# University of Southern Maine Undergraduate Catalog 1998-1999 

University of Southern Maine

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# University of Southern Maine 

Undergraduate Catalog<br>1998-1999

## Welcome

Dear Student,
The University of Southern Maine is an energetic, challenging, personal, and caring academic institution dedicated to student success. The faculty are active scholars-teachers who take great pride in their expertise and in their abilities to motivate students to reach their potential. The staff are prepared to assist in any way possible to ensure that your experience as a student is a rewarding one.

In this catalog you will find descriptions of an extraordinary array of programs and learning opportunities both inside and outside the classroom. I hope it provides you with the information you need to make the most of your educational experience here at USM.

Our faculty, staff, and students join me in welcoming you to our community of learners.

Sincerely,
Richard L. Pattenaude
President

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The University of Southem 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 Southem Maine shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, national origin or citizenship status, age, disability, or veterans status in employment, education, and all other areas of the University. The University provides reasonable accommodations to qualified individuals with disabilities upon request. Questions and complaints about discrimination in any area of the University should be directed to the campus compliance officer, Sue Ellen Bordwell, 7 College Avenue, (207) 780-5094/ITY (207) 780-5646. Inquiries or complaints about discrimination in employment or education may also be referred to the Maine Human Rights Commission. Inquiries or complaints about discrimination in employment may be referred to the U.S. Equal Employment Opportunity Commission. Inquiries about the University's compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, and national origin; Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability; Title IX of the Education Amendments of 1972, which prohibits discrimination on the basis of sex; and the Age Discrimination Act of 1975, which prohibitsdiscrimination on the basis of age, may also be referred to the U.S. Department of Education, Office of Civil Rights (OCR), Boston, MA 02109-04557, telephone (617) 223-9662 (voice) or (617) 223-9695 ITY/TDD. Generally, an individual may also file a complaint with OCR within 180 days of alleged discrimination.

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 hy the University of Southerm Maine.

The University of Southem 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.

# Academic Calendar 1998-1999 

| Fall Semester | Classes Begin | 8:00 a.m., Monday, August 31 |
| :---: | :---: | :---: |
|  | Labor Day (no classes) | Monday, September 7 |
|  | October Vacation Begins | After all classes, Sunday, October 11 |
|  | Classes Resume | 8:00 a.m., Wednesday October 14 |
|  | Veterans Day (no classes) | Wednesday, November 11 |
|  | Thanksgiving Vacation |  |
|  | Begins | 4:00 p.m., Wednesday, November 25 |
| Spring Semester | Classes Resume | 8:00 a.m., Monday, November 30 |
|  | Last Day of Classes | Monday, December 14* |
|  | Final Exams Begin | Tuesday, December 15 |
|  | Final Exams End | Saturday, December 19 |
|  | *Final exams for 4:00 p.m. or later classes will be given on Monday, December 14. |  |
|  | Classes Begin | 8:00 a.m., Monday, January 11 |
|  | Dr. Martin Luther King Jr. Day (no classes) | Monday, January 18 |
|  | Winter Vacation Begins | After all classes, Sunday, February 14 |
|  | Classes Resume | 8:00 a.m., Monday, February 22 |
|  | Spring Vacation Begins | After all classes, Sunday, March 21 |
|  | Classes Resume | 8:00 a.m., Monday, March 29 |
|  | Last Day of Classes | Sunday, May 2 |
|  | Final Exams Begin | Monday, May 3 |
|  | Final Exams End | Friday, May 7 |
|  | Commencement | Saturday, May 8 |

## The University

Each college and university in the country likes to think of itself as unique, as offering experiences unavailable at other institutions of higher leaming. To be sure, the University of Southem Maine has many characteristics typical of me-dium-sized, public universities elsewhere in the United States. It comprises eight academic units (Applied Science, Arts and Sciences, Business, Education and Human Development, Law, Lewiston-Aubum College, Muskie School, and Nursing); it enrolls over 10,200 students, and is the largest of the seven campuses in the University of Maine System; it offers three associate and forty-one baccalaureate degree programs, as well as graduate and professional degrees in law, nursing, business, applied immunology, computer science, education, American and New England studies, manufacturing management, occupational therapy, public policy and management, community planning and development, counseling, health policy and management, and school psychology.

But the University does have many unique features. It is both large and small. With 1,160 students in residence on the Gorham campus, 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 these two campuses, the Lewiston-Aubum College serves students in central Maine.

The student body of the University is the most diverse in the state of Maine. Approximately half are full-time students; more than 59 percent are women, and the average age of an undergraduate student is 27 . 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 intemships 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-ime 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 leaming opportunities in the areas of the arts, humanities, politics, business, mass communication, and high technology. The University maintains strong intemational affiliations with colleges and universities in England, Ireland, the Netherlands, Canada, Russia, Japan, Mexico, Latvia and the People's Republic of China.

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 respondingcreatively to its particular circumstances and the challenges of its students. A Core curriculum has been established to define the types of skills and the kinds of leaming experiences our graduates should have in today's world. A University Honors Program provides an enriched undergraduate education to a selected group of students who are outstanding in their ability, curiosity, creativity, and motivation. 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 northem part of the 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 Southem 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.

Expected Results<br>of a University<br>Education

The University of Southern Maine is accredited by the New England Associamon of Schools and Colleges, indicating the University meets or exceeds Association standards; the College of Nursing is accredited by the National League for Nursing; the College of Education and Human Development by the National Council for Accreditation of Teacher Education; and several departments within the College of Arts and Sciences and the College of Education and Human Development by specialized accrediting bodies. Lewiston-Aubum College's master of occupational therapy program is accredited by the American Occupational Therapy Associalion. The University of Maine School of Law is approved by the American Bar Association and the Association of American Law Schools.

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

They should possess the knowledge and skills necessary to enter the work force or be admitted to graduate or professional school. Graduates of the University of Southem Maine should also possess the atributes and skills that lead to rich and fulfilling lives.

They should be intelligent readers of their own culture and be able to use analysis and historical context to interpret cultural practices, artif acts, and documents of various kinds.

They should appreciate the many ways of knowing, including the arts, the humanimes, and the natural, applied, and social sciences; they should be aware of how these disciplines help define and shape the world; and they should understand the joy and wonder that can arise from rigorous inquiry leading to fresh discoveries and modes of expression in these fields.

