors, registers, memory and I/O. Programming and applying the microcomputer in engineering systems. Cr 4.

**IET 190 Preprofessional Field Experiences**
Provides an exploratory opportunity in public/private school or educative agencies to assist students in becoming acquainted with the teaching profession and to examine various options in the field of industrial arts. Cr 2.

**IET 290 Contemporary Teaching in Industrial Education**
This course is designed to develop verbal communication skills in the field of industrial arts. Basic understanding of related terminology in industrial education will be emphasized. Students will become knowledgeable of contemporary industrial arts programs at the elementary, junior high, and senior high school levels. Prerequisite: IEA 190. Cr 2.

**IET 380 Curriculum Materials in Industrial Arts Education**
Development of curriculum materials for contemporary programs in industrial arts. Emphasis on unit preparation, performance-based objectives, and task analysis essential for identifying content and an effective instructional delivery system. Individualized and class instruction. First of a two-course sequence prior to student teaching. Prerequisites: 100/200 level technical core, ITP 300, IEA 290, 2.5 GPA, and recommendation of faculty. Cr 3.

**IET 381 Methods of Teaching Industrial Arts Education**

**IET 324 Student Teaching**
Full-time student teaching during the senior year is provided for one semester under direct supervision in off-campus situations for all who meet requirements. Prerequisites: successful completion of IET 380 and IET 381 and recommendation of faculty. Cr 12.

**ITP 100 Modern Industry**
Evolution and contemporary structure of American industry and its impact upon the social, economic, and cultural environment. Major areas and functions of industry explored include: personnel administration, research and development, production, finance, marketing, and service. Industrial visitations and reports. Cr 3.

**ITP 210 Technical Writing**
A basic study of techniques used in technical fields to communicate in writing. Study includes document purpose, situation analysis, style, format and production of reports, proposals, procedure sheets, technical descriptions, forms, letters, memos, and visual aids. Prerequisite: competence in basic expository writing. Cr 3.

**ITP 300 Motion and Time Study**
A study of techniques to utilize available resources (men, material, machines and facilities) in the most effective and economical manner giving full recognition to the human factors involved in engineering work methods and time measurements. Cr 3.
ITP 310 Plant Layout and Material Handling
A study of materials flow, layout production, assembly and service departments, manufacturing, buildings, service departments, handling equipment, and packaging techniques. Cr 3.

ITP 320 Occupational Safety and Health
Theory of occupational safety with emphasis on fundamental concepts in the industrial environment. Emphasis will be placed on the psychological, sociological, and physiological aspects of industrial safety and health. Consideration will be given to legislation and its impact on the work environment. Cr 3.

ITP 330 Production Control
Production control as a system, types of process organization, planning and scheduling, inventory control, forecasting production control and production planning. Some of the techniques developed in Operational Research will be used to solve problems in Production Control. Cr 3.

ITP 340 Quality Control Fundamentals
An overview of fundamental concepts and principles of quality control. The course will cover techniques utilized from the simplest products test to process control engineering and will include incoming material control, inspection sampling and quality control management. The course will cover practical application for installing quality control systems using actual case studies developed by participants. Cr 3.

ITP 350 Conference Leading
A course in philosophy and techniques of organizing and conducting successful conferences. Each participant will assume the responsibility of planning and leading a simulated conference. Cr 3.

ITP 370 Job/Work Analysis
The course in job analysis is basic to the functional aspects of work involved in producing goods and services in our economy. It is a first course in applied research, helping the technology major to understand the importance of being methodical in one's study and one's work. There is also emphasis in the course on career development, work design, work ethic and work productivity. A semester project requires students to analyze a job in terms of relevant duties, tasks, job methods and requirements. Cr 3.

ITP 380 Principles of Industrial Management
Fundamental principles of management as applied to business and industrial settings. The functions of management, introduced in ITP 100, will be given broader treatment by considering management of manufacturing firms. Prerequisite: ITP 100. Cr 3.

ITP 390 Cost Analysis and Control
Study of the techniques of cost estimation for products, processes, equipment, projects, and systems. Cr 3.

IEV 300 Occupational and Trade Analysis
Identification of occupational or trade fields, units, operations, and items of related information. Cr 3.

IEV 305 Curriculum Development in Vocational Education
This course is concerned with developing specific course content from an occupational analysis. The identification of educational needs and objectives precedes the selection and organization of relevant matter. Prerequisite: IEV 300. Cr 3.

IEV 310 Methods and Materials of Instruction in Vocational Education
This course treats the general and specific materials and methods of teaching vocational courses. Deals with both the theoretical and practical aspects. Prerequisites: IEV 300 and IEV 305. Cr 3.

IEV 312 Teaching Students With Special Needs
A course designed for vocational educators who need to learn how to serve handicapped, disadvantaged and gifted youth. It is structured to aid vocational teachers in working with special education personnel and to provide skills needed in planning instruction for students with special needs. Cr 3.

IEV 315 Learning and Programmed Instruction
The first application of the laboratory and scientific study of the learning process, including the principles of learning which are derived from experimental study and which have provided a foundation for advances in the techniques of learning. Cr 3.

IEV 320 Coordination of Cooperative Education
The role of the coordinator in organizing and conducting a program of work-study experience in high school. Introduction to cooperative half-time training, community survey, advisory committees, laws and regulations; and examination of the responsibilities and activities of the coordinator. Cr 3.

IEV 330 Principles and Practices of Vocational Guidance
Discussion and study with the intent to develop a better understanding of principles and objectives of vocational guidance. Cr 3.

IEV 331 Practicum Vocational Guidance
Field experiences in identification of content and relevant information for vocational counseling. Individual and group activity, visits, tours, and career counseling techniques. Cr 3.
IEV 340 Shop Organization and Management
Basic principles of planning, organizing, and managing an industrial or technical shop or laboratory. Selection and arrangement of equipment including specification writing. Control of personnel for efficient shop management. Prerequisite: IEV 310 Cr 3.

IEV 350 Philosophy of Vocational Education
A survey of the history and philosophy of vocational education in the United States with emphasis upon recent developments. Cr 3.

IEV 382 Preparation of Instructional Materials
A lecture-laboratory series which involves students in the creation of instructional materials. Techniques include the dry mounting of flat pictorial materials, cloth backing of pictorial materials, professional-quality lettering, rudimentary photography and processing (including use of the darkroom), and the production by several techniques of transparent projectuals. Cr 3.

IEV 402 Student Teaching
Experienced instructors (three years teaching experience) seeking credit. Observation of performance and documentation of successful practice required. Cr 6.

IEV 411 Measurement and Evaluation in Vocational Education
The construction, selection, and use of achievement and performance tests in industrial-technical education. Skill in writing test items is developed. Elementary statistics for the industrial-technical instructor, including grading, are stressed. Prerequisites: IEV 300 and IEV 310. Cr 3.

IEV 420 Trends in Vocational Education
Identification, analysis, and discussion of major problems and trends in vocational education. Cr 3.

IEV 450 Local Administration and Supervision of Vocational Education
Procedure and practices utilized in establishing, promoting, coordinating, supervising, controlling vocational programs on the local level. Cr 3.

IEV 455 Development of Technical Education Programs
Planning and development of technical education programs including the determination of needs and organization of programs for secondary and post-secondary schools. Cr 3.

IEV 460 Independent Study in Vocational Education
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 completeness. Permission of advisor. Cr 3.
School of Nursing

Interim Dean: Kathleen I. MacPherson
Interim Associate Dean: Julia Tiffany; Chair of Undergraduate Nursing Program: Maggie Fournier; Chair of Graduate Nursing Program; Martha Skoner; Chair of Recreation and Leisure Studies: James Sullivan

Faculty in Nursing Program
Professor: MacPherson; Associate Professors: Burson, Czupryna, Drew, Fournier, Greenleaf, Healy, Normandeu, Paltrow, Peake-Godin, Rodgers, Thompson, Tiffany, Tukey; Assistant Professors: Berardelli, Johnson, Kreamer, Thomas-Lawson, Nealand, Skoner, Young; Instructors: Ellis, Keith, Whitcher, Woods-Smith

Faculty in Recreation and Leisure Studies
Chair, the Department of Recreation and Leisure Studies: James V Sullivan
Professor: Sullivan; Associate Professors: Meyer, McCullough; Assistant Professors: Martin, Willard

The School of Nursing offers programs leading to baccalaureate or master's degrees in nursing and baccalaureate or associate degrees in therapeutic recreation. In addition, it offers a minor in health studies for students not majoring in nursing or therapeutic recreation. 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 master's degree in nursing. The School of Nursing is approved by the Maine State Board of Nursing and received an eight-year accreditation award by the National League for Nursing in 1988.

The School's aims are consistent with the mission of the University, including providing nursing and leisure studies education within a state institution of higher learning; recognizing the centrality of the liberal arts in the education of professional practitioners; focusing on the health needs of the community; recognizing research as a means of increasing knowledge and improving practice; and acknowledging an educational responsibility to respond to the learning needs of a diverse student population.

Department of Undergraduate Nursing
Believing that nursing is an art and science and that nurses' roles focus on the prevention of illness, and the promotion, maintenance, and restoration of health, the undergraduate program prepares graduates to:

1. Apply theoretical and empirical knowledge from nursing, the behavioral and physical sciences, and the humanities into the practice of professional nursing.
2. Utilize the nursing process in the delivery of professional nursing service.
3. Provide professional nursing care to a diverse, multicultural population across the life span at various points along the health continuum within a variety of settings.
4. Collaborate with consumers and other health professionals to enhance clients' abilities to attain full potential and optimal health.
5. Utilize principles of leadership in the implementation of entry level professional nursing roles.
6. Integrate research findings in nursing practice.
7. Recognize the importance of life-long learning.
8. Demonstrate professional and personal accountability.

Graduates are prepared to begin their nursing practice in a variety of health care settings and in a variety of specialty areas. A foundation to assume beginning leadership and management positions and to begin graduate studies is also provided.

Faculty have received their graduate education at a variety of leading universities. Faculty are active scholars who contribute to the development of nursing knowledge through publications and presentations at national
Admission and Non-academic Requirements

In addition to requirements established for admission to the University, the School of Nursing requires high school chemistry and biology with labs. See admission section of the catalog for further requirements.

Because health care workers are at a higher risk for certain illnesses, all students must have a physical examination and a series of immunizations. Requirements are listed in the Student Handbook available through the dean's office. Student health records must be on file in the University Health Center prior to entry into clinical courses.

A $15.00 lab fee is assessed each semester during the junior and senior year to cover lab costs. Nursing majors must purchase uniforms and lab coats and must be certified in cardiopulmonary resuscitation (CPR) prior to entry into clinical courses. Since clinical experiences occur in a variety of settings in the southern Maine area, students must provide their own transportation. Professional liability insurance and health insurance are highly recommended for non-RN students in the nursing major.

Prerequisites for the Nursing Major

Enrollment in nursing courses at the upper-division is dependent on the successful completion of prerequisite requirements.

Prerequisite courses to the upper-division nursing major consist of competencies (English Composition, Quantitative Decision Making, Skills of Analysis/Philosophy), physical and behavioral sciences, humanities, and fine arts. Nursing students must achieve a minimum of 2.25 grade point average in designated prerequisite courses in order to be eligible to progress to the 300-level nursing major courses. D grades or below are not acceptable in prerequisite areas except in one general elective course. For graduation with a major in nursing no more than 3 credits of pass/fail in general electives will be accepted.

Prerequisite Requirement Areas

General Education Requirements

*English Composition 0-3 credits
*Philosophy 3 credits
Humanities 6 credits
Fine Arts 6 credits
Statistics 3 credits 18-21 credits

Physical Science Requirements

*General Biology and lab 4.5 credits
*Human Anatomy and Physiology and Lab 4.5 credits
*Inorganic Chemistry and Lab 4 credits
*Organic or Bio Chemistry 3 credits
*Microbiology and Lab 4 credits
*Nutrition 3 credits 25 credits

Social Science Requirements

*Introductory Psychology 3 credits
*Introductory Sociology 3 credits
*Human Growth & Development (life span preferred) 3 credits 9 credits

Nursing

Introduction to Professional Nursing 3 credits

Other

General Electives (can include nursing electives)

*Must be completed before entering 300-level nursing courses.
Nursing Major

Nursing content at the upper division is organized to facilitate the integration of nursing knowledge and skill and to draw on a foundation of learning from other disciplines. Courses focus on the use of the nursing process to promote, maintain, and restore the health of clients. Students have experiences which involve assessment, planning, implementation, and evaluation of care for individuals of all ages, in families, groups of clients, and communities on all spectra of the health continuum. Inpatient and outpatient hospital settings, community health agencies, community settings, nursing homes, schools, and industries are used for clinical experience.

Nursing Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO</td>
<td>Pathophysiology</td>
<td>3 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Health Assessment</td>
<td>3 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Nursing Process I</td>
<td>2 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Nursing I lab</td>
<td>2 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Pharmacology</td>
<td>3 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Concepts in Mental Health</td>
<td>3 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Nursing Process II</td>
<td>3 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Nursing II lab</td>
<td>4 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Nursing Process III</td>
<td>4 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Health-Related Research</td>
<td>3 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Concepts in Community Health</td>
<td>3 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Nursing Process IV</td>
<td>3 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Nursing IV lab</td>
<td>4 credits</td>
</tr>
<tr>
<td>NUR</td>
<td>Leadership in Health Care</td>
<td>4 credits</td>
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<tr>
<td></td>
<td></td>
<td>47 credits</td>
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</tbody>
</table>

Retention/Progression Policies

Students within the School of Nursing must maintain class standing according to hours accomplished, with a grade point average as follows:

<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>2.25</td>
<td>2.0</td>
</tr>
<tr>
<td>31-45</td>
<td>2.0</td>
<td>1.8</td>
</tr>
<tr>
<td>0-30</td>
<td>1.8</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Standards apply to both part-time and full-time students. Probation lasts for a period of one semester. These standards allow the beginning or non-traditional student to adjust to school and studies. By maintaining a 2.25 GPA or above during the upper-division years, the student maintains a standard appropriate to professional practice.