They should be able to appreciate basic ecological and physical processes, how their lives are affected by environmental rends and characteristics, and how each of us shares in the responsibility for sustaining the life forces, cycles, and processes upon which all life depends.

They should understand the nature of at-risk behaviors and be able to make informed decisions about their own well being.

They should be able to communicate effectively, both orally and in writing, think critically and creatively, and use effectively both information technology and the skills of quantitaive decision making.

They should know how to work in teams, take responsibility, exercise leadership and manage resources effectively.

They should be aware of the world's complexities beyond their own set of experiences and assumprions, have an appreciation for other peoples' values and customs, and think effectively about ethical and social issues.

They should have the capacity for self-education so they can enjoy a lifetime of continuous leaming.

They should be responsible citizens committed to fostering the ideals of a democratic society: civic and social participation, free inquiry and informed decision making, and equal opportunity.

## Programs of Study

The University of Southern Maine offers three associate and forty-one baccalaureate degree programs as well as graduate and professional degrees in law, nursing, applied imınunology, business, computer science, American and New England studies, school psychology, education, counseling, health policy and management, manufacturing management, community planning and development, occupational therapy, 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 | Geosciences (B.A. or B.S. degree) |
| (B.S. degree) | History |
| Art (B.A. degree or | Mathematics |
| B.F.A. degree) | Music (B.A. degree or B.M. |
| Biology (including pre-med, | degres in Performance or |
| pre-dental and pre-vet) | Music Education) |
| Chemistry | Philosophy |
| Cominunication | Physics |
| Criminology | Political Science |
| Economics | Psychology |
| English | Self-Designed Major** |
| Environmental Science and Policy | Social Work |
| French | Sociology |
| Geography-Anthropology | 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

Intermational Studies
Linguistics
Media Studies
Russian Studies
Social Science

Lewiston-Auburn College
Arts and Humanities (B.A.)
Leadership and Organizational Studies (B.S.)
Natural and Applied Sciences (B.A.)
Social and Behavioral Sciences (B.A.)
School of Applied Science
Applied Technical Education (B.S.)
Applied Technical Leadership (B.S.)
Computer Science (B.S.)
Electrical Engineering (B.S.)
Industrial Technology (B.S.)
Technology Education (B.S.)

## Women's Studies

Women's Studies (B.A.)
This University also offers the first year of the four-year program common to other engineering majors and the first and second years in civil engineering and mechanical engineering. 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.

## College of Nursing

Nursing (B.S.)
Therapeutic Recreation (B.S.)
Health Sciences (B.S.)
Sports Medicine (B.S.)

## School of Business

Business Administration (B.S.) (with majors in business administration and accounting)

## Associate Degree Program

## Minors

College of Arts and Sciences<br>Liberal Arts (A.A.)

## College of Nursing

Therapeutic Recreation (A.S.)

## School of Business

Business Administration (A.S.) (with concentrations in accounting; computer; management; marketing.)

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

Several colleges and schools offer minors. Many of these minors can be taken by students outside the college or school in which their major is declared. Students should consult with their advisors before electing a minor program. In some cases, students need specific permission of both the college or school in which they are majoring and the department through which the minor is offered. Consult the deparment sections in this catalog for information.

| College of Arts and Sciences |  |
| :--- | :--- |
| Art Department | Art History |
| Biological Sciences Department | Biology |
| Chemistry Deparment | Chemistry |
|  | Biochemistry |
| Communication Department | Communication |
|  | Linguistics |
| Criminology Department | Criminology |
| Economics Department | Economics |
| English Department | English |
| Foreign Languages and Classics |  |
| $\quad$ Department | Classics (Greek or Latin) |
|  | French |
|  | German |
|  | Russian |
| Geography-Anthropology | Spanish |
| Department | Anthropology |
|  | Applied Geography (Planning) |
|  | Geography |
| Geosciences Department | Geosciences |
| History Department | History |
| Mathemarics and Statistics |  |
| Department | Mathematics |
| Music Department | Music |
| Philosophy Department | Philosophy |
| Physics Department | Physics |
| Political Science Department | Political Science |
| Sociology Department | Sociology |
| Theatre Department | Theatre |

\author{

College of Education and Human Development <br> Educalional Studies (also available at Lewiston-Auburn College) <br> \begin{tabular}{ll}

| School of Business |
| :--- |
| Accounting Department |
| Business Administration |
| Department | \& Accounting <br>

School of Applied Science \& Business Administration <br>

Computer Science Department \& | Computer Science |
| :--- |
| Engineering Department |
| Tectmology Department | <br>

| Electrical Engineering |
| :--- | :--- |
| Computer Applications |
| Environmental Safety and Health |
| Industrial Management |
| Manufacturing Tectmology | <br>

College of Nursing \& <br>
Health Studies \& <br>
Lewiston-Auburn College <br>
Information Systems (in collaboration with CMTC) <br>
Educational Studies (offered by USM's College of Education and Human <br>
Development) \& <br>
Women's Studies \& <br>
Women's Studies
\end{tabular}

}

## 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, religion, sexual orientation, national origin or citizenship status, age, handicap, or veteran status. 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 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 (207-780-5670) located in the Admissions House on the Gorham campus. For more information on Lewiston-Auburn College, call (207) 753-6560.

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 college preparatory 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 Geomery) |
| Science | 2 units (with lab) |
| History/Social Science | 2 units |

## Applicants to the College of Arts and Sciences must also have:

 Foreign Language* 2 units (one language)Science majors, including those interested in environmental science and policy, must have three units of lab science. Foreign language majors must have three units of a foreign language. Mathematics majors are required to have four units of mathematics. *ASL may be substituted for this.

Special Note: For specific admissions requirements of the degree program in music education, please refer to the Music Department section of the catalog.

## Applicants to the College of Nursing

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

## Applicants to the School of Business

A fourth year of college preparatory mathematics (trigonometry, pre-calculus, etc.) is strongly recommended.

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

Preparation for engineering should include chemistry, physics, and four units of mathematics. Departmental interviews in person or by telephone are required for admission into the industrial technology, technology education, and applied technical education/leadership majors.

Applicants to Lewiston-Auburn College
Lewiston-Auburn College applicants must meet all University general subject

Admissions<br>Procedures

## Admissions Priority Filing Dates

## Admissions

Decisions
requirements. Applicants should make an appointment with a USM advisor at Lewiston-Aubum College, (207) 753-6560.

Admission to degree programs at the University is on a selective basis. Each applicant for admission is required to submit a completed University of Maine System Application, a USM Adult Student Application, or a USM Intemational Student Application, and a nonrefundable $\$ 25$ application fee. The Application requires the applicant to detail his/her academic, personal, and extracurricular 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 admission at any lime during the year prior to the 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 be made to enter the University in the fall or spring semester.

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

Applications are reviewed on a rolling basis. Those completed by February 1 for the fall semester and December 1 for the spring semester will receive priority consideration. Nursing applicants are not accepted for the spring semester unless the candidate currently holds an R.N. degree. Completed nursing applications must be received by February 1 for fall admission. Nursing candidates who wish to be considered for nonbinding early action must apply by December 1. Completed intemational applications must be received by October 15 and April 15 in order to be evaluated for the spring and fall semesters. Candidates applying for early admission after their junior year of high school 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 reactivate or reapply (if more than two years have elapsed) if they wish to be enrolled in a degree program.

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/or 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 Services Office. Students who are admitted with conditions take a reduced course load ( 12 credit hours) for the first few semesters, and are expected to fulfill terms of an academic support plan that outlines their responsibilities as conditionally admitted students. 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 meet the requirements of 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 Committee 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 Southem Maine. If a student has been academically dismissed from the University or if a student wishes to resume studies after the ten-year period has elapsed, she or he must apply for readmission. Readmission applicants should contact the Admissions Office for the proper forms.

EarlyAdmission 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, and 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 early admission, the applicant should have at least a B average and/or rank in the top 15 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; two years of social science/history; two years of laboratory science; and two years of a foreign language. In addition, the applicant should register for and take the Scholastic Assessment Test (SAT) at the earliest possible date and arrange to have the scores forwarded to the Admissions Office 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 submit it, along with an official transcript, to the Admissions Office, University of Southern Maine, 37 College Avenue, Gorham, Maine 040381083.

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 International applicants must complete the USM International Student Application and submit it, along with the $\$ 25$ application fee, to the USM Office of Admissions. All international students must submit results of the Scholastic Assessment Test (SAT) or the American College Test (ACT). In addition, applicants whose native language is not English are required to submit scores of the Test of English as a Foreign Language (TOEFL). For fall 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. Due to limitations on available financial aid, applications are encouraged only from international students who are able to fund their educational expenses fully from their own resources. To certify this, a Declaration 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.

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

Admissions<br>Applications

Services Office 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 intercollegiate athletics. Interested persons are invited to contact the Advising Services Office, Payson Smith Hall, on the Portland campus for further information.

Special students hold non-matriculant status, but are required to meet the same academic progress standards as matriculants. 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.

Because admission to the University is selective, 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 students whose first language is not English must submit official results of the Test of English as a Foreign Language (TOEFL).

Admission from Secondary School Applicants to the University 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. Applicants who have graduated or will graduate from a non-accredited secondary school may be required to submit GED test results in addition to a secondary school transcript. Scores from the ScholasticAssessment Test (SAT) must also be submitted by all students, including those with GEDs, who intend to enroll within three years of high school graduation. SAT-II tests are not required. The American College Test (ACT) may be substituted for the SAT for admission purposes. If not more than five years old, SAT scores are also used for course placement in mathematics and English.

Admission of Adult Candidates Adult candidates must arrange for their secondary school transcript to be sent to the Office of Admissions. Although Scholastic Assessment Test (SAT) scores are not required for admission of adult candidates, they may be submitted for placement purposes as such scores (if not more than five years old) may be used to declare minimum academic proficiencies. A special Adult Application for Admission is available for candidates whose high school graduation date was three or more years ago; contact the Admissions Office, University of Southern Maine, 37 College Ave., Gorham, Maine 04038-1083, (207) 780-5670. An interview with an admissions counselor is highly recommended.

Admission by<br>Transfer

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 from high school for less than three years. Transfer candidates who have previously earned a baccalaureate degree 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 of at least a 2.0 (on a 4.0 scale). Transfer credit may be awarded 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

University of Maine System Transfer Practices

## Transfer Credit Evaluation

special circumstances, students may, in individual cases, petition the dean of the appropriate school or college for consideration of coursework eamed 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 request an Application 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 at least a 2.0 grade point average 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 (D- or higher) 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 the responsibility of the particular academic unit.

Generally, course grades do not transfer from instution to institution. Semester and cumulative grade point averages reflect only those courses taken at the home instituion. Exceptions to this policy are approved by the vice chancellor for Academic Affairs. Students in external degree programs and/or those taling courses at distant sites and centers should inquire about any exceptions which may apply.

Grades in courses taken within the University of Maine System and accepted for transfer credit will be recorded on the student's transcript although not computed into the cumulative grade point average.

All undergraduate courses successfully completed at one University of Maine System instution will transfer to another.

Each student must meet the established requirements of the academic program or college into which she or he is transferring. Transfer credits do not necessarily count toward such requirements.

Transfer students must consult the individual instution catalog to determine requirements regarding the number of degree credits that must be taken through the degree-granting institution.

Transferring students will be expected to provide official transcripts reflecting all previous postsecondary coursework.

Each accepted transfer student will receive a written evaluation of transfercredit. The transfer student should then meet with program faculty/advisors at the receiving institution to review how the transfer credit will be applied.

Course credit will be transferred only for coursework delivered by regionally accredited institutions, through AP or CLEP, or through life experience (i.e., prior leaming or other learning such as military training, etc.) when validated through the approved campus processes.

Course credit from international institutions will be accepted for transfer consistent with established institutional policies.

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. 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

Placement Exams

Prior Learning<br>Evaluation

determined by the Transfer Affairs Office 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 Affairs Office within one year of the completion of the evaluation. At that time, the evaluation becomes permanent and will not be changed.