The faculty of the School of Nursing reserves the privilege of retaining only those students who, in the judgment of the faculty, satisfy the requirements of scholarship, health, and personal suitability for nursing.

A student who receives a grade of D or F in NUR 309, Health Assessment, will be allowed to repeat the course once alone or concurrently with NUR 300 and NUR 350, Nursing Process I and Nursing I laboratory, with the permission of the instructor. The course must be passed with a grade of C- or better.

Nursing Process and Laboratory courses must be taken concurrently the first time a student is enrolled in each course. Exceptions may be made with the consent of the course faculty. (NUR 300 with NUR 350, NUR 305 with NUR 355, NUR 400 with NUR 450, and NUR 405 with NUR 455).

A grade of D or F in a Nursing Process or Laboratory course will stop progression within the School of Nursing until corrected. Only the course in which the D or F is received, Nursing Process or Laboratory, needs to be repeated. The student must achieve a grade of C- or better in the course which is repeated before entering the next nursing process or laboratory course. A course may be repeated only once.

A student who receives an F grade in any course with a NUR designation, who is able to maintain a grade point average of 2.25, will be allowed to...
take the course one time when it is offered again. The course must be passed with a grade of C− or above. A student who is unable to maintain a grade point average of 2.25, but whose average remains above 2.00, is on probation within the School of Nursing. Such a student may take support courses until his or her grade point average has been restored to the level of 2.25 or above, at which point progress in Nursing Process and Laboratory courses may resume. A student who receives a D or F grade in courses with a NUR designation and who is unable to maintain a grade point average of 2.00 will be dismissed from the School of Nursing and either be dismissed or suspended from the University according to its policies or required to change major.

The academic record of a student who receives multiple grades of F in nursing and/or support courses or an F in a nursing lab course (NUR 350, 355, 450, 455) will be reviewed by the subcommittee for academic advancement. Matters of personal concern to the student will also be considered. The subcommittee will recommend to the dean a decision regarding progression or dismissal.

Incomplete Grades

A temporary grade may be assigned by faculty when a student, because of extraordinary circumstances, has failed to complete course requirements in a nursing course. Incomplete grades in sequential nursing courses must be completed with a letter grade of C− or better before progressing to the next course in the sequence.

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 grade point average of at least 2.25.

Recognizing the need and desirability for registered nurses to attain baccalaureate and master's degrees within the state, the School of Nursing faculty have designed two options for RNs — the first leading to a bachelor of science degree, and the second (described in USM's Graduate Catalog) leading to a master's degree. Realizing that RNs returning to school face many complexities, every effort is made to promote dialogue and to remain attentive and flexible in adjusting the plan of study and accommodating individual needs. Advice with prerequisites, course planning, and course sequencing for RNs may be obtained by contacting Brenda Webster at 780-4802.

The RN to BS option consists of courses in new areas of content for RNs, the assessment of prior learning in areas of previously attained knowledge and skill, and the granting of credit by examination for some courses. Sixty (60) credits may be attained through the process of prior learning assessment and credit by examination in both nursing and non-nursing courses.

The following courses must be completed prior to entry into the upper division nursing courses or are available for credit by examination.

- English Composition
- General Biology
- Inorganic Chemistry
- General Psychology
- General Sociology
- Anatomy and Physiology
- Growth and Development
- Pathophysiology
- Nutrition

The following courses must be completed prior to entry into the upper division nursing courses.

- Organic or Biochemistry
- Microbiology
- Statistics (prerequisite to research)

University requirements in the humanities, fine arts, and Core curriculum may be taken any time prior to graduation.
Upper division nursing courses for RNs include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transition to Professional Nursing</td>
<td>5</td>
</tr>
<tr>
<td>*Total Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td>*Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>**Assessment Test for Nursing</td>
<td>19</td>
</tr>
<tr>
<td>*Concepts in Mental Health</td>
<td>3</td>
</tr>
<tr>
<td>Health Related Research</td>
<td>3</td>
</tr>
<tr>
<td>Concepts in Community Health</td>
<td>3</td>
</tr>
<tr>
<td>Nursing IV Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>Leadership and Issues in Professional Nursing</td>
<td>4</td>
</tr>
</tbody>
</table>

*Available for credit by examination

**In Fall 1990, students may elect sitting for this examination or preparing a portfolio documenting their learning.

Admission Requirements for the RN to BS Option

The RN applicant must (a) graduate from an NLN accredited program; (b) meet the general admission requirements of the University; (c) achieve a minimum 2.25 grade point average in prerequisite courses prior to progression to the nursing courses; (d) provide evidence (photocopy) of current licensure as a registered nurse in Maine; (e) provide evidence (photocopy) of coverage by professional liability insurance. All policies applicable to students in the baccalaureate program (see under Retention/Progression Policies) also apply to students in the RN to BS option program.

Minor in Health Studies

The School of Nursing minor in health studies is designed to meet a growing interest in preventive health measures and self-care. Health studies offers courses in three areas of concentration: health promotion, health/fitness, and nutrition. The minimum number of credits required for the minor: 18.

Students seeking to minor in health studies must:

1. Complete NUR 280, Holistic Health I, and NUR 281, Holistic Health II.
2. Complete nine credits of health studies courses drawn from the three areas of concentration. The nine credits may consist of three courses from one concentration or one course from each of the three concentrations.
3. Complete a three-credit elective course selected from any concentration.

The health promotion concentration includes: REC 199, NUR 321, NUR 404, NUR 324, NUR 306, NUR 456.

The health/fitness concentration includes: REC 219, REC 277, REC 279, REC 280, REC 543, REC 281, REC 282, REC 283.

The nutrition concentration includes: NFS 252, NFS 300, NUR 320, NUR 540, NFS 541.

Health studies courses are open to students enrolled in the health studies minor and to those who simply wish to enroll in courses to satisfy personal needs or interests. The minor is not available to students with a nursing major.
**Nursing Courses**

**NFS 252 Human Nutrition**
A course designed to show how the given nutrients serve to meet the metabolic processes required for life. Prerequisites: Anatomy and Physiology; General and Organic Chemistry; Biochemistry. For challenge information of NFS 252, contact the School of Nursing. Cr 3.

**NUR 200 Introduction to Professional Nursing**
This course introduces the student to historical and contemporary perspectives regarding the nature and scope of professional nursing. It explores the relationship between professional nursing and the broad base of theoretical and empirical knowledge derived from the behavioral and physical sciences and the humanities. It examines the role of the nurse as communicator and caregiver with a diverse, multi-cultural population in a variety of settings. Open to any sophomore standing University student. Cr 3.

**NUR 300 Nursing Process I**
This course examines the theories and philosophies of health promotion activities that enhance the health of individuals throughout the lifespan. The students study the wellness needs of culturally diverse clients at different developmental stages from a variety of selected settings. The nursing process provides a research based foundation for introducing the professional nursing roles of communicator and teacher. Prerequisites: NUR 200, NUR 309. Concurrent: NUR 350. Cr 2.

**NUR 302 Pharmacology**
Basic concepts in pharmacology including major drug categories, drug interactions, the use of the nursing process in the therapeutic administration of drugs, legal implications, and the physical and psychological effects of drugs on various age groups will be emphasized. Prerequisites: Human Anatomy and Physiology; Junior standing students in nursing accepted. Permission of instructor for non-nursing majors. Cr 3.

**NUR 305 Nursing Process II**
In this course, theory and research findings are presented utilizing the nursing process as a method for health promotion, maintenance, restoration, and adaptation of individuals and families with short-term alterations in health. Students study the needs of clients at different developmental stages, in a variety of health care settings, and representative of a culturally diverse society. The nursing roles of advocate and caregiver are emphasized. The concept of family and its significance as a potential support system for individual clients is explored. Prerequisites: NUR 300 and NUR 350. Concurrent: NUR 352, BIO 345, and NUR 355. Cr 3.

**NUR 309 Total Health Assessment**
This course introduces and develops the knowledge and skills necessary to conduct an in-depth bio-psycho-social-cultural health assessment of well individuals across the life span. Emphasis is placed on data collection through development of communication, interviewing, history-taking and physical examination skills, and data synthesis with identification of nursing diagnoses. Open to RN or junior standing students in the School of Nursing. Permission of the instructor required for non-nursing majors. Cr 3.

**NUR 350 Nursing I Laboratory**
Nursing I Laboratory applies theories and philosophies of health promotion activities to culturally diverse individuals throughout the life span in day care, school, hospital and community settings. Students apply the nursing process to well individuals and focus on the roles of communicator and teacher. Must be enrolled in NUR 300 concurrently. Cr 2.

**NUR 352 Concepts in Mental Health**
This course introduces concepts and principles basic to mental health nursing. Focus will be on understanding of personality development and its behavioral manifestations. Assessment of clients and intervention strategies are explored. Interdisciplinary aspects of mental health care delivery and current issues in mental health/nursing will be discussed. Open to junior standing students in the School of Nursing. Prerequisites: General Psychology and Behavioral and Physical Sciences. Cr 3.

**NUR 355 Nursing II Laboratory**
Nursing II Lab provides an opportunity for students to apply the theoretical concepts of health promotion, maintenance and restoration with individuals throughout the life span experiencing short-term alterations in health in acute care settings by using the nursing process framework. The concepts of family theory are applied through an assessment of a healthy family and the role of nurse as teacher is expanded to include working within the social context of the family. The concepts of client advocacy and caregiving will be incorporated into planning and implementing client care. Students must be enrolled in NUR 305 concurrently. Cr 4.

**NUR 400 Nursing Process III**
In this course, theory and research findings are presented on the use of the nursing process in the health promotion, maintenance, restoration, and adaptation of individuals, families, and groups with long-term alterations in health. Students study the needs of clients at different developmental stages, in a variety of health care settings, and representative of a culturally diverse society. Multiple nursing roles, including collaborator and coordinator,
are examined, with emphasis on nursing functions in management and change of health behaviors. Prerequisites: NUR 305 and NUR 355. Concurrently: NUR 450.  Cr 3.

NUR 401 Health-Related Research
Introduction to health-related research with an emphasis on understanding the research process and becoming a consumer of research. Application of current research findings to nursing practice is a major component of the course. Prerequisites: Statistics; NUR 305 and NUR 355; senior standing in the School of Nursing, or permission of instructor.  Cr 3.

NUR 405 Nursing Process IV
In this course theory and research findings are presented on the use of the nursing process in the health promotion, maintenance, restoration, and adaptation of individuals, families, groups, and communities with complex alterations in health. Students study the needs of clients at different developmental stages, in a variety of health care settings, and representative of culturally diverse society. Multiple nursing roles, including leader/case manager, are examined. Prerequisites: NUR 400 and NUR 450.  Cr 3.

NUR 407 Leadership and Issues in Professional Nursing
Theories of leadership, organizations, and planned change are presented. The student will analyze systems and methods of health care delivery and identify factors and strategies which inhibit or facilitate change. Professional and ethical issues, legislation, and emerging role in nursing will be analyzed. An experien-
tial component is required and varies with the student's learning objectives and interests. Prerequisites: All laboratory and process nursing courses except concurrent with NUR 405 and NUR 455.  Cr 4.

NUR 450 Nursing III Laboratory
In this course the student utilizes knowledge of theory and research findings in caring for people with long-term alterations in health. The application of the nursing process continues to be emphasized. This experience provides the student with the opportunity to care for culturally diverse individuals, families, and groups in a variety of health care facilities. The nurse's role in collaboration and coordination is introduced. Students must be enrolled in NUR 400 concurrently.  Cr 4.

NUR 455 Nursing IV Laboratory
In this course the student is expected to utilize the nursing process in caring for clients with complex health problems. This experience provides the student with an opportunity to care for culturally diverse individuals, families, and groups with a variety of settings. Must be taken concurrently with NUR 405.  Cr 4.

NUR 456 Concepts in Community Health
Introduces concepts and principles basic to the development and maintenance of community health nursing. The epidemiological process is stressed in surveying current major health issues. Emphasis is on groups in the community at national, regional, and local levels. Senior standing in the School of Nursing required.  Cr 3.

Nursing Electives
- NUR 280 Holistic Health I
This beginning-level course explores the many facets 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, exercise, therapeutic massage, counseling, 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.

NUR 281 Holistic Health II
This advanced 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. Prerequisite: Holistic Health I or permission of instructor.  Cr 3.

NFS 300 Child Nutrition Seminar
An interdisciplinary approach to nutritional needs of children. Films, speakers, text, and journal readings serve as basis for class discussion. Sample topics include infant nutrition, nursery school meals, snacks, educational nutrition games, school lunch as a learning tool, and vegetarian diets. Opportunity for students to focus on an area of special interest. One clinical feature is the participation in a head start nursery school lunch hour.  Cr 3.

NUR 310 Health Care in the Camp Setting
An overview of nursing in the organized summer camp is presented. Nursing process is applied to individuals of all ages and the camp as a community. Prevention activities, management of common health problems, and crisis intervention is explored. In examining the independent role of the camp nurse, issues such as state health regulations, nurse practice acts, accreditation standards, general legal concerns, and collaboration with camp staff and other health care providers are addressed.  Cr 3.

NUR 320 Eating Behaviors
A course designed to examine eating behaviors in the context of genetic and environ-
mental influences. Normal motivation for eating and drinking as well as abnormal eating and drinking behaviors are considered. Cr 3.

**NUR 321 Perspectives in Gerontology**
A broad-based perspective on current theories and issues related to aging in this society. The older person is viewed within a wholistic realm including the physical, psychological, and sociological considerations which are relevant. Emphasis will be placed on dispelling the myths of aging while enhancing the growth potential of aging persons. Cr 3.

**NUR 324 Cultural Diversity in Health**
A study of factors that influence provider-client relationships in a multicultural society. An examination of the health care system, the social, political, and economic environment of our society, and the health care needs and practices of culturally diverse groups. Assessment tools and transcultural communications models will be presented and discussed. Cr 3.

**NUR 395 Nursing Independent Study**
Individualized study in an area of nursing with the permission of the instructor. Cr 1-3.

**NUR 495 Nursing Independent Study**
Individualized study in an area of nursing with the permission of the instructor. Cr 1-3.

**NUR 520 Ethical Issues in Health Care**
Analysis of selected contemporary ethical issues confronting health care professionals. Examination of major ethical theories and principles and related decision-making models. Cr 3.

**NUR 560 Dimensions of Aging**
This course offers the opportunity to explore differences between the true effects of aging and the various processes that affect persons as they grow older; management of specific health problems of the elderly; and resources available for elder care. Emphasis will be placed on nursing role and responsibility in meeting the unique needs of the elderly. R.N. license or permission of the instructor is required. Cr 3.

**NUR 570 Advanced Assessment and Pathophysiological Processes**
This course focuses on selected aspects of advanced assessment and pathophysiological processes. Course content includes an overview of pathophysiological concepts. Case studies are used to facilitate analysis and synthesis of these concepts. Concurrent assessment laboratory and clinical rounds complement classroom teaching. Cr 3.

**NUR 580 Communication Strategies for the Health Professional**
This course assists the student in developing advanced skills in communicating with patients. Communication is approached as a strategic mode of intervention for the health care professional. Students will: (1) critically analyze current theoretical and empirical communication literature; and (2) further develop their interpersonal competency through various methodologies including role playing, videotaping, and interview rounds. Cr 3.

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**Courses Specific to RN to BS Students**

**NUR 304 Transition to Professional Nursing**
This course introduces the RN student to the nature and scope of professional nursing. The student studies the theories and concepts that form a basis for professional nursing practice with individuals and families. Nursing process is utilized to define the needs for health promotion, restoration, and maintenance for clients at various developmental levels in a variety of settings and in a culturally diverse society. The study of nursing history and the development of nursing theory is initiated. Students use research to develop the role of the professional nurse and to explore family theory, crisis theory, and teaching and learning theory. Legal and ethical issues related to the delivery of health care are discussed. Open to RN or junior standing University students. Prerequisite: NUR 200 or RN license. Cr 5.

**NUR 314 Assessment Test for Nursing**
The purpose of this examination is to validate the prior learning of Registered Nurse students in the areas of fundamental nursing care. The test provides the student with an opportunity to demonstrate the application of the nursing process in the care of individuals, families, and groups in health and illness. Prerequisites: NUR 304 and NUR 309 or permission of faculty. RN license is required. Cr 19.

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**Department of Recreation and Leisure Studies**

The Department of Recreation and Leisure Studies in the School of Nursing offers two degree programs for students interested in pursuing careers in therapeutic recreation. The associate degree program in therapeutic recreation consists of 64 credit hours. Upon completion of the degree requirements, the student may seek employment as a therapeutic recreation assistant or recreation generalist and is eligible for certification by the National Council for Therapeutic Recreation Certification.

The baccalaureate degree program in therapeutic recreation consists of 123 credit hours. Upon completion of the degree requirements, the students...
may seek employment as an activity coordinator, therapeutic recreation specialist, or recreation generalist. Students who complete Internships under the supervision of a certified Therapeutic Recreation Specialist will be eligible for certification by the National Council for Therapeutic Recreation Certification.

In addition to the two degree programs, a wide variety of professional recreation and leisure courses, as well as fitness activity courses, is available. Students are encouraged to pursue recreation, leisure, and fitness course offerings as appropriate to their academic program.

The School of Nursing also offers a minor in health studies for students not majoring in nursing or therapeutic recreation. See description in School of Nursing section of catalog.

Retention/Progression Policies

Students in the Department of Recreation and Leisure Studies adhere to the retention/progression policies of the School of Nursing.

Associate Degree Program in Therapeutic Recreation

The minimum number of credits required for the degree is 64.

The two-year program in therapeutic recreation consists of the following courses leading to the associate of science degree. Students must achieve a grade of C- or higher in required recreation courses.

A. General Foundation Courses

<table>
<thead>
<tr>
<th>Required</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 100C College Writing</td>
<td>3</td>
</tr>
<tr>
<td>BIO 100K Biological Basis for Human Activity</td>
<td>3</td>
</tr>
<tr>
<td>THE 170F Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>COM 171 Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives (one from each area)

| Humanities                      | 3       |
| Social Sciences                 | 3       |
| General Elective                | 3       |

B. Major Requirements

| REC 110 Introduction to Recreation and Leisure Services | 3       |
| REC 113 Preprofessional Field Experience              | 2       |
| REC 121 Introduction to Therapeutic Recreation Services | 3       |
| REC 125 Recreation Analysis and Adaptation            | 3       |
| REC 211 Programming Leadership in Recreation          | 3       |
| REC 216 Advanced First Aid and Emergency Care         | 3       |
| REC 232 Methods in Therapeutic Recreation Program Design | 3       |
| REC 260 Introduction to Special Populations           | 3       |
| REC 290 Organization and Administration of Recreation | 3       |
| REC 294 Pre-internship                               | 2       |
| REC 295 Internship                                  | 9       |

Two courses from the following:

| REC 226 Leadership in Recreation/Leisure Activities | 3       |
| REC 231 Arts and Crafts for Special Populations    | 3       |
| REC 233 Environmental Recreation                   | 3       |
| REC 278 Leisure and Older Adults                   | 3       |

One elective course in recreation

Transfer into the B.S. Degree Program in Therapeutic Recreation from other USM Academic Programs

Students in the associate degree program in therapeutic recreation who have a 3.5 cumulative average or a 3.0 average in selected courses may transfer to the four-year therapeutic recreation program providing space is available. Students interested in this option should meet with their advisor and then apply in writing to the Baccalaureate Degree Program Coordinator for transfer.

Students enrolled in other programs of study must meet with the appropriate therapeutic recreation coordinator to discuss transfer requirements.
Such students will be required to provide a copy of their academic transcripts and a letter which explains their reasons for wanting to transfer. Acceptance into the program is dependent on the student’s academic performance, letter of application, and space availability.

**Baccalaureate Degree Program in Therapeutic Recreation**

The minimum number of credits required for the degree: 123.

In satisfying Core curriculum requirements, students are urged to take MUS 110F Fundamentals of Music for the fine arts performance-centered arts section. PSY 101J Introduction to Psychology and SWO 101J Introduction to Social Welfare are recommended for fulfilling the social sciences requirement. BIO 105K and 106K Biological Principles are recommended for the natural sciences requirement.

The four-year program in therapeutic recreation consists of, in addition to the Core curriculum requirements, the following courses leading to the bachelor of science degree. Students must achieve a grade of C− or higher in required recreation courses.

### Required courses within the program

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC 110</td>
<td>Introduction to Recreation and Leisure</td>
<td>3</td>
</tr>
<tr>
<td>REC 113</td>
<td>Preprofessional Field Experience</td>
<td>2</td>
</tr>
<tr>
<td>REC 121</td>
<td>Introduction to Therapeutic Recreation Service</td>
<td>3</td>
</tr>
<tr>
<td>REC 125</td>
<td>Recreation Analysis and Adaptation</td>
<td>3</td>
</tr>
<tr>
<td>REC 216</td>
<td>Advanced First Aid and Emergency Care</td>
<td>3</td>
</tr>
<tr>
<td>REC 232</td>
<td>Methods in Therapeutic Recreation Program Design</td>
<td>3</td>
</tr>
<tr>
<td>REC 241</td>
<td>Leadership and Supervision in Leisure Services</td>
<td>3</td>
</tr>
<tr>
<td>REC 278</td>
<td>Leisure and Older Adults</td>
<td>3</td>
</tr>
<tr>
<td>REC 290</td>
<td>Organization and Administration of Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 314</td>
<td>Leisure Awareness Counseling</td>
<td>3</td>
</tr>
<tr>
<td>REC 371</td>
<td>Therapeutic Recreation for Special Populations I</td>
<td>3</td>
</tr>
<tr>
<td>REC 381</td>
<td>Therapeutic Recreation for Special Populations II</td>
<td>3</td>
</tr>
<tr>
<td>REC 480</td>
<td>Management and Supervision in Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 490</td>
<td>Senior Seminar in Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 494</td>
<td>Pre-internship</td>
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</tr>
<tr>
<td>REC 495</td>
<td>Internship</td>
<td>9</td>
</tr>
</tbody>
</table>

### Required courses outside of the program

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE 170F</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>BIO 211</td>
<td>Human Anatomy and Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 212</td>
<td>Practical Human Anatomy and Physiology</td>
<td>1.5</td>
</tr>
<tr>
<td>SWO 266</td>
<td>Self Concept and the Handicapped</td>
<td>3</td>
</tr>
<tr>
<td>HRD 333J</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>PSY 333</td>
<td>Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A computer science course</td>
<td>3</td>
</tr>
</tbody>
</table>

### Recreation Elective Courses (Select 14 credits)

Majors should select a well-balanced array of recreation electives. Their selections must reflect the following requirements:

- One 3 credit physical fitness course (select from REC 219, REC 277, REC 279, REC 280, REC 282, or REC 283)

- Two 1 credit activity courses (select from REC 100, REC 101, REC 102, REC 104, or REC 221) or one 2 credit activity course, e.g., REC 217

- Three 3 credit recreation elective courses (select from REC 215, REC 226, REC 231, REC 233, REC 250, REC 281, REC 345, or REC 398)
General Elective Courses (at least 6 credits). The number of general electives will depend upon the number of credits remaining after the student has fulfilled the Core curriculum basic competence requirements. General electives can be any course that does not have REC prefix. Some highly recommended courses include:

- PHE 310 Experiential Learning in Outdoor Education 3
- PHE 325 Workshop in Experiential Education 3
- HRD 331 Group Dynamics 3
- COR 108 Poverty in America 3
- COR 110 Old and in the Way? 3
- PSY 335 Deviations of Childhood 3
- THE 103F Contemporary Dance I 3
- SWO 288 Substance Use and Abuse 3

REC 100 Recreation and Leisure Activities
Ballroom Dance; Bicycle Touring; Golf; Karate. Two-hour laboratory; 1 credit per activity; 101 Tennis; 102 Volleyball; 103 Wallyball; 104 Racquetball. These courses provide the student with the opportunity to learn and participate in one of the above activities.

REC 110 Introduction to Recreation and Leisure Services
Concepts of leisure, play, time, and work are discussed. Leisure awareness and identifying barriers to leisure are covered. Students are encouraged to develop a recreative lifestyle attitude. Cr 3.

REC 113 Pre-Professional Field Experience
This course will provide students with the opportunity to observe, analyze, and evaluate therapeutic recreation programs in various settings. Students will visit the Center for the Blind, the Baxter School for the Deaf, the Cerebral Palsy Center, two nursing homes, Maine Medical Center's Department of Rehabilitation, and the Woodford's West Educational Center. Written reports on each one of these visitations will be required. In addition, students will be expected to read four articles relating to therapeutic recreation and write summary reports on each of the articles read. Prerequisite: REC 110. Cr 2.

REC 121 Programming Leadership in Recreation
This course provides the student with the principles of program planning. In particular, the course addresses the process of identifying the problems that exist in recreation, setting goals and objectives, selecting and implementing the program design, and developing an evaluation procedure. In addition, the student learns many of the detailed technical skills that are essential to achieve positive results in programming. Prerequisite: REC 110. Cr 3.

REC 211 Programming Leadership in Recreation
This course provides the student with the principles of program planning. In particular, the course addresses the process of identifying the problems that exist in recreation, setting goals and objectives, selecting and implementing the program design, and developing an evaluation procedure. In addition, the student learns many of the detailed technical skills that are essential to achieve positive results in programming. Prerequisite: REC 110. Cr 3.

REC 215 Travel Concepts for Life & Leisure
This course will address many issues associated with travel in today's society. Planning a trip, seeking advice, obtaining reservations, securing required documents, investigating costs, evaluating vacation packages, and discovering the various types of travel opportunities throughout the world. This course will guide you through the travel experience from the initial inquiry to the time you arrive back home. Cr 3.

REC 216 Advanced First Aid and Emergency Care
This course will cover the topics prescribed by the American Red Cross in their advanced first aid course, including respiratory emergencies, artificial respiration, wounds, poisoning, water accidents, drugs, burns, emergency childbirth, emergency rescue and transfer, and other topics. Successful completion of the course requirements will lead to advanced Red Cross first aid certification. Cr 3.

REC 217 Basic Sailing & Seamanship
An intensive study of the theoretical and practical elements involved in coastal sailing.
Emphasis is on USCG safety regulations, seamanship, navigation, and sail handling.

REC 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 lecture/discussion and in-class laboratory evaluations.

REC 221 Audio Visual Aids In Recreation
This course will provide students with basic instruction necessary for the operation of equipment and the development of basic media used in recreation settings.

REC 226 Leadership in Recreation/Leisure Activities
Students will learn a variety of recreation activities through participation. Classroom sessions cover the rules and techniques of the sports as well as efficiency of movement.

REC 231 Arts and Crafts for Special Populations
Students will learn about the therapeutic benefits of art and craft activities and how to plan, adapt, organize, and lead programs and activities. The course will require students to participate in a variety of craft activities including leatherwork, weaving, macrame, sand painting, and other appropriate projects. The course is recommended for students who are interested in developing craft skills as well as for those who plan to work with members of special populations. Prerequisite for associate degree majors: REC 121.

REC 232 Methods in Therapeutic Recreation Program Design
Emphasis is on the development of specific and individualized recreation programs. Topics include the program design process, unit planning, assessment, documentation, and evaluation. Prerequisites: REC 120, REC 125.

REC 233 Environmental Recreation
An overview of basic environmental and outdoor education concepts and teaching strategies. Examination of resource-based recreation activities, outdoor survival skills, and environmental issues as well as participation in selected outdoor recreation activities such as map and compass games, nature photography, lashing, nature crafts, and adventure activities.