Placement Examination Program SAT scores (if not more than five years old) are used for course placement in mathematics and English. All newly admitted baccalaureate and associate degree candidates who took the SAT prior to April 1995 and whose SAT mathematics score was below 450 or SAT verbal score was below 470 (or TSWE, Test of Standard Written English, was below 43) must take the placement examinations. All newly admitted baccalaureate and associate degree candidates who took the SAT in April 1995 or later and whose SAT mathematics score was below 480 or SAT verbal score was below 550 must take the placement examinations. Newly admitted students with SAT scores that are five years or older must take the placement examinations. Transfer and readmitted students with 30 or more 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. Non-matriculated (special) students are encouraged to take the placement examinations and should contact Advising Services for details. Copies of the publication, Placement Examination Program, are available at the Testing and Assessment Center, Portland campus, and Advising Services. NOTE: Placement exams will not be used in place of SAT/ACT results for admission purposes.

The University recognizes several procedures for the assessment of leaming acquired outside a sponsored collegiate setting. This may include standardized examinations (e.g., CLEP, DANTES), 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, Payson Smith Hall, Portland campus.

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

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

General Examinations The University will grant credit in the following areas
for a score of 500 or higher on these CLEP general examinations: English (3
credits, will satisfy ENG 100C); Humanities ( 6 elective credits); Social Sci-
ence/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 who have credits beyond 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, and the College of Education and Human Development (Educational Psychology and Human Growth and Development). Interested candidates should contact the Office for Prior Leaming Assessment for further information and testing schedules.
DANTES Exams Standardized exams are available for department elective or general elective credits through the DANTES program.

Challenge Examinations Students in the College of Nursing's RN Studies Option 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

Preprofessional Programs
leaming 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.

Anned Services Experience The University recognizes some credit based on the American Council on Education's Guide to the Evaluation of Educational Experiences in the Arned 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, with certain restrictions, for credit evaluations through the Program on Non-Collegiate Sponsored Instruction (PONSI). Details may be obtained from the Office for Prior Learning Assessment.

Pre-Law There is no specific course of study required of students who are planning to apply to law schools. Since the practice of law covers all fields, the only recommendation that law school admissions officers give to students is that they pursue challenging courses in areas of interest to them and that they do well in these courses. Participation in an honors program definitely enhances a student's admission as does a well-written senior thesis or an independent study.
a) Students must be able to write clearly. They should take upper level, writing intensive courses in English or other fields.
b) Students must be able to think clearly and critically. Courses in philosophy, science, and language will be helpful.
c) Students should understand the social and political context within which the law exists. Courses in sociology, history, and political science are appropriate.
d) Students may wish to take substanive courses in the law and in legal reasoning. Courses in law and society, civil liberties, civil rights, constitutional law, business law and the rule of law-some of which are offered as undergraduate courses by professors from the University of Maine Law Schoolmay be of interest.
Students who are interested in law should be advised that their overall academic record and performance on the LSAT are much more important than a specific undergraduate major for law school admission.

Pre-Medical, Pre-Dental, Pre-Veterinary USM, like most universities, does not have a major in pre-medical, pre-veterinary, or pre-dental studies. Most students who are accepted in a professional school majored in biology or zoology as undergraduates. However, a student does not have to major in science to be accepted to medical, dental, or veterinary medicine school. Approximately one-third of all students accepted to professional schools took the required science courses as electives while pursuing their undergraduate degrees in non-science fields.

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

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

As minimum entrance requirements, most professional schools recommend:
1 year of college biology with lab (BIO 105, 106; BIO 107, 108)
1 year of inorganic chemistry with lab (CHY 113, 114; CHY 115, 116)
1 year of organic chemistry with lab (CHY 251,252; CHY 253,254)
1 year of physics with lab (PHY 111K, 112 or PHY 121-124)
1 semester of mathematics (Statistics recommended)
Some recommended courses are:
Psychology (PSY 101J)
Genetics (BIO 301)
Microbiology (BIO 311, 312)
Comparative or Human Anatomy (BIO 205 or 211/212)
General or Human Physiology (BIO 401/402)

Technical College Articulation Agreements

## Immunization <br> Requirement

The University of Southern Maine has entered into formal articulation agreements in certain academic disciplines with the Maine Technical College System. These agreements facilitate transfer of graduates from these programs in the technical colleges to USM. Under these agreements, students complete an associate's degree at the technical college before transferring to USM. For more information, students should contact the academic department at USM to which transfer is being considered.

In cooperation with the New England Board of Higher Education (NEBHE) the University offers undergraduate and graduate programs of study at reduced rates of tuition to qualified candidates from the New England states. Because the lising 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 1998-1999. The 1999-2000 listing will be available during the spring of 1999. Further information is available through your guidance counselor or NEBHE at 45 Temple Place, Boston, Massachusetts 02111.

| Undergraduate Programs |  |
| :--- | :--- |
| Applied Chemistry | CT, VT |
| Applied Technical Education | CT, MA, RI, VT |
| Criminology | NH, RI |
| Indusrial Technology | VT |
| Natural and Applied Science | CT, VT |
| Technology Education | VT |
| Therapeutic Recreation (Baccalaureate) | MA, RI, VT |
| Therapeutic Recreation (Associate) | MA, NH, RI, VT |
|  |  |
| Graduate Programs | MA, VT |
| Adult Education | CT, MA, NH, RI, VT |
| American and New England Studies | CT, NH |
| Applied Immunology | CT, NH, VT |
| Community Planning and Development | CT, NH, RI, VT |
| Health Policy | CT, MA, VT |
| Independent School Teacher Education | CT, MA, RI, VT |
| Occupational Therapy | NH |
| School Psychology |  |

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, mumps, 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 at any time. A student acknowledges this reservation by applying for admission or registering for courses.

There are three types of tuition charged: undergraduate, graduate, and law. The level of the course determines the type of tuition charged. 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.

## Tuition

Fees

| Charges in effect as of August 1, 1998. |  |
| :--- | :--- |
| Undergraduate Tuition Charges Per Credit Hour |  |
| $\quad$ Maine Resident | $\$ 118.00$ |
| Non-Maine Resident | $\$ 327.00$ |
| New England Regional Program | $\$ 177.00$ |

Activity Fee A mandatory fee charged each semester. Students registered for at least one but not more than 5.5 undergraduate credits are charged $\$ 13.00$; students registered for at least 6 but not more than 11.5 credits are charged $\$ 27.00$; students registered for 12 or more are charged $\$ 39.00$. This fee is assessed all students except those taling only off-site classes (i.e., Pratt-Whitney and Bath Iron Works) due to the fact that those students are unable to avail themselves of services and programs.