REC 241 Leadership and Supervision in Recreation
This course provides the student with the basic knowledge necessary for effective leadership in recreation. Topics include identifying problem areas, establishing goals and objectives, selecting and implementing program design, understanding the evaluation process, and developing detailed technical skills essential for efficient use of time. Prerequisite: REC 110.

REC 250 Adapted Aquatics
This course is designed for therapeutic recreation majors who are interested in organizing swimming programs for the handicapped and for experienced swimming instructors desiring to update their background in this field. It will offer all the necessary skills and techniques for teaching handicapped people how to swim and to discover the joys of participating in water activities.

REC 250 Introduction to Special Populations
This course provides an overview of disabilities served by therapeutic recreation professionals including developmental disabilities, physical disabilities, psychiatric disabilities, and problems associated with aging. Emphasis will be on etiology, treatment approaches, prognosis, educational concerns, and a basic understanding of the disabilities' impact on the person's leisure lifestyle.

REC 277 Weight Training: An Approach to Strength
Designed for both men and women, this course will examine various methods and routines of weight training for the development of muscular strength, endurance, cardiovascular benefits, and weight control. The course will consist of both theory and practical application.

REC 278 Leisure and Older Adults
This course provides an overview of the aging process with an emphasis on understanding the role of leisure in elderhood. Topics of study will include meanings of recreation and leisure, activity patterns and constraints, pre-retirement planning and the relationship of leisure to adjustment in retirement and elderhood. The course will also examine recreation program designs and strategies in a variety of settings including municipalities, senior centers, adult day care, and nursing homes. The delivery of therapeutic recreation services in institutional settings will be stressed. Prerequisite: REC 232.

REC 279 Health and Fitness for Older Adults
Emphasis throughout this course is on the positive values and benefits of better health and fitness in the development of a high
quality lifestyle for older persons. The "cutting edge" of the course is to identify and study all aspects of positive health and fitness as they relate to the aged. Class sessions are organized so that students not only gain theoretical knowledge but also valuable laboratory experiences by working directly with older persons.  

**REC 280 Physiology of Exercise**  
Students will gain an understanding of acute and chronic effects of exercise. Muscle physiology, respiration, cardiac function, circulation, energy metabolism, and application to training.  

**REC 281 Kinesiology**  
This kinesiology course emphasizes the study of human motion as it relates to performance. The course covers principles of biomechanics, musculoskeletal anatomy and neuromuscular physiology.  

**REC 282 Health and Fitness for Children and Youth**  
This course is designed to help students understand the changing nutritional and exercise needs of children and youth as they pass through various developmental stages from infancy through early adolescence. Along with fitness development, students will acquire a basic knowledge of nutrition, exercise physiology, and related techniques. Also, some first aid techniques will be included.  

**REC 283 Exercise Laboratory Evaluation and Techniques**  
This course is designed to provide hands-on learning relative to the field of physical fitness screening. Students will spend a majority of class time in a laboratory setting. The course will also cover theoretical information relative to behavior modification, exercise prescription, testing techniques, and other pertinent materials. Prerequisite: REC 219 or REC 280 or permission of the instructor.  

**REC 285 Perspectives on Animal Facilitated 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.  

**REC 290 Organization and Administration of Recreation**  
This course acquaints students with the skills and techniques of management. Topics include organizational structure, sources of revenue, the process of budgeting, personnel practices, and the aspects of safety and liability. Prerequisite: REC 110.  

**REC 294 Pre-internship**  
This course will prepare students for an extended internship experience. Students will develop individualized objectives for their internships and will complete all of the tasks necessary to secure an internship placement. Serious study and discussion of topics such as professional conduct, ethics, and risk management will be required. This course must be taken immediately prior to Internship. Prerequisites: Recreation core courses and instructor's permission.  

**REC 295 Internship**  
Students are required to work a minimum of 350 hours within a 10-week period at the beginning of the internship semester. This experience will be in an approved agency that provides recreation or therapeutic recreation services. During this period the students will apply the knowledge, methods, and leadership techniques that have been learned in academic courses. Students will be directly supervised by qualified agency personnel and indirectly supervised by a faculty member. Following this 10-week experience there will be a 4-week course in the classroom to complete the Internship. This will allow students to synthesize the internship experience and gain select knowledge prior to entering the profession. Prerequisites: Recreation core courses and instructor's permission.  

**REC 314 Leisure Awareness Counseling**  
The intent of this course is for students to study and learn how to help people plan for and find enjoyment in leisure. Theories and techniques of counseling will be included. Students will learn how to help clients identify barriers and to assess their values, attitudes, interests, and behaviors as they relate to their leisure. Prerequisite: REC 110 or permission of the instructor.  

**REC 343 Perceptual-Motor Learning**  
An introduction to motor development and motor learning including psychological theories and implications for skill instruction and research.  

**REC 371 Therapeutic Recreation for Special Populations I**  
This course explores the bio-psycho-social aspects of persons with physical disabilities as well as the leisure lifestyle of persons socially, culturally, and economically disadvantaged. Students will participate in a variety of lectures, discussions, and experiential assignments designed to enhance clinical knowledge and to develop specific programming skills, e.g., wheelchair handling skills. Special emphasis is given to planning, implementing, and evaluating recreational activities. Prerequisite: REC 232.
REC 381 Therapeutic Recreation for Special Populations II
This course will explore the role of therapeutic recreation as a treatment modality for persons with developmental disabilities and psychiatric disorders. The concept of mental health and its relationship to leisure will be examined and specific treatment strategies, procedures, and programs will be explored. Prerequisites: REC 232, PSY 333. Cr 3.

REC 395 Field Experience in Health/Fitness
This course is designed for students who are pursuing the minor in health studies. Students are required to work a minimum of seven hours a week for a total of 105 hours within a semester under a field supervisor who has a degree in health/fitness and experience in the field. The distinctive contribution of the field experience is that it combines the field work with an academic preparation. This course is to be taken after all courses in the minor are completed. Written reports are required. Cr 3.

REC 398 Independent Study in Recreation Leisure
This course is intended to provide students with an opportunity to pursue a project independently, to chart a course and explore an area of interest bearing upon it based on previous course experiences. A course outline must be prepared by the student and a final written paper is required. Prerequisite: permission of the instructor. Cr 3.

REC 480 Management and Supervision 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 discuss their internship experiences and will apply the information learned through internships to course assignments and discussions. Prerequisite: REC 495. Cr 3.

REC 490 Senior Seminar in Therapeutic Recreation
Small group research and discussion of selected health and rehabilitation related issues that can affect the delivery of therapeutic recreation services in community and treatment settings. Students will be required to view their discipline through the examination of the research and literature of related disciplines. Included will be the opportunity to synthesize the internship experience and to evaluate critically the therapeutic recreation curriculum. Prerequisites: REC 494, REC 495. Cr 3.

REC 494 Pre-internship
This course will prepare students for an extended internship experience. Students will develop individualized objectives for their internships and will complete all of the tasks necessary to secure an internship placement. Serious study and discussion of topics such as professional conduct, ethics, and risk management will be required. This course must be taken immediately prior to internship. Prerequisites: Recreation core courses and instructor's permission. Cr 2.

REC 495 Internship
Students are required to work a minimum of 525 hours in an agency that provides recreation or 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 a faculty member. This course is to be taken the senior year. Prerequisites: Recreation core courses and instructor's permission. Cr 9.
Lewiston-Auburn College

Dean: Helen Greenwood, 51 Westminster Avenue, Lewiston

The Lewiston-Auburn College of the University of Southern Maine is designed to serve as a resource to its community and to its region. The curriculum is marked by integration not only among the various disciplines within the liberal arts, but also between the liberals arts and the professional concentrations, between professional concentrations and the workplace, and between the college and the community. Just as the curriculum is designed to provide for each student the ability to change and grow as new opportunities present themselves, the College itself is designed so that it, too, can change with the times.

Transfer Policies

Lewiston-Auburn College is composed of programs and courses from two different campuses of the University of Maine System, namely, University of Maine at Augusta and University of Southern Maine, each with their own academic policies. Therefore, it is important for students to be aware of the policies that apply to their particular situation. The implementation of the policies listed below is not automatic. It is the student's responsibility to ensure that transcripts are forwarded to the campus determining and awarding the transfer credit.

1. **Students Matriculated (accepted) into USM's baccalaureate programs.** Students matriculated into Management and Organizational Studies (MOS) and Social and Behavioral Sciences (SBS) will receive full credit, grades, and quality points from UMA courses or from courses of any campus in the University of Maine System.
2. **RN Studies Program.** Grades, credits, and quality points of all USM courses will automatically be recorded on a USM transcript. Credits (not grades or quality points) will be transferred from UMA courses onto USM transcripts.
3. **Students matriculated into UMA Programs.** Credit (not grades or quality points) from USM courses will be recorded onto UMA's transcripts.
4. **Special students (not matriculated).** Students may register for any course of USM or UMA provided they meet prerequisites. USM courses, grades, and quality points will be recorded on a USM transcript and UMA courses, grades, and quality points will be recorded on UMA transcripts. When a student applies for admission to either campus, it is the student's responsibility to assure that the appropriate transcript(s) accompanies the application.

The Lewiston-Auburn College offers: B.S. degree in management and organizational studies; B.A. degree in social and behavioral sciences; and a B.S. degree in nursing for students holding an R.N. (extended from USM's School of Nursing).

**B.S. Degree in Management and Organizational Studies**

The baccalaureate degree in management and organizational studies (MOS) combines a liberal arts program with a specialization for individuals who are currently or hope to be in managerial positions or who wish to understand how to work more effectively in an organization. This degree attempts to distinguish itself from traditional management or business programs by its emphasis on understanding and working with people, by its broad approach that incorporates the liberal arts tradition, by its interdisciplinary focus, and by its practical application of concepts and theories. This program is designed to prepare students for positions in private and public sector, human service and governmental organizations.
Students will take the comprehensive Core curriculum of the University of Southern Maine to provide a well-rounded liberal arts background. The core courses of the MOS major will provide students with an underpinning in organizational theory and practice. Within these courses, students are introduced to organizational behavior and management.

A critical component of this degree program is the internship. With the assistance of a faculty mentor, students identify an organization within which they would like to put into practice the theories and skills gained from coursework.

In addition to completing these specific course requirements for the major, baccalaureate degree students must meet the proficiency requirements of the University of Southern Maine as well as the complete Core curriculum. To complete the baccalaureate degree, students must complete a minimum of 120 credit hours of coursework. Prerequisites to 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.

Requirements for the Major

MOS Core (24 credits)

- MOS 300 Introduction to Organizations and their Management
- MOS 320 Research Methods and Statistics
- MOS 340 Managing Organizational Change and Development
- MOS 385 Internship
- MOS 400 Seminar in Organizations and Modern Society
- MOS 402 Organizational Theory
- MOS 405 Ethics and the Organization
- MOS 410 Interpersonal Behavior in Organizations

Individual Concentration (21 Credits)

While taking the MOS Core, each student will work closely with a faculty advisor to identify seven MOS electives (21 credits) that will complete the requirements for the major. The advisor will also assist the student in selecting the remaining courses necessary for the degree.

**MOS 300 Introduction to Organizations and their Management**
Overview of basic managerial processes. Planning, organizing, staffing, financial control, human resource management, decision making, and leadership are among the areas covered. Prerequisite: junior standing or permission of the instructor. Cr 3.

**MOS 312 Human Resource Management**
Focus on the procedures and processes associated with the management of human resources within organizations. Topics include recruitment development, job analysis, personnel systems, and training. Prerequisite: junior standing or permission of the instructor. Cr 3.

**MOS 314 Employee Relations**
Provides an understanding of legal, social, and economic aspects of labor-management relations in the United States. Topics include a historical overview of labor law, grievance procedures, the negotiation process, equal opportunity, and personnel rules. Includes case studies and simulated bargaining exercises. Prerequisite: junior standing or permission of instructor. Cr 3.

**MOS 316 Women in Organizations**
Focus upon current studies of women in organizations and the implications these studies have for women (as well as men) as managers and members of an organization. Prerequisite: junior standing or permission of the instructor. Cr 3.

**MOS/SBS 320 Research Methods and Statistics**
An introduction to quantitative and qualitative research and evaluation methods which can be used in organizational planning and decision making. The course will cover topic areas related to determining an appropriate method of inquiry, the development of hypotheses or assumptions, as well as a brief overview of statistical methods. Prerequisites: MOS 300 or SBS 320, and college level mathematics. Cr 3.

**MOS 322 Introduction to Public Affairs**
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.
MOS 325 Management of State and Local Government
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. Prerequisite: junior standing or permission of the instructor. Cr 3.

MOS 330 Social Policy Environment
A review of the problems and prospects associated with meeting human needs in a complex society. Includes a review of contemporary social policy alternatives and the policy making process. Prerequisite: junior standing or permission of the instructor. Cr 3.

MOS/SBS 335 Legal Issues in Health and Human Services
Examines current legal issues affecting the management and delivery of human services including the protection of the rights of both clients and workers. Prerequisite: junior standing or permission of the instructor. Cr 3.

MOS 340 Managing Organizational Change and Development
Explores the process of organizational change and how to manage change effectively. Topics covered include diagnosing the need for change, choosing the best method, implementing planned change, and dealing with resistance to change. Prerequisite: MOS 300 or permission of instructor. Cr 3.

MOS 385 Internship in Management and Organizational Studies
Prerequisites: MOS 300 and two 300/400 level MOS courses. Cr 3.

MOS 386 Field Project in Organizational Studies
Prerequisite: MOS 320. Cr 3.

MOS 395 MIS (Management Information Systems)
An introduction to management information systems in organizations. This course will focus upon providing students with a survey of package systems available for use by managers. Included will be a discussion of the questions and processes that managers should ask and use in deciding on a management information system. Prerequisite: junior standing or permission of the instructor. Cr 3.