Advising and Orientation Fee A mandatory $\$ 50.00$ fee is charged to newly admitted undergraduate students. This fee is only charged once.

Application Fee A mandatory $\$ 25.00$ fee is charged to an applicant who has not previously matriculated at the University of Southern Maine. This fee is only charged once.

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.

Distance Education Fee Students registering for classes offered over the Education Network are charged a $\$ 5.00$ per credit fee to defray some mailing costs.

Installment Payment Fee A $\$ 20.00$ fee is charged to students participating in the University's three and/or four payment plans. There is a $\$ 50.00$ fee assessed students enrolling in the ten-payment plan.

Insufficient Funds Fee A $\$ 10.00$ fee is charged when a student's check is returned or a bank card payment is declined for insufficient funds.

Late Fee A maximum of $\$ 50.00$ per semester in mandatory late fees is charged to students who do not pay University bills when due.

Matriculation Fee A mandatory one-time $\$ 15.00$ fee is charged to create a student record when a student begins pursuing a degree within the University of Maine System.

Parking Fee The cost of a sticker to park on campus is $\$ 25.00$ for one year; $\$ 15.00$ for a single semester. The cost of a sticker for Marginal Way parking is $\$ 5.00$ for one year.

Reactivation Fee A mandatory $\$ 10.00$ fee is charged to students who have previously applied for admission but did not complete the admission process, or who leave for several years and wish to become degree candidates again.

Records Fee A mandatory fee charged each semester to cover the cost of Commencement, transcripts, and access and upkeep of student records (Interactive Voice Response system and the World Wide Web). Students are charged $\$ 3.50$ when registered for 1-6 credits; $\$ 7.00$ when registered for 7 or more credits.

Recreation Fee A mandatory $\$ 8.00$ per credit charge assessed to all students.
Student Health and Counseling Fee A mandatory $\$ 40.00$ health fee is charged students registered for six or more credits of instructional activities emanating from the Portland and/or Gorham campus for fall and spring semesters. Such acivities include independent study, internships, field experiences, etc. Credits for regular classes taken at off-campus locations are omitted when determining this fee.

## Room and Board

Optional coverage is available to students who register for fewer than six credits and/or during the summer.

Student Health Insurance (Optional) Students may purchase optional insurance plans under policies made available by contract with the University of Southern Maine. These plans can provide financial coverage for health care costs incurred tbrough Student Health Services, family physicians, or other health care providers.

A moderate cost, 12-month basic insurance plan is available to students registered for six or more credit hours. Students who have enrolled in the prior academic year must re-enroll each year and cannotre-enroll in the basic plan if not a USM student.

An extended health care insurance plan is also available to students registered for three or more credit hours who want financial coverage for potential severe or catastrophic health problems. The extended care plan reimburses only after the first $\$ 10,000$ of health care is already paid by the student or any basic insurance plan. Further information about either policy and coverage is available through Student Health Services.

Technology Fee A mandatory $\$ 5.00$ per credit charge assessed to all students.
Testing and Assessment Fee A $\$ 10.00$ per test fee is assessed to students taking the English or math placement exam.

Board The University offers a variety of meal plans. Information about the meal plans is available from Resident Student Services, Room 100, Upton Hall, Gorham (780-5240).

USM Meal Plans The University offers seven different resident student meal plans. All cost $\$ 2,308.00$ per year.

Commuter Only Meal Plans Commuter meal plans allow students to purchase food at a discount. Information about the plans is available from Resident Student Services and Dining Services.

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 Resident Student Services, Room 100, Upton Hall, Gorham (780-5240). Limited parking may be rented for $\$ 100.00$ per semester plus the annual cost of a parking decal at the Portland Residence Hall.

While the student is billed by the semester, the housing contract is for the full year.

Rooms:
Gorham, Double \$2,478.00/year
Gorham, Regular Single
Gorham, Large Single
Portland, Yankee Clipper Wing Double
Portland, A-Wing Double
Portland, B-Wing Single
Portland, 2nd Main Double
Portland, 1-Person Suite
Portland, 2-Person Suite
Portland, 3- and 4-Person Suite
\$2,950.00/year
\$3,304.00/year
\$2,874.00/year
\$2,674.00/year
\$3,180.00/year
\$2,874.00/year
\$3,326.00/year
\$3,262.00/year
\$2,854.00/year
All rates are based on full occupancy, and residents are charged for the type of housing in which they reside. There is an additional charge for living in a room which is under-capacity. That charge is approximately one-third of the base rate.

Phones jacks are activated in all residence hall rooms. Residents need to supply their own touch-tone phone. Arrangements may be made with the University or with the carrier of choice for long-distance calling.

Residence Hall Computer Fee An optional fee of $\$ 30.00$ per semester. Students living in the University residence hall who pay this fee are provided with access to e-mail, the Internet, World Wide Web, and software on University networks. Students must provide their own computer hardware.

USM offers courses at Lewiston-Auburn College in conjunction with the University of Maine at Augusta. A separate cost sructure is in effect. A mandatory

## Other Expenses

## Deposits

## Payment Procedures and Policies

student development fee of $\$ 3.50$ per credit hour is charged. This fee supports onsite personal counseling services as well as career counseling services. For additional information, contact Lewiston-Aubum College.

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

When a student is notified of acceptance into a University degree program, a $\$ 50.00$ admission deposit is due within four 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.

Resident Student Services 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 Resident Student Services before May 1 that housing is not desired, this deposit will be refunded. If notification is received after May 1, the deposit is forfeited.

Billing The student is responsible for paying all charges. 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. These include:

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

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

Credit/Debit Cards The University accepts Discover credit card, as well as MasterCard or Visa credit and debit cards. The University is not able to accept debit or ATM cards that do not have the MasterCard or Visa logo.

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

Installment Payment The University offers a variety of payment plans. Additional information about these plans and enrollment deadlines is available from Student Billing.

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. If, for any reason, the third party does not pay, the student is responsible for all charges.

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 pattem 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 regis-

Add/Drop<br>Withdrawal Policy

tration, preventing a student from receiving grades or credit for courses, if outstanding charges are not paid.

Transcripts, certification of graduation, and other records will be withheldfrom 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.

The schedule adjustment period begins withthe first day of scheduled University classes and includes weekends and holidays. Students may add a course during the first week of the semester. For late afternoon and evening and weekend courses that meet once a week, adds will be accepted through the day following the second class meeting.

A student who remains registered is not charged for any course dropped during the first two weeks of the semester. Students who drop after the second week receive no refund. Drops do not require an instructor's signature. They may be processed at the Registrar's Office, Enrollment Services Center, Lewiston-Aubum College, or a University of Maine System Center. The date the drop form is received at one of these offices is used to determine whether charges should be deducted.

The charges assessed students who withdraw from all classes at 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. To be considered, the request must be filed within one year of the end of the semester involved. Charges will not be reduced for voluntary absence from classes. Contact the Student Billing Office for additional information about this procedure.

Tuition Refunds Student charges will be refunded to students who are withdrawing from the University of Maine System in accordance with the schedules and provisions set forth below.

For purposes of calculating tuition refunds, the attendance period begins on the opening day of scheduled campus classes, includes weekends and holidays, and ends on the date the student notifies the Registrar in wriling that she or he is withdrawing.

1. Schedules For All Returning Students

| a. ACADEMIC YEAR (Fall and Spring Terms) | Refund Percentage |
| :--- | :---: |
| Cancellation Prior To First Day Of Class | $100 \%$ |
| Withdrawal Prior To End Of First Week | $100 \%$ |
| Withdrawal Prior To End Of Second Week | $90 \%$ |
| Withdrawal Prior To End Of Fifth Week | $50 \%$ |
| Withrawal Prior TT End Of Eighth Week | $25 \%$ |
| Withdrawal After The Eighth Week | $0 \%$ |

b. OTHER SESSIONS
(1) Sessions which are more than three weeks: Cancellation Prior To First Days Of Class 100\% Withdrawal Prior To End Of First Week 50\% Withdrawal Prior To End Of Third Week 25\% Withdrawal After The Third Week 0\%
(2) Sessions which are three weeks or less:

Cancellation Prior To First Day Of Class 100\%
Withdrawal Prior To End Of First Week 50\%
Withdrawal Prior To End Of Second Week 25\%
Withdrawal After The Second Week 0\%
2. Schedule For First-Time Students

First-time students will receive a refund on all institutional charges up to the point where $60 \%$ of the enrollment period has elapsed. No refunds will be made

Rules Governing<br>In-State and<br>Out-of-State<br>Tuition

after this point in time. The percentage used to calculate the refund will be based on: Weeks Remaining/Total Weeks in Semester = Percentage of Refund.

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

Room Refunds Students who vacate University housing will be charged in accordance with the terms and conditions of the Residence Hall contract.

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

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

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

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

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

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

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

To change tuition status, the following procedures are to be followed:
A. A "Request of Change in Tuition Status" must be filed with the executive directorforFinancial Resources or designee on or before the campus's first day of classes for the summer session, fall or spring semester for which residency is requested. All applications shall be prospective.
B. If the executive director for Financial Resources' written decision, to be issued within 30 days of the first day of classes, is considered incorrect by the student, the student may appeal that decision in writing, within 30 days, in the following order:

1. The chief financial officer of the campus. After receiving a written decision from this level within 30 days, the student has 30 days to submit a written appeal to:
2. The treasurer of the University System, whose decision shall be final.

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

Applications for "A Request for Change in Tuition Status" are available at the Student Billing Office, 110 Corthell Hall, on the Gorham campus, or the Business Office, 118 PaysonSmith, on the Portland campus. Completed applications should be returned to the Portland Business Office.

## Student Financial Aid

Eligibility for Aid

At some point in the college planning process, the consideration of cost enters into the decision to pursue a college education. A college education is one of the most important investments a student will make. To provide students with an affordable education, the University of Southem Maine Office of Student Financial Aid offers a variety of programs to assist students and families in paying their educational expenses. During the 1998-1999 academic year, close to $\$ 35,000,000$ is available from aid programs.

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. civizens 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.

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.

Every school participating in the federal student financial aid programs must monitor its financial aid recipients to ensure that they are meeting satisfactory progress standards. A school's satisfactory progress policy for students receiving federal student financial aid funds must be at least as strict as the policy used for students who do not receive federal funding. Federal regulations mandate that the school's satisfactory progress policy must include both a qualitative measure (such as the use of cumulative grade point average) and a quantitative measure (such as a maximum time frame for completion) of the student's progress. While the qualitative measure is determined and monitored by the academic standards of the institution, the quantitative measure administered by the Financial Aid office is used to determine the number of credit hours completed when compared to those attempted. To quantify academic progress, the school is required to set a maximum time frame in which a student is expected to finish a program. For an undergraduate program, the maximum time frame may not exceed $150 \%$ of the published length of the program as measured in academic semesters. Hence in USM's case, a student enrolled in an undergraduate program and enrolled full time may not receive federal financial aid for more than 12 semesters.

To ensure that the student is making sufficient progress throughout the course of study, the school must divide the program into equal evaluation periods called increments. Once the school defines the length of each increment, the school must compare the number of hours the student attempted with the number of hours the student successfully completed. This calculation enables the school to determine whether the student is progressing at a rate that will allow him or her to finish the program within the maximum time frame. As is the case in USM's progress policy, a school is permitted to apply a more lenient completion standard in the student's first academic year and then gradually increases the completion standard for each subsequent academic semester. USM's satisfactory progress policy explains how withdrawals, grades of incomplete, courses that are repeated, noncredit remedial coursework, and other attempted coursework which is not completed affect the

## Application <br> Procedures

Types of Aid Available
satisfactory progress determination. Procedures have been established that enable a student to appeal a determination that finds him or her not to be making saisfactory progress. The quantitative and qualitative standards used to judge satisfactory progress must be cumulave and include all periods of the student's enrollment. Even periods in which the student did not receive financial aid funds must be counted. If the student does not meet the school's standards for satisfactory progress, he or she is not allowed to receive further funds from federal student aid programs. Forspecific detailsregarding satisfactory progress for financial aid, please contact the Financial Aid office.

Students are encouraged to apply for assistance as early as possible. To ensure a fair distribution of funds, a priority filing date is established. To meet the priority filing date for federal student aid programs, the federal processor must receive the student's FAFSA or renewal FAFSA by February 15, 1999. The FAFSA is the Free Application for Federal Student Aid. Students who want to be considered for the summer College Work Study Program must also meet the above deadline. Federal receipt of the FAFSA will ensure that USM will receive federal application data from the U.S. Department of Education by March 1, 1999. USM must receive this federal data by March 1 for priority processing.