MOS 398 Independent Study
Prerequisites: MOS 300, junior standing and permission of instructor. Cr 3.

MOS 399 Special Topics
Topics offered may include studies of organizations and media, organizations and literature, analysis of organizations through film, etc. Prerequisite: MOS 300 or permission of instructor. Cr 3.

MOS 400 Seminar in Organizations and Modern Society
Explores various dimensions of the role that organizations play in the social system. The course is taught in a seminar format and assignments will be appropriate to providing students with additional theoretical and practical exposure to organizational concepts. Prerequisite: junior standing or permission of the instructor. Cr 3.

MOS 402 Organizational Theory
Examines the behavior of organizations from a macro perspective. Topics include organizational structure, culture, technology, the design of work, organizational change, the relationship of an organization to its external environment, and organizational effectiveness. Prerequisites: MOS 300 and senior standing. Cr 3.

MOS 404 Public Finance
Assesses the theory and practice of financial management of non-profit and public organizations with an emphasis on the relationship between financial decision making and organizational policy and strategy. Prerequisite: MOS 300 or permission of instructor. Cr 3.

MOS 405 Ethics and the Organization
Explores the ethical dimensions of private- and public-sector decision making. Includes learning concepts and theories in ethics and applying them to ethical issues and dilemmas faced by individuals and organizations. Prerequisites: MOS 300 or SBS 300 and SBS 301, and senior standing. Cr 3.

MOS 410 Interpersonal Behavior in Organizations
Focuses on understanding interpersonal behavior and developing effective interpersonal skills. Includes such topics as verbal and nonverbal communication, developing trust, managing conflict, assertiveness, effective influence, and understanding and helping another person. Prerequisite: MOS 300 or permission of instructor. Cr 3.

MOS 422 Public Policy Analysis
The approaches used to explore public policy alternatives and assess the impact of policy upon society. Examples cover a variety of policy areas such as education, environmental protection, and urban development. Prerequisites: MOS 301 and MAT 120, PSY 201, SBS 321 (or equivalent). Cr 3.

MOS 426 Managing Human Services
Analysis of management practices in human and social service agencies, hospitals, income maintenance programs, welfare and training programs, and other nonprofit and public systems. Prerequisites: MOS 330 or equivalent and introductory psychology or sociology course. Cr 3.
B.A. Degree in Social and Behavioral Sciences

In this program, students will be exposed to a multi-disciplinary approach to the social and behavioral sciences and will be prepared to enter into a variety of fields. As with the B.S. degree in management and organizational studies, students will be expected to complete the University of Southern Maine's Core curriculum.

SBS Prerequisite Courses (15 Credits)
- Introduction to Sociology
- Introduction to Psychology I & II
- Cultural Anthropology
- Human Growth and Development

Note: These courses may also be used to satisfy Core curriculum requirements.

SBS Core (24 Credits)
- SBS 300 Deviance and Social Control
- SBS 301 Abnormal Psychology
- MOS/SBS 320 Research Methods and Statistics
- SBS 385 Internship
- MOS/SBS 405 Ethics
- SBS 400 Seminar in Social and Behavioral Sciences
- MOS/SBS 330 Social Policy Environment
- Elective (SBS, SOC or PSY)

Fields of Concentration (15 Credits)

Students pursuing the degree in social and behavioral sciences will take a minimum of 9 credits from any field of concentration and an additional 5 credits from each of the other fields of concentration. Current fields of concentration include: Human Development, Health and Wellness, and Deviance.

Recommended Electives:
- Economics (macro), political science, anthropology, sociology, and psychology courses.

Human Development
- SBS 305 Child Development and Behavior
- SBS 306 Adolescence
- SBS 340 The Family
- SBS 342 Gerontology
- SBS 350 Deviations of Childhood

Health and Wellness
- SBS 307 Sociology of Health
- SBS 308 Health Psychology
- SBS 309 Human Genetics
- SBS 343 Substance Abuse

Deviance
- SBS 311 Mental Health
- SBS 312 Foundations of Criminology
- SBS 344 Violence and Aggression
- SBS 350 Deviations of Childhood

Psychology I and II and Introduction to Sociology are prerequisites to all 300- and 400-level SBS courses.

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 301 Abnormal Psychology
An introduction to the etiology and classification of maladaptive behavior. The psychological, sociological, and biological bases for mental illness will be discussed. Cr 3.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>SBS 305</td>
<td>Child Development and Behavior</td>
<td>An introduction to the study of the behavior and psycho-social development of children to adolescence.</td>
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<tr>
<td>SBS 306</td>
<td>Adolescence</td>
<td>An overview of the psychological and sociological dimensions of adolescent development.</td>
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<tr>
<td>SBS 307</td>
<td>Sociology of Health</td>
<td>An examination of the sociological dimensions of and responses to issues related to physical and psychological health and well-being. Particular attention will be given to the historical development of sociological considerations of health.</td>
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<tr>
<td>SBS 308</td>
<td>Health Psychology</td>
<td>A survey of the psychological dimensions of health and wellness. Consideration will be given to contemporary health issues such as stress-related behavior.</td>
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<tr>
<td>SBS 309</td>
<td>Human Genetics</td>
<td>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.</td>
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<tr>
<td>SBS 311</td>
<td>Mental Health</td>
<td>This course will explore the historical, biological, sociological, and psychological bases of the nature of mental health and mental illness as well as examine the treatment of mental illness. Particular attention will be given to the cultural definitions of mental illness.</td>
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<tr>
<td>SBS 312</td>
<td>Foundations in Criminology</td>
<td>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.</td>
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<tr>
<td>SBS 320</td>
<td>Research Methods and Statistics</td>
<td>An introduction to quantitative and qualitative research and statistical methods which can be used in the social and behavioral sciences. The course will cover topic areas related to determining an appropriate method of inquiry, the development of hypotheses or assumptions, as well as a brief overview of statistical methods. Equivalent to MOS 320. Prerequisite: college level mathematics.</td>
<td>3</td>
</tr>
<tr>
<td>SBS 340</td>
<td>The Family</td>
<td>A contemporary approach to the study of the family. Includes an examination of family structures, familial relationships, and the impact of social and psychological change on these structures and relationships.</td>
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<tr>
<td>SBS 342</td>
<td>Gerontology</td>
<td>A review of current theories and issues related to aging. Consideration will be given to physical, psychological, and sociological aspects of aging as well as cultural perspectives regarding the elderly.</td>
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<tr>
<td>SBS 343</td>
<td>Substance Abuse</td>
<td>This course will consider the use and abuse of prescription and nonprescription substances. Included will be drugs, alcohol, caffeine, nicotine, to name a few. A review of the history as well as the social and psychological implications of substance abuse and treatment programs will be included.</td>
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<tr>
<td>SBS 344</td>
<td>Violence and Aggression</td>
<td>This course reviews the psychological and sociological perspectives on the relationship between violence and aggression.</td>
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<tr>
<td>SBS 350</td>
<td>Introduction to Deviations of Childhood</td>
<td>Readings and discussion of the etiology and manifestation of deviant patterns of behavior in children. Topic areas will be considered from both a psychological and sociological perspective.</td>
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</tr>
<tr>
<td>MOS/SBS 330</td>
<td>Social Policy Environment</td>
<td>A review of the problems and prospects associated with meeting human needs in a complex society. Includes a review of contemporary social policy alternatives and the policy-making process. Prerequisite: junior standing or permission of the instructor.</td>
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<tr>
<td>MOS/SBS 335</td>
<td>Legal Issues in Health and Human Services</td>
<td>Examines current legal issues affecting the management and delivery of human services including the protection of the rights of both clients and workers. Prerequisite: junior standing or permission of the instructor.</td>
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<tr>
<td>SBS 398</td>
<td>Independent Study</td>
<td>Prerequisite: junior standing and permission of instructor.</td>
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<tr>
<td>SBS 399</td>
<td>Special Topics</td>
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<tr>
<td>SBS Internship</td>
<td></td>
<td>Prerequisites: SBS 300 and two 300/400 level SBS courses.</td>
<td>3</td>
</tr>
<tr>
<td>SBS Seminar in Social and Behavioral Sciences</td>
<td>Designed to serve as the capstone seminar for majors in the social and behavioral sciences. Assignments will be appropriate to providing students with additional insights into their selected field of specialization as well as into social and behavioral science theory.</td>
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</table>
**B.S. in Nursing**

Beginning with the fall 1989 semester, students who are R.N.s will be able to complete the B.S.N. program at Lewiston-Auburn College. For more information about this R.N. Studies program, contact Jane Young in the School of Nursing (207-780-4154) or Kathy Robichaud at Lewiston-Auburn College (207-783-4860).
Division of Off-Campus Instruction and Academic Support

Director: John W. Bay
Director, Off-Campus Centers and Instructional Delivery: Kathleen H. Bouchard; Director, Saco-Biddeford Center: Nate Greene; Director, Sanford Center: Lorraine Masure; Director, Bath-Brunswick Center: Dennis Hatch; Director, Learning Assistance: Robert Lemelin; Coordinator of Developmental Math: Bruce A. Allen; Coordinator, Academic Support Centers: Frank K. Carner; Coordinator, Academic Support Services for Students with Disabilities: Margo W. Druschel; Program/Production Coordinator, USM Television: Caroline Hendry; Administrative Manager, USM Television: Ann Clarey; Television Technical Operations Specialist: Forrest Spaulding

The Division of Off-Campus Instruction and Academic Support, a unit of the University established in 1973, has responsibility for offering courses and administering associate degree programs at a number of off-campus locations in southern Maine as well as delivering courses via television. The Division sponsors or co-sponsors off-campus centers in Bath-Brunswick, Saco-Biddeford, and Sanford. Each of these centers offers comprehensive academic counseling and other student services to assist students who wish to take courses or to pursue associate degree programs. Also available are selected courses that meet the needs of baccalaureate students. Additionally, the Division is responsible for the Learning Assistance Program, Academic Support Services for Students with Disabilities, and for the course entitled Freshman Seminar.

Programs of Study

Associate Degree Offerings

Through the Division of Off-Campus Instruction and Academic Support, students may pursue several associate degree programs at locations that are geographically convenient. Specific degree offerings include:

- Liberal Arts (A.A.)
- Business Administration (A.S.)

General Admission Requirements: Students desiring to pursue any associate degree program through the Division of Off-Campus Instruction and Academic Support are required to meet the admissions requirements as outlined under the specific degree program. Students should contact an academic advisor at the off-campus center of their choice for more information.

Changing to a Baccalaureate Degree Program: Students desiring to change to one of the University's baccalaureate degree programs are advised to consult with an academic advisor regarding the process and the applicability of coursework toward their intended program.

Instructional Television (ITV)

Beginning in September 1984, credit courses were offered for the first time on the University of Southern Maine's Instructional Television (ITV) system. Courses are offered "live" on color television through a system that simultaneously connects classrooms at the Gorham and Portland campuses, off-campus centers in Sanford and Saco-Biddeford and at Lewiston Auburn College. Students at each location are able to hear and see the class in session and, using a specially developed microphone system, they are able to talk to the instructor during class. Information about the ITV system may be obtained by contacting the Division.

Learning Assistance

The Learning Assistance Program provides students with developmental instruction designed to help them achieve proficiency in writing (ENG 009)
Academic Support Services for Students with Disabilities

This office works with students to overcome obstacles they may face at USM as they strive for academic success. The office is located in 122 Payson Smith Hall. Call 780-4706 (voice) or 780-4395 (TDD) to schedule an appointment. See the Student Life and Services section of the catalog for a fuller description.

Freshman Seminar (FRSJ00)

The Division is responsible for the planning and delivery of this course which assists new students with the sometimes difficult transition into higher education. The course helps to build a strong foundation on which to build an academic career.

Off-Campus Centers

The Division of Off-Campus Instruction and Academic Support administers University courses and programs at three off-campus centers, Bath-Brunswick (a cooperative program with the University of Maine at Augusta), Saco-Biddeford, and Sanford. Each center offers geographical convenience and personal attention. A comprehensive array of services, which includes registration for and information about all campus programs, as well as admissions, financial, and career and academic counseling, is offered. Courses such as computer science, theatre, geology, economics, accounting, as well as many others are offered which meet the requirements for associate and baccalaureate degree programs. Also available is a program in writing and mathematics designed to meet the needs of those students who wish to strengthen their skills in these areas. Courses are offered both in the day and evening to accommodate the various schedules of part-time or full-time students.

Bath-Brunswick Center

The University of Maine at Augusta and the University of Southern Maine coordinate course offerings at the Bath-Brunswick Center, a fully equipped academic facility which includes a computer lab. USM degree program offerings include an associate degree program in business administration. Those desiring information about counseling services, financial aid, courses, and degree programs should contact: Bath-Brunswick Center; 275 Bath Road, Brunswick, ME 04011; (207) 442-7070.

Saco-Biddeford Center

Located at Saco Island, the Saco-Biddeford Center offers courses carefully selected to fit program requirements for the Core curriculum and for completion of associate degrees, as well as some selections from a variety of baccalaureate programs. All courses are held on site with library resources available at nearby Dyer Library. In addition, a full range of student services is provided at the Center, an academic facility with a modern computer lab and an instructional television link to other USM locations. For more information about programs, financial aid, or other academic counseling services contact: Saco-Biddeford Center, Mill 2, Saco Island, Saco, Maine 04072; (207) 780-4492 or 282-4111.

Sanford Center

The University offers associate degree program opportunities in liberal arts and business administration at the Sanford Center. Additionally, selected courses which satisfy requirements of most two- or four-year programs are available. Academic and career counseling, registration, and business office functions for students attending any USM location are available and noncredit personal interest courses and specialty workshops are offered each semester. A modern computer lab and instructional television link Sanford with other campus locations and offer up-to-date delivery systems.

Interested persons need not be in a degree program to take advantage of offerings. They need only call or stop by for a complete description.
Programs and Requirements

Liberal Arts
This associate degree program is offered in conjunction with the College of Arts and Sciences. Graduates may change to a baccalaureate degree program with a maximum transferability of credits.

Admission Requirements: Admission is based upon the candidate's academic background and is consistent with admission requirements for the University's baccalaureate programs in the College of Arts and Sciences.

Business Administration
The associate degree program in business administration is offered off-campus in conjunction with the School of Business, Economics and Management and is designed to serve two purposes: to prepare students who wish to complete their education in two years for employment in junior management positions in several different careers, and to provide a sound foundation for those students who perform well and who wish to transfer to a baccalaureate program in business administration at this University or another institution.

While the program emphasizes business, it contains liberal arts courses including writing, fine arts, social sciences, humanities, and mathematics. Concentrations within the associate program offered off-campus include accounting and business administration.

Admission Requirements: Any high school graduate may seek admission to the associate degree program. A college preparatory background, while desirable, is not necessary. Applicants should complete the University of Maine System application and specify the associate in business administration program.

ENG 009A Developmental English
This course is designed to help students who need to develop proficiency to enter ENG 100, College Writing. ENG 009 is taken on a pass/fail basis. Credit earned in ENG 009 does not apply or accumulate toward any degree program at the University of Southern Maine. 

Cr 3.

ENG 019 Written Business Communication
This course introduces students to business communication strategies and provides practice in the application of those strategies using the case method. Students manage business letters, short and long reports, and employment writing.

Cr 3.

FRS 100 Freshman Seminar
An orientation to the University emphasizing its purpose, programs, and services. Basic academic skills, expectations, career planning and other topics will be covered. This course may be counted for elective credit only. Enrollment open only to freshmen with less than 25 credits.

Cr 3.

MAT 009 Developmental Mathematics
A review of fundamental topics of arithmetic needed prior to a study of algebra. Topics covered include: basic operations with fractions, decimals and integers; introduction to ratios and proportions; applications of percent; notations involving exponents, average and square roots; and solving word problems and equations. Credit earned in MAT 009 does not apply or accumulate toward any degree program at the University of Southern Maine. 

Cr 3.

MAT 010 Elementary Algebra
The first course of a two-course sequence designed for students who are deficient in high school algebra. Topics covered include: basic operations with integers and rational numbers; equations with variables; algebra word problems; polynomials and algebraic fractions (including factoring); and graphs of linear equations. Prerequisite: MAT 009 or its equivalent. Associate degree credit only.

Cr 3.

MAT 011B Intermediate Algebra
A continuation of MAT 010. Topics include: quadratic equations; graphs of functions and relations; solutions to systems of equations; graphs and solutions for inequalities; and exponential functions. Prerequisite: One year of high school algebra or MAT 010. Associate degree credit only.

Cr 3.

RDG 009 Developmental Reading
This course provides opportunities for students to develop the critical reading skills needed at the college level. Students must demonstrate skills' mastery at the end of the course. This course may be taken on a pass/fail basis. Credit earned in RDG 009 does not apply or accumulate for any degree program at the University of Southern Maine. 

Cr 3.
Department of Military Science

Professor and Director: Lieutenant Colonel Gerald W. Barnes (U.S. Army); Assistant Professors: Major Caouette, Captain Henegan; Instructors: Master Sergeant Mars, Sergeant First Class Weaver, Sergeant First Class Clark, Staff Sergeant Close

Army ROTC  Army ROTC offers students of the University an opportunity to earn a commission in the United States Army while pursuing a bachelor's degree. Students register for military science courses as part of their regular undergraduate curriculum. For information, contact the Department of Military Science at 780-5255 or visit the office at 51 College Avenue, Gorham campus.

The Army ROTC program consists of a two-year (freshman and sophomore) basic course and a two-year (junior and senior) advanced course. Students who have completed previous military training (veterans, military academies, Junior ROTC, etc.) may be granted credit for all or a portion of the Basic Course as determined by the professor of military science. ROTC Basic Camp may be taken between the sophomore and junior years in lieu of the Basic Course as outlined in the course descriptions.

Students who successfully complete or receive credit for the Basic Course may apply to the professor of military science for admission to the Advanced course. If admitted the student receives $100 per month during his/her junior and senior years. Students who successfully complete the Advanced Course may be offered a commission as a second lieutenant in the United States Army, and can be appointed in the National Guard, the Army reserve, or the active Army.

Scholarships  The Reserve Officer Training Corps offers scholarships in four-, three- and two-year awards which pay tuition, education fees, lab fees, and a fixed amount for textbooks, supplies, and equipment. In addition, winners receive an allowance of up to $1,000 each school year the scholarship is in effect.

The ROTC Scholarship Program is highly competitive. The selection procedure includes an evaluation of academic potential and performance, physical condition, degree of demonstrated motivation towards officership in the Army, and the results of a personal interview with the professor of Military Science.

For more information, contact the Department of Military Science, University of Southern Maine, 51 College Avenue, Gorham, Maine 04038 or telephone (207) 780-5255.

Professional Military Education

Successful pre-commissioned undergraduate training requires a proper mix of academic skills and knowledge. Prior to commissioning, cadets must take five required Professional Military Education (PME) courses from the University curriculum which complement the Core curriculum. One course from each of the following fields of study is required: written communications, human behavior, military history, computer literacy, and math reasoning. Courses are selected by the student and approved by the professor of Military Science.
The Basic Course

The Basic Course is a 6-credit curriculum which allows students an opportunity to experience ROTC leadership training without making a commitment. This phase involves two years of fundamental and practical leadership training; upon successful completion, cadets qualify for entry into the Advanced Course. Cadets can also qualify by completing a six-week Basic Camp at Fort Knox, Kentucky. Prerequisites: full-time student, medically qualified.

MTL 000 Leadership Laboratory
Leadership Lab is a component of all Military Science courses and constitutes a graded portion of each course. Emphasis is on practical application of leadership skills taught in the classroom. Schedule arranged with instructor. Cr 0.

MIS 111 Fundamentals of Leadership
A practical course designed to provide a background study of concepts and skills essential to the development of leadership. This course strongly emphasizes leadership development, master student skills, interpersonal communication, team-building, and problem solving. In addition to the classroom training there is a practical application during leadership laboratory which provides experience through participation. This course meets the first semester freshman requirement for the Reserve Officer Training Corps Basic Course. Cr 1.

MIS 112 Leadership Fundamentals and ROTC
A continuation of the elements studied in the Fundamentals of Leadership (MIS 111). This course narrows its focus to the role of the officers and the noncommissioned officers in the Army. (Development of military customs, courtesies and tradition, organization of the Army, and role of the Army.) This course integrates basic leadership principles as exemplified by the U.S. Army. In addition to the classroom training there is a practical application during leadership lab. This course meets the second semester freshman requirement for the Reserve Officer Training Corps Basic Course. Prerequisites: MIS 111; permission of instructor. Cr 1.

MIS 221 Practical Skills in Leadership
This course provides students with a basic knowledge of land navigation, first aid, supervisory skills and techniques for effective leadership, and supervision in a military environment. Land navigation focuses on developing practical skills in reading and interpreting maps, marginal information, map grid coordinates, scale and distance, direction, elevation, identifying terrain features and intersection/resection. These skills will be applied in a cross country navigation exercise. First aid will cover topics in respiratory emergencies, wounds, burns, fractures, and other topics. Students will be required to attend leadership labs which will focus on practical application of skills taught in the classroom. Prerequisites: MIS 111, 112, permission of instructor. Cr 2.

MIS 223 Demonstrated Skills in Leadership
This course is a follow up to MIS 221 and is designed to provide the student with an opportunity to perform numerous leadership functions. The framework for these demonstrated leadership skills are primarily within a military environment. The tasks include such actions as writing an operations order, establishing and conducting a physical fitness program, presenting a briefing, and similar action-oriented skills. This course lays the ground for transition into the ROTC advance course. Cr 2.

MIS 229 Leadership in Action, ROTC Camp Challenge
A six-week leadership summer course conducted at Fort Knox, Kentucky. The environment is rigorous and is a definite leadership challenge. Participants are able to compete for two-year ROTC scholarships while at Camp Challenge. These scholarships are extremely competitive in nature. The Army provides travel and a fixed amount of pay for the six-week period. There are normally three different cycles to choose from during the summer. The student incurs no military obligation for participating in this training, which qualifies the applicant to enter the Advanced ROTC course in the fall. Camp Challenge applicants are accepted during the spring semester, and must apply for enrollment to the professor of Military Science. Selection for attendance is based on qualifications and merit. Prerequisites: Same as for entry into MIS 111. Cr 6.
Upon successful completion of the Basic Course or receiving advanced placement status approved by the professor of Military Science, students who are eligible to contract may enter the pre-commissioning phase of their military leadership training. The courses listed below are required for completion of the Advanced Course and commissioning as a second lieutenant.

**MIS 331 Leadership Doctrine and Theory**

Leadership Doctrine and Theory is the collection of teaching and principles applied to the practice of leadership. It provides the basis and framework for all leader actions. Attention will be given to important principles of leadership, including the BE-KNOW-DO framework; teaching and counseling; the communication process; team development; and factors of leadership. The course encompasses weekly classroom instruction, Leadership Lab, and one weekend Field Training Exercise. Prerequisites: Basic Course, MIS 229 or Active Duty experience, permission of professor of Military Science. Cr 3.

**MIS 332 Leadership Application**

This course is an intensive preparation for Advanced Camp. It develops knowledge in small unit tactics, land navigation, and physical conditioning. The accumulated leadership skills and knowledge are employed and evaluated in practical exercises throughout the course curriculum. The course encompasses classroom instruction and physical conditioning, Leadership Lab, and one weekend Field Training Exercise, and a mini-camp prior to attendance of Advanced Camp. Prerequisites: MIS 331, or Active Duty experience, permission of professor of Military Science. Cr 3.

**MIS 339 ROTC Advanced Camp**

Cadets are placed in the most challenging field training environment during ROTC which provides practical experiences in a stressful environment, and opportunities for cadets to develop and demonstrate their leadership capabilities. Advanced Camp is six weeks at Fort Bragg, North Carolina. Pay and travel costs are defrayed by the Army. Prerequisites: MIS 332, permission of professor of Military Science (pass/fail). Cr 0.

**MIS 340 Ranger School**

A leadership course for small unit leaders in which the student is exposed to conditions and situations which closely approximate and often exceed those he will encounter in combat. The Ranger course is two months in length, with an average of 19 hours of training each day, 7 days a week. It is divided into four phases of training with each phase being conducted at a geographically different location. Students who graduate are awarded the coveted Ranger tab. Ranger School is in lieu of Advanced Camp. Prerequisites: MIS 332, permission of professor of Military Science (pass/fail). Cr 0.

**MIS 341 Nurse Summer Training Program**

The Nurse Summer Training Program (NSTP) provides qualified cadets, majoring in nursing, opportunities to develop and practice leadership skills in both field and clinical environments. Cadets spend 2 weeks at an Advanced Camp patterned after MIS 339 and 5 weeks at selected Health Services Command Medical Treatment Facilities. Cadets work one-on-one with an Army Nurse Corps officer preceptor. NSTP is in lieu of MIS 339. Prerequisites: MIS 332, permission of professor of Military Science (pass/fail). Cr 0.

**MIS 441 Advanced Leadership I: Military Management**

This course is designed to enhance the senior students leadership development and to prepare the cadet to transition to an Army officer. It will review management theory; personnel, logistics and training management systems; and military law. The pre-commissioning assessment of officer potential will continue. Student participation in leadership laboratory is required. Prerequisites: MIS 332, successful completion of advanced camp, and permission of instructor. Cr 3.

**MIS 442 Advanced Leadership II: Small Unit Leadership Seminar**

This course is designed as a final preparation for cadets to assume the leadership responsibilities inherent in their commissions as second lieutenants, United States Army. It will review the organization and functions of the Department of Defense and the U.S. Army; threats to national security; small unit tactical operations; the ethics of leadership; training individual soldiers and platoons; professional writing and speaking; troop leading procedures; and personal planning and financial management. Student participation in leadership laboratory is required. Prerequisite: MIS 441. Cr 3.

**MIS 499 Advanced Leadership III: Independent Study**

This course is only open to contracted ROTC cadets. It is a concentrated program of research into a particular topic selected by the student, mentored by a faculty member and approved by the professor of Military Science. Cr 1-6.
Special Courses

Special courses are available to individuals in the ROTC program on a competitive and voluntary basis. Courses are offered during the summer months. Application packets need to be processed during the spring semester. All of the following courses require permission of the professor of Military Science.

MIS 075 Air Assault School
A mental and physical, 10-day school to train on the tactical utilization of Army helicopters and air transport procedures. Cadets are taught to rappel from helicopters to establish drop/pick-up zones, along with preparation of air transportable cargo. Cadets who graduate from the Fort Campbell, Kentucky, school are awarded the Army Air Assault Badge (pass/fail). Cr 0.

MIS 070 Airborne School
A physically tough, three-week school to train and qualify cadets in military parachuting. Attendance is competitive within the enrolled ROTC cadets. Cadets who graduate from the Fort Benning, Georgia, school are awarded the Army Parachute Badge (pass/fail). Cr 0.

MIS 080 Northern Warfare Training Center
A three-week course conducted at Fort Greely, Alaska, which emphasizes military mountain-climbing skills and military operations in northern areas (pass/fail). Cr 0.

Air Force ROTC

Two-year and four-year Air Force Reserve Officer Training (AFROTC) programs are sponsored and offered by Detachment 475 located at the University of New Hampshire, Durham, New Hampshire.

The four-year program is open to freshmen or transfer students from an ROTC program at another college. This program allows "trying out" Air Force ROTC for up to two years without incurring any obligation unless the cadet is on an Air Force scholarship.

The two-year program is offered to students who have at least two years of undergraduate or graduate work remaining before entering the Air Force.