Applications are accepted after the priority filing date, although the type and amount of aid offered may be reduced subject to funding limitaions.

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

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

A student who is a mid-year transfer and who has attended any vocational school or college, other than the University of Southern Maine, will need to submit a Financial Aid Transcript (FAT) form. Please contact the previous institution(s) and request the FAT to be sent to the University of Southern Maine, Office of Student Financial Aid. The FAT must be completed even if the student did not receive aid from other school(s) attended.

The University begins reviewing student aid applications in early spring. Once a student is accepted by the Admissions Office, the FAFSA 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. Undergraduate students with prior bachelor's degrees are not eligible to receive grants.

Even after a student is allocated aid, the amount may be adjusted if the student's financial situation changes. Students and parents must promptly report any of the following to the 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.

Federal Pell Grants This is a federally funded program to help needy students. In 1998-1999 grants will vary between $\$ 200$ and $\$ 3,000$ per academic year.

Federal Supplemental Educational Opportunity Grants This is a federally funded program to help needy students. Grants will range from $\$ 100$ to $\$ 4,000$ during the 1998-1999 academic year.

University and Miscellaneous Scholarships These are funded by the University and private donors. Awards have ranged from $\$ 100$ to $\$ 3,550$ and are given on the basis of financial need.

Federal Work Study Employment This is a program funded by the University and the federal government. Eligible students may earn between $\$ 600$ and $\$ 2,100$
per year. A student's financial need governs the amount that can be earned.
Federal Perkins Loans Funded by the federal govemment, the University, and former borrowers repaying loans, this program lends money to needy students. No repayment is required unil 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 $\$ 40$ must be repaid each month. Loans vary between $\$ 200$ and $\$ 2,500$ annually.

Federal Nursing Student Loans Funded by the federal government, the University, and loans repaid by former borrowers, money is lent to needy nursing students. Repayment terms are similar to those of the Perkins Loan. Loans range from $\$ 200$ to $\$ 2,500$.

Federal Stafford Loan 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.

Federal Unsubsidized Stafford Loans This is a new program. It provides access to borrowing for students who do not qualify for need-based assistance. The student is responsible for the interest as it accrues.

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

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

Native American Scholarship Program Tuition, mandatory fees, and on-campus room and/or board will be waived for qualified and eligible North American Indians residing in Maine. Eligibility is extended to 1) the person whose name is included on the current census of either the Passamaquoddy or Penobscot Tribes; and 2) the person who has resided in Maine for at least one year and whose name, or the name of at least one of their grandparents, was included on the census of a North American Tribe OR held a band number of the Maliseet or Micmac Tribes with direct blood lineage.

Presidential Scholarships The Presidential Scholarship Program recognizes superior academic accomplishment by assisting undergraduates who demonstrate exceprional academic merit and potential.

To be eligible for these prestigious and competitive scholarships, USM students must have earned 15 or more USM (not transfer) credits and a 3.5 or higher cumulative G.P.A. For each semester the scholarship is in effect, the recipient must carry at least 6.0 USM (not transfer) credit hours and maintain a cumulative G.P.A. of 3.5 or higher.

Presidential Scholars receive a tuition and fees credit of $\$ 500$ per semester for a maximum total of $\$ 4,000$. During the course of the year, scholars may participate in special seminars with the President. For more information, contact the Office of the President.

For more information about financial aid programs, contact the Office of Financial Aid, University of Southern Maine, Corthell Hall, CollegeAvenue, Gorham, Maine 04038 or telephone 207-780-5800.

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

## University Degree Requirements

Course Numbering

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 an SAT Mathematics score below 480 or an SAT Verbal score below 550 must take placement examinations. Transfer and readmitted students with 30 or more eamed 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 550 or above on the verbal section of the Scholastic Assessment Test (SAT)
2. Pass the English Placement Examination
3. Successfully complete ENG 009A or its equivalent (Developmental English) (no degree credit)
4. Successfully complete ESL 008 (non-native speakers of English only).
B. Evidence of Minimum Mathematics Proficiency Do One
5. Score 480 or above on the quantitative section of the Scholastic Assessment Test (SAT)
6. 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.)
7. Pass the Mathematics Placement Examination
8. Successfully complete MAT 011B (Intermediate Algebra). (Credit for this course applies only toward associate degrees.)

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

001-009 No Degree Credit
010-099 Associate Degree Program Credit Only
100-199 Introductory Level
200-399 Intermediate Level
400-499 Senior Level, others by permission
500-599 Undergraduate and Graduate Students
600-699 Graduate and Professional Students Only
Note:

1. All courses carrying number 010-099 carry credit and quality points only 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. Marriculated baccalaureate students should not register for courses with numbers less than 100 unless meeting minimum proficiency requirements.
4. Associate degree students who wish to change their major to a baccalaureate program should complete a Change of Major form. Some programs require a minimum grade point average (GPA) for a major change into a baccalaureate program. Credit and quality points for courses numbered 010-099 will be removed from the academic record when a student changes from an associate degree program to a baccalaureate program.

## Registration

## Enrollment Status

Grading System

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 Advising Services of their schedule for orientation, advising, and registration. Advising Services coordinates the new student academic advising process and initiates the registration procedure by approving course schedules prior to processing by the Registrar and Business Office.

Continuing degree students may advance register in priority order, based on credits earned and class level. Advance registration is conducted near the end of each semester for the following semester. Non-matriculated (special) students may register only during the open registration period. Degree students 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.

Students are considered to be full-ime if they are enrolled for 12 or more credits. Half-time enrollment requires an active enrollment of at least 6 credits.