Entering freshmen may compete for four-year scholarships during their senior year of high school. Three-and-one-half year, three-year, two-and-one-half-year, and two-year scholarships covering all or part of tuition, certain fees, and an unlimited amount of books are also available. All scholarship recipients receive a $100 per month subsistence allowance. All non-scholarship cadets receive $100 per month subsistence allowance for the last two years of the program.

The first two years of the Air Force program require one hour of class and one-and-half hours of Leadership Lab per week. The remaining two years require three hours of class and one-and-half hours of Leadership Lab per week.

The following Air Force ROTC, Detachment 475 courses and labs are held on the Gorham campus, University of Southern Maine or the University of New Hampshire Campus in Durham:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>AFL 000</td>
<td>Leadership Laboratory</td>
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<tr>
<td>AFL 112-113</td>
<td>The Air Force Today I &amp; II, Freshman Year</td>
</tr>
<tr>
<td>AFL 341-342</td>
<td>The Development of Air Power I &amp; II, Sophomore Year</td>
</tr>
<tr>
<td>AFL 471-472</td>
<td>Air Force Management and Leadership I &amp; II, Junior Year</td>
</tr>
<tr>
<td>AFL 481</td>
<td>National Security Forces in Contemporary American Society, Senior Year</td>
</tr>
<tr>
<td>AFL 482-483</td>
<td>The Military Profession I &amp; II, Senior Year</td>
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</table>

After qualifying for either ROTC program, the cadet must see the Registrar of the University of Southern Maine for the proper registration procedures. Students may enroll in the ROTC programs under the crosstown agreement at no extra cost.

For additional information regarding either of these programs the student should contact Air Force ROTC Detachment 475, University of New Hampshire, at (603) 862-1480.

Leadership Laboratory is required each semester of all Air Force ROTC students seeking commissions as second lieutenants in the U.S. Air Force upon graduation. Students taking Air Force ROTC courses for credit, but not seeking commissions, need not register for this lab.
AFL 000 Leadership Laboratory
Taken by all AFROTC cadets throughout enrollment in AFROTC. Command and staff leadership experiences in cadet corps. Air Force customs and courtesies, drill and ceremonies, career opportunities, and life and work of the junior officer. Student leadership potential developed in a practical, supervised laboratory. Field trips to Air Force installation. Cr 0.

AFL 112 The Air Force Today I

AFL 113 The Air Force Today II
Major Air Force commands; roles of separate operating agencies; organization, systems, and operations of strategic defense; general-purpose aerospace support forces. Cr 1.

AFL 341 The Development of Air Power I
The nature of warfare; development of air power from balloons and dirigibles through World War II. Cr 1.

AFL 342 The Development of Air Power II
Development of air power from post-World War II through the peaceful use of air power in Berlin; the Cuban crisis; air war in Southeast Asia; and research and development of present and future aerospace vehicles. Cr 1.

AFL 471 Air Force Management and Leadership I
An integrated management course emphasizing the individual as a manager in the Air Force. Motivation and behavior, leadership, communication, group dynamics, and decision making in a changing environment. Air Force case studies. Cr 4.

AFL 472 Air Force Management and Leadership II
Organizational and personal values; management of forces in change; organizational power, politics, managerial strategy, and tactics; Air Force cases studied. Cr 4.

AFL 481 National Security Forces in Contemporary American Society
Focus on the armed forces as part of American society, emphasizing civil-military relations in context of U.S. policy formulation and implementation. Requirements for adequate national security forces; political, economic, and social constraints on the national defense structure; impact of technological and international developments on strategic preparedness; the variables involved in the formulation and implementation of national security policy. Cr 3.

AFL 482-483 The Military Profession
Focus on attitudes toward the military, socialization processes, role of the professional military leader-manager, and military justice and administrative law. Cr 1.
Graduate Programs
Office of Graduate Affairs, 100 Payson Smith, Portland, 780-4386

The following graduate programs are available at the University of Southern Maine. The programs are described in detail in the Graduate Catalog.

School of Appliance Science: Computer Science; Applied Immunology; and in cooperation with the University of Maine in Orono: Electrical Engineering. College of Arts and Sciences: New England Studies, Statistics. College of Education: Adult Education, Counselor Education, Educational Administration; Exceptionality; Instructional Leadership, Literacy Education; School Psychology. School of Business, Economics and Management: Business Administration; School of Nursing: Nursing; Inter-College Program: Public Policy and Management; University of Maine School of Law: Law (Juris Doctor)

School of Law

Dean: Donald N. Zillman; Associate Dean: David P. Cluchey.
Professors: Cluchey, Delogu, Friedman, Gregory, Kandoian, Lang, Loper, Potter, Rogoff, Ward, Wroth, Zarr; Associate Professors: Khoury, Mullane, Rieser, Wells; Visiting Professors: Gao, O'Malley; Visiting Associate Professor: Plimpton; Adjunct Professors: Godfrey, Petruccelli, Wernick; Lecturers: Checkoway, Eichenberg, Frank, Hirshon, Howard, Leahy, Maiman, Priest, Thompson.

The University of Maine School of Law is a small school that has long offered a high quality of 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 men and women who will become capable and motivated attorneys.

The academic program is rigorous and demanding. Thanks to the School's size, however, its students have the benefit of small classes, frequent and informal contact with the faculty, and a friendly atmosphere. These factors do much to ease the strains attendant upon entry to an exacting profession.

The School averages 75-80 students per class, of whom approximately 50 percent are women; the number of students in the School is about 260, making it one of the smallest in the country. The student body is remarkably varied in age, professional and academic experience, and background.

The School's faculty consists of 16 full-time and a number of part-time instructors. It is drawn from many specialties and represents a diversity of backgrounds and interests.

The School is fully accredited by the American Bar Association and is a member of the Association of American Law Schools.

Established at Portland in 1961, the Law School is the successor to the University of Maine College of Law which existed in Bangor from 1898 to 1920. It is an administrative unit of the University of Southern Maine, but has responsibilities to the statewide University system. The school is located in a modern building, fully accessible for handicapped students, that provides excellent facilities for classroom and seminar discussion, library research, moot court participation, clinical practice, legal publications, and student activities.
Summer Session

Director: Rosa S. Redonnett

During the summer the University offers over 300 credit and noncredit courses, and a number of institutes and programs. The Stonecoast Writers' Conference, courses for Music Educators, Childhood Psychopathology Institute, and a music camp for talented high school musicians represent just a few of the many special programs available for people of all ages. In addition to the 4,000 students who enroll in academic courses, over 8,000 people attend summer conferences held in University facilities. Cultural events such as a faculty lecture series, concert series, and poetry readings are also featured. Classes are held days and evenings in several schedule formats. The campus offers residence hall accommodations and meals at reasonable rates. Child care is also available for faculty, staff, students, and conference participants.

For further information, contact the Summer Session Office, University of Southern Maine, 106 Payson Smith, Portland, ME 04103 or telephone 780-4076.
Office of Sponsored Research

Director: Robert J. Goettel

The Office is responsible for encouraging grant and contract initiatives that support program-related activities of academic departments and research and development units. The Office promotes awareness of funding opportunities and deadlines among faculty and staff, maintains up-to-date information on potential sponsors, assists faculty and staff in identifying possible sponsors for projects, assists in matching project planning to sponsor priorities and requirements, and assists in contacts with funding agencies.

Faculty and research staff of the University of Southern Maine are involved in a wide range of research, policy and program development and evaluation, technical assistance, and training initiatives for public and private agencies in the state and throughout the nation. Many of these programs are implemented through institutes and centers designed to bring the resources of the University to bear on problems and issues of concern to society. To develop new knowledge and understanding and to transfer knowledge to practitioners, these institutes and centers often include USM faculty and staff from several disciplines in interdisciplinary teams engaged in the study of specific problems. The eleven USM institutes and centers and the academic units with which they are primarily affiliated are as follows:

Center for Business and Economic Research CBER is a unit of the School of Business, Economics and Management.

Center for Housing and Land Use CAH is a unit of the School of Business, Economics and Management.

Center for Real Estate Education CREE is a unit of the School of Business, Economics and Management.

Child and Family Institute The Child and Family Institute, within the Division of Human Resources, serves children, families, and those who work with children and families. CFI provides leadership and promotes excellence through a comprehensive delivery of educational programs, consultation services, library resources, research, networking, model program development, and advocacy. Contact the institute at 780-5455 for further information.

Cumberland Legal Aid Clinic CLAC is a unit of the School of Law.

Human Services Development Institute HSDI is a unit of the Public Policy and Management Program.

Institute for Real Estate Research and Education IRERE is a unit of the School of Business, Economics and Management.

Marine Law Institute MLI is a unit of the School of Law.

Production Technology Center PTC is a unit of the School of Applied Science.

Professional Development Center PDC is a unit of the College of Education.

Small Business Development Center SBDC is a unit of the School of Business, Economics and Management.

Center for Technology Transfer CTT is a collaborative program with the University of Maine.

See the appropriate school or college section of this catalog for further information.
Division of Continuing Studies

Director: William G. Mortensen
Assistant to the Director: Ellen M. Corkery

The Division of Continuing Studies is responsible for the development, coordination, and support of the University's noncredit programs. It offers a wide range of noncredit activities to meet the professional and personal needs of the residents of southern Maine. During 1988-1989, over 50,000 persons participated in conferences, seminars, workshops, short courses, and certificate programs sponsored by the Division.

CEU Award System The Division administers the Continuing Education Unit (CEU) Award System. The CEU is a nationally accepted unit of measurement applicable to noncredit continuing education. CEU courses are generally designed for a specific audience and are often used for professional development in a particular industry or profession. The CEU permits the individual to participate in many kinds of programs while accumulating a uniform record available for future reference. One CEU is awarded for 10 hours of participation in an approved program of continuing education.

The following information indicates the variety and scope of the University's noncredit activities. Specific inquiries about these programs should be directed to the appropriate department. General inquiries should be directed to the Division of Continuing Studies at 68 High Street, Portland, Maine 04101; phone 874-6515.

Department of Continuing Education for Business

Director: Donald J. Clark

The Department of Continuing Education for Business (CEB) offers a wide variety of noncredit courses and seminars designed to meet the training needs of companies and nonprofit organizations in southern Maine. These include certificate programs in management, supervision, and human resources. CEB also offers evening seminars on various management skills, courses in quality control production and inventory control, OSHA regulations, executive housekeeping, and one- and two-day seminars on management issues.

Programs are held at the USM Intown Center, the Saco/Biddeford Center, the Bath-Brunswick Center, the Sanford Center, Lewiston-Auburn College, and other locations.

CEB's instructional staff is drawn from USM faculty and from business and industry. Programs are practical and job-related and focus on professional development. CEUs are awarded for most courses and seminars.

Nearly all CEB programs are available for in-house delivery for customized company training.

For additional information and printed materials, contact the Department of Continuing Education for Business, 68 High Street, Portland, Me. 04101; telephone 874-6510.

Department of Conferences

Director: Kathleen S. LeBel
Assistant Director: Frances M. Myers
Conference Coordinator: Elizabeth A. Morin

The Department of Conferences provides planning and coordination to University and community groups and organizations wishing to use the University's conference facilities and services. The Department occasionally
provides workshops and seminars which bring together qualified individuals to share new information and ideas, upgrade professional skills, or to impart new techniques.

The Department's conference planning and management services are extended to professional and trade associations, government agencies, private business and community groups and organizations. Programs can be conducted on either campus, or off-campus wherever an appropriate meeting site can be arranged.

An experienced conference staff is available to plan, coordinate, and facilitate the delivery of programs of virtually any size or duration. By using the University's conference services, the program initiator is free to concentrate fully on program content.

During the summer and, to a lesser extent during the academic year, the University's classrooms, auditoriums, recreational facilities, and dining services are available for use by conference groups. Residence halls are also available for housing from June to the end of August. All meetings are within easy reach of major educational facilities on both campuses. Two libraries allow conference participants ready access to reference materials. The University also maintains two well-equipped audio-visual departments, as well as a print shop.

Conference fees are determined by the Department of Conferences with the assistance of the conference sponsor's planning committee. While program costs will vary with the number of participants, duration of program, and special requirements, program fees are kept reasonable by utilizing University facilities and services whenever possible. The staff prepares a budget for each conference or workshop and presents to the sponsor a financial statement at the successful completion of the program.

Each summer the Department of Conferences offers a number of camps for junior and senior high school age students. Offerings for the summer include USM Soccer School, "SWISH" Basketball Camp, "STIX" Field Hockey Camp, Southern Maine Music Camp, and "Ten-O" Gymnastics.

For information about these and other conference services at USM please call 874-6506.

Department of Continuing Education for Nursing and Health Professions

Director: Mary Ann Rost

The Department of Continuing Education for Nursing and Health Professions develops, offers, and evaluates noncredit programs in a variety of formats to meet the learning needs of nurses and other health professionals at locations throughout the state of Maine. Programs offered by the Department are held at college campuses, in health facilities, and other appropriate locations and include workshops, seminars, conferences, and courses. Programs are available either on a fee basis or through specifically designed contracts with health care agencies.

Programs offered by the Department of Continuing Education for Nursing and Health Professions are conducted in cooperation with health agencies, health care officials in the state of Maine, or at the request of a group or individual. Examples of groups served are: nurses, pharmacists, dieticians, physical therapists, occupational therapists, and social workers.

All programs are awarded CEUs and are approved by professional associations including The Maine State Nurses Association, and Maine Commission of Pharmacy. The following are examples of programs recently offered by the Department: The Annual Nurse-Pharmacist Conference; Physical Assessment Skills; AIDS Education; Refugee Health Care; Cardiovascular Update; Drugs and Women's Health; NCLEX-RN Review Course. For information call 874-6550.
The Department of Community Programs offers a wide range of programs including professional development in selected areas, personal enrichment, and career and skill enhancement. Community Programs are generally designed for adults with full-time home and career responsibilities who desire practical courses which meet a specific need and which are offered at convenient times.

Courses are taught by instructors who are recognized experts in their fields. Instruction is usually designed so that participants can apply the knowledge and skills obtained to their specific situation.

Because of the rapidly changing programs within the personal enrichment category, only professional certificate programs are described in this catalog. Please contact the Department of Community Programs at 874-6500 for specific information regarding programs and courses of study in both categories.

Personal Enrichment Areas of Study:
- arts; language and culture; finance and investment; personal computers; community leadership; environment and land use; interpersonal skills; self-help; women's/men's issues; programs for older adults.

Certificate Program for Paralegals: This paraprofessional program will provide a sequence of training leading to a certificate in the broad range of legal services known as general practice.

The Paralegal Program is designed primarily for part-time students and courses are offered twice a week in the evenings and in a one- or two-day seminar format.

Those wishing to obtain the certificate must apply for acceptance to the program and meet admission requirements. Only accepted candidates will be allowed to enroll in courses. The curriculum includes the following courses: Introduction to Law and Paralegalism; Legal Research and Source Materials; Litigation; Estates, Wills and Trusts; Real Estate; Business Organizations; Bankruptcy/Secured Transactions; Domestic Relations; Legal Writing; Computers in the Law Office. Required seminars: Orientation to the Legal Assistant Profession, Interpersonal Skills and Interview Techniques.

Follow-up courses may be offered on a demand basis. Internships are also available with the approval of the Program Coordinator.

Certificate Program in Personal Computer Management: Managing PCs for maximum results takes more than the right equipment and technical, management, and "people" skills. This program helps businesses meet this need. The program is designed for part-time students who have several years of computer experience as end-users, support staff, or as coordinators/managers. The curriculum is appropriate for individuals from any size organization who have responsibility (or would like to have responsibility) for managing personal computers.

The program runs from September through June. Students may enroll mid-year on a space-available basis. In lieu of an application, students will complete a skills assessment questionnaire. This assessment will serve as the basis for determining the extent of a student's computer experience and for recommending supplemental computer courses when necessary. Students are expected to have a working knowledge of word processing, spreadsheets, and databases.

All courses are offered in the Department's Computer Lab in room 201 Payson Smith Hall, on the Portland campus, from 6:30-9:00 p.m., one evening per week.
Community Leadership Institute  The Institute seeks participants who have demonstrated a capacity for and a commitment to volunteer community leadership.

Lifeline Center for Fitness, Recreation and Rehabilitation

Director: Thomas J. Downing
Fitness Program Manager: Peter Allen; Rehabilitation Program Manager: P. Len Jordan; Continuing Education and Leisure Manager: Gabriel Williamson; Employee Wellness Specialist: Mary Moskowitz; Medical Director: Peter K. Shaw, M.D.

The Lifeline Center is designed to help individuals and organizations in southern Maine adopt health-enhancing lifestyles by providing leadership and services in exercise, rehabilitation, education, recreation, and employee wellness.

Many of Lifeline's fitness and rehabilitation activities require medical clearance from personal physicians. Application to all programs should be made well in advance. Free brochures and registration information are available by calling 780-4170.

Fitness Programs

*Walk/Jog* is a program designed for the sedentary person who, for one reason or another, is not in good physical condition. It is essentially a routine of walking/jogging, calisthenics, stretching, and relaxation techniques. Exercise begins slowly and progresses each week. At the end of ten weeks, one may elect to go into the intermediate program.

*Energy in Motion* is a comprehensive exercise program consisting of aerobic conditioning, muscular endurance and toning, postural flexibility, and relaxation. Floor exercises done to contemporary music make up the aerobic portion of the classes. Various relaxation techniques are utilized at the end of each class.

*Aquatics* is a cardiovascular exercise program for those who prefer swimming. Non-swimmers may also participate, as many of the exercises can be performed in the shallow end of the pool. A combination warmup/water calisthenics routine is followed by a peak exercise period where heart rates are elevated to improve cardiorespiratory endurance. The exercise session will end with a cool down period of slow walking and swimming and final stretch downs on the pool deck.

*Low-Impact Aerobics* is a basic exercise program for men and women. It includes components of light aerobics, flexibility and postural exercises, and relaxation techniques. A good program for individuals with little or no previous exercise habits.

*Aerobic Calisthenics* offers a 60-minute workout emphasizing flexibility and muscular toning. Light weights and rubber "Dynabands" will be incorporated into each workout. Popular music will provide a background for all classes.

*Bodyshop* helps people improve their posture and strength in a supervised program of weight training. A complete assortment of weight training equipment is available including Nautilus, Universal, and free weights. The Bodyshop Program is a sensible approach to progressive resistance weight training for improving body tone, muscular strength, power, and endurance. Individually prescribed programs of exercise are designed to meet the particular goals and needs of each participant.

*Youth Weight Training/Conditioning Program* is a supervised training program for boys and girls 14 to 17 years of age. Courses are offered throughout the year utilizing the Lifeline Bodyshop. The program is designed to teach proper conditioning values and techniques; increase muscular strength and endurance; increase flexibility; and increase cardiovascular conditioning.

*Senior Fitness* is designed for persons over 60 years of age, including those who require a low level of exercise. Cardiovascular conditioning, determined by individual age-predicted heart rates, includes stationary bike riding, walking, or a combination of walking and jogging. Emphasis is
placed on flexibility and postural muscle strength, accomplished through slow stretches and muscular improvement of specific muscle groups. Senior Fitness should be considered a maintenance exercise program where individuals progress at their own rate.

Rehabilitation Programs

*Heartline* is a program of cardiac rehabilitation for post-coronary and high risk individuals. This is a physician-supervised class, utilizing walking, jogging, and swimming to recondition persons who need close supervision while exercising. All participants must be referred to Heartline by their personal physician. While Heartline provides medical supervision during the exercise session, it is not intended to replace the role of the primary physician. Throughout the program, periodic reports are sent to the primary physician and all significant events are promptly reported. Heartline is intended to improve communications between the participant and his or her personal physician. All necessary forms are provided by the Heartline office. All participants must enter the program at the start of a new session.

*Pulmonary Rehabilitation* is a comprehensive program of exercise, education, and proper medical management for patients with chronic obstructive pulmonary disease. This is accomplished by increasing their awareness of their disease and its management, and through participation in a progressive cardiopulmonary exercise program, thereby enabling adaptation to improve lifestyles. Participants are enrolled in the program only after referral from their primary care physician.

*Love Your Back* is a six-week program consisting of progressive low-level exercise routines combined with periodic educational sessions. Emphasis is placed upon the improvements of postural and muscular strength and endurance, body flexibility, and relaxation techniques. Along with the exercise sessions specific time is devoted to topics relating to low back problems. Such items as body anatomy and physiology, causation factors, body mechanics, and nutrition will be integrated into the ten-week program. Medical clearance is required for all participants regardless of age. Appropriate medical forms will be provided for your physician to sign.

Education and Leisure Services

*Lifeline's recreation leisure programs* are designed to make University recreation and fitness activities available to students, faculty and staff, alumni, and the general public. Activities, offered in the form of courses, one-day clinics, and workshops, include: T'ai Chi Ch'uan, massage, volleyball tournaments, fly tying, bicycling, flycasting, racquetball, nutrition/fitness conferences, and wellness weekend.

*Certificate in Fitness Instruction*

Certificate in Fitness Instruction is an innovative noncredit eight-week curriculum offering instruction and leadership in key subject areas. Courses include anatomy and physiology, kinesiology, teaching adult fitness, sports injury, physical fitness testing/lifestyle counseling, weight training, nutrition for health and fitness, and fundamentals of exercise physiology.

Employee Wellness Services

*Employee Wellness* can assist a company in the development, implementation, and evaluation of multi-faceted programs based on the needs of both the company and its employees. Such tools as corporate health profiles, employee needs assessments, and health risk appraisals are available to aid in this process. Employee health/fitness programs can be instituted at both large and small companies.

*Weight Wise* is a nine-week course using a many-sided approach to weight reduction. The primary emphasis is on the individual identification and solution to problem eating behaviors which may lead to or maintain overweight conditions. Proper nutrition and eating plans are emphasized and developed for participants, along with discussion on the value and myths of exercise.
Smoke-Free  This course, offered for five weeks, is designed to assist the smoker in making the decision to stop smoking and does not offer false hopes of 100 percent success. The primary purpose is to help the smoker identify reasons for smoking and through group support make some decisions about possibly stopping.
The University of Southern Maine Alumni Association numbers more than 20,000 active members representing alumni of Gorham Normal School, Gorham State Teachers College, Portland Junior College, Portland University, University of Maine in Portland, Gorham State College, Gorham State College of the University of Maine, University of Maine at Portland-Gorham, and the University of Southern Maine. The Association is governed by a 22-member board of directors and an Alumni Advisory Council provides support to the board of directors and the executive director regarding general alumni matters.

The USM Alumni Association works to expand the tradition of service both to the alumni and the USM community, carrying on a tradition established some years ago by the Gorham Alumni Association. The Association, while serving the alumni of the University of Southern Maine and its predecessor institutions, its current and future students, and the University community, strives to promote the University through increased involvement, commitment, and communication. The Association serves as a vehicle to enable alumni to further the University as an important educational, economic, cultural, and social influence in the state of Maine.

The Association, through its membership, serves as an advocate and participates in support of University program development. It promotes increased educational aspirations within the community at large and a sense of fellowship among its members. Students are urged to visit the Alumni House on the Portland campus and to get acquainted with the people and programs of the Alumni Association before graduation.

Interested students are encouraged to join the newly organized student alumni association by contacting the director of Alumni Relations.
Administration of the University of Southern Maine

Administrative Organization as of June 1, 1990

President: Patricia R. Plante, 705 Law Building, Portland tel: 780-4480
Provost and Vice President for Academic Affairs: John Deegan, Jr., 711 Law Building, Portland tel: 780-4485
Vice President for Administration: Samuel G. Andrews, 723 Law Building, Portland tel: 780-4484
Vice President for Student Affairs: Larry G. Benedict, 721 Law Building, Portland, tel: 780-4035
Vice President for Development and External Affairs: Stephen T. Honey, 731 Law Building, tel: 780-4382
Executive Assistant to the President: Robert J. Goettel, 709 Law Building, Portland, tel: 780-4482

Administrative Offices Serving Students

Admissions
Daniel Palubniak, Director

Advising and Academic Information
Lawrence Bliss, Director

Applied Science, School of
Brian C. Hodgkin, Dean

Arts & Sciences, College of
Dave D. Davis, Dean

Athletics
Paula D. Hodgdon, Acting Director

Bookstores
Cynthia S. Quinn, Director

Business, Economics and Management, School of
Richard J. Clarey, Dean

Child Care Services
Helene Gerstein, Director

Continuing Studies, Division of
William G. Mortensen, Director

Counseling & Career Services
Ira Hymoff, Director

Education, College of
Dorothy D. Moore, Dean

Educational Media Service
Ronald W. Levere, Director

Financial Aid, Student
Melody Havey, Director

Graduate Affairs, Office of
Martin A. Rogoff, Associate Provost

International Student Development, Office of
Domenica T. Cipollone, Director

Law, University of Maine School of
Donald N. Zillman, Dean

Lewiston—Auburn College
Helen L. Greenwood, Dean

Libraries
George Parks, University Librarian

Nursing, School of
Kathleen I. MacPherson, Interim Dean

Off-Campus Instruction and Academic Support, Division of
John W. Bay, Director

Police and Safety
Coin P. Hauk, Director

Public Policy and Management Program
Richard E. Barringer, Director

Registrar's Office
John F. Keysor, Registrar

Residence Life
Joseph M. Austin, Director

Student Activities and Campus/Student Centers
Judith S. Ryan, Director

Student Billing
Richard R. Campbell, Associate Executive Director for Financial Resources

Student Health Services
Judith LaFountain, Director

Student Testing and Assessment, Office of
David L. Silvernail, Director

Summer Session
Rosa S. Redonnett, Director
**EMERITI**


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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Hopkinson, David B. (1959-1983) University of Maine, B.S., 1942; University of Vermont, M.S., 1949; University of Maine, M.E., 1961; P.E. (Maine); Associate Professor Emeritus of Engineering


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York, Robert M. (1962-1984) Bates College, A.B., 1937; Clark University, M.A., 1938; Ph.D., 1941; Professor Emeritus of History

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FACULTY & STAFF


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Guay, Merle D. (1969) Professor of Mathematics; Tufts University, B.S., 1958; University of Maine, M.A., 1960; Michigan State University, Ph.D., 1967
Gupta, Bhisham C. (1985) Professor of Applied Mathematics, Punjab University (India), M.A., 1964; University of Windsor (Canada), M.S., 1969; Ph.D., 1972
Gupta, Sat (1986) Associate Professor of Mathematics, University of Delhi (India), B.A., 1970; M.S., 1972; Ph.D., 1977; Colorado State University, Ph.D., 1987
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Schwanauer, Johanna (1963) Lecturer in German; Wellesley College, B.A., 1957
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Shaughnessy, Michael (1987) Assistant Professor of Art; University of Missouri, Kansas City, B.A., 1981; Ohio University, M.F.A., 1984
Shedletsky, Leonard (1979) Associate Professor of Communication; Brooklyn College, B.A., 1965; San Francisco State College, M.A., 1968; University of Illinois, Ph.D., 1974
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Smith, Charles E. (1969) Associate Professor of Education; Western State College, B.S., 1966; University of Massachusetts, M.S., 1963; Ed.D., 1969
Smith, James W. (1986) Associate Professor of Applied Science; Pennsylvania State University, B.S., 1961; M.S., 1963; Ph.D., 1967
Snell, Mary E. (1985) Concert Manager; University of Maine, B.A., 1971
Soychak, Anthony G. (1965) Assistant Professor of Mathematics; University of Maine, B.S., 1959; Bowdoin College, M.A., 1963
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Steele, William P (1967) Associate Professor of Theatre; University of Maine, B.S.Ed., 1964; M.A., 1967
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