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 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
H Honors performance in a pass/fail course
I Incomplete; a temporary grade given when the student, because of extraordinary circumstances, has failed to complete the course requirements. Incomplete grades must be resolved by the end of each subsequent semester; the Registrar shall notify faculty members involved, and their deparment 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 counted automatically 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 members 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 auto-

## Minimum Grade and Academic Suspension

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## Dean's List

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matically 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 lime limit for a specific period.
W Withdrawal after the second 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. In courses scheduled for fewer than 14 weeks, the W notation will be assigned through the date which coincides with 8/14 of the length of the course.
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 $\mathrm{A}+$ and D - are not valid.
The academic standing of each student is computed by the Registrar at the end of every semester. The following table represents the rating scale:

A $\quad 4.00$ grade points per credit hour
A- $\quad 3.67$ grade points per credit hour
B+ $\quad 3.33$ grade points per credit hour
B $\quad 3.00$ grade points per credit hour
B- $\quad 2.67$ grade points per credit hour
C+ $\quad 2.33$ grade points per credit hour
C $\quad 2.00$ grade points per credit hour
C- $\quad 1.67$ grade points per credit hour
D+ $\quad 1.33$ grade points per credit hour
D $\quad 1.00$ grade points per credit hour
F $\quad 0.00$ grade points per credit hour
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 two decimal places to produce the grade point average for that semester.

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

At the end of each semester, full-time, undergraduate degree students ( 12 credit 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 a total of at least 12 credit hours in both semesters 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 cumulative grade point averages for all undergraduate programs at the University are as follows:

| Associate Degree Students | For Good <br> Standing | For Probationary <br> Standing |
| :---: | :---: | :---: |
| $0-15$ credit hours | 1.60 | 1.35 |
| $16-30$ credit hours | 1.80 | 1.60 |
| $31-45$ credit hours | 2.00 | 1.80 |
| Baccalaureate Degree Students |  |  |
| 0-30 credit hours | 1.70 | 1.50 |
| $31-60$ credit hours | 1.80 | 1.60 |
| 61-90 credit hours | 1.90 | 1.70 |
| 91 or more credit hours | 2.00 | 1.80 |


| Non-Matriculated Students |  |  |
| :--- | :--- | :--- |
| $0-15$ credit hours | 1.60 | 1.35 |
| $16-30$ credit hours | 1.80 | 1.60 |

Re-enrollment after<br>Academic<br>Suspension

Unsatisfactory<br>Progress

## Academic Dismissal

Non-Matriculated (Special) Students

Class Membership

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 deparment chair or the student's advisor if the student's semester average falls below 1.0 . While under suspension, students may not take coursework, either at the University of Southem Maine or at other institutions, to be applied for credit at the University without permission of the dean of the suspending academic unit. Academic suspensions are imposed for a length of one academic semester. Other standards vary from college to college and are outlined in the letter of suspension directed to the student from the appropriate dean. For details concerning disciplinary suspension and dismissal, consult the Student Conduct Code.

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.

Technology education majors must maintain a 2.5 cumulative index prior to and throughout the professional sequence, i.e., ATE 380, ATE 381, and ATE 402. No more than one D grade will be accepted in the technical and professional courses required of industrial arts majors.

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

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.

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 Student Conduct Code.

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.

A minimum of 120 credit hours is required for graduation in most baccalaure-ate-level programs and 60 credit hours in associate-level programs. To progress through the University in the traditional four years (two years for associate degree students), full-time students should earm at least 30 credits each year, carrying at least 15 credit hours each semester. Permission must be obtained from the advisor and the appropriate dean to carry more than 18 credit hours.

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 are:

|  | Sophomore | Junior | Senior |
| :--- | :---: | :---: | :---: |
| Four-year programs | 23 | 53 | 83 |
| Two-year programs | 23 |  |  |

## Pass-Fail Option

## Repeated Courses

Academic Forgiveness Policy

## Auditing Courses

## Independent Study

Once a semester commences, a period of one week is permitted to add courses. Adds require the signature of the instructor, but drops should be completed with the Registrar without a signature. Drops processed during the first two weeks do not have financial penalty. Drops completed afterthe first two weeks will result in no refund. This procedure enables the student to make the necessary changes in the planned curriculum. A student dropping a course after the second week through the eighth week of classes will receive the grade notation ofW. 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 F. 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 insructor 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 $\mathrm{A}, \mathrm{B}, \mathrm{C}$, 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 $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{F}, \mathrm{H}$, 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. Courses intended to repeat University of Southem Maine courses may not be taken at other institutions.

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

There are several qualifying criteria required in order to forgive a semester. These criteria are detailed in the application that may be obtained in the Registrar's Office.

Students who register to audit a course receive no credit for the course but will have an audit grade (AU) recorded on their ranscripts. Audit courses must be declared at registration.

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 de-

Variable Credit Courses

Permanent Academic Record

Academic Record Changes

Coursework at Other Institutions

Graduation<br>Requirements

Residence Requirement

Graduation Honors Policy

scription 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.

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.

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

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.

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

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 Applicaion 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.

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 six 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 concemed to pursue work elsewhere, the work of the senior or final year must be completed at this University.

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

For purposes of wearing honor cords at Commencement: (gold cords, summa cum laude; blue cords, magna cum laude; white cords, cum laude) a student must meet the GPA requirements listed above, and be registered for enough credits to meet the 60 credit hours at USM requirement.

Post-Baccalaureate Study for Second Degree

Withdrawal from<br>the University

## Matriculation Status (Leave of Absence)

## Catalog Effective for Graduation Requirements

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

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.

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 Enrollment Services Center and require a signature. The date of withdrawal will normally be the posmark date of the withdrawal letter or the date the official form is signed.

If a student withdraws from the University during the first two weeks of the semester, there will be no courses or grades recorded. Students withdrawing after the second 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 conceming financial obligations to the University relative to the withdrawal policy will be found in the Financial Information section of this catalog.

Degree candidates maintain their matriculation status for ten calendar years from their first semester of attendance as matriculated students. 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 decision will be made. In such cases, the student should simply file a re-entry form with the Transfer Affairs Office. If, however, a student wishes to resume studies as a degree candidate after the ten-year period has elapsed, an admissions decision will be made. Readmission applicants should contact the Transfer Affairs Office for the proper forms.

Freshmen and new transfer students (including transfers from other campuses of the University of Maine System) must savisfy 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 Advising Services.

Change of College or School

Double Majors

## Attendance Policy

Student Academic Integrity Policy

## Examination Policy

Absence from a Final Examination

## Confidentiality Policy

Clinical Course<br>Requirements

## Student Academic Appeals Policy

Information on the procedure forchange of college or school may be obtained from the Registrar's Office or Advising Services.

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

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

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

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

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.

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.

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

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

Student<br>Administrative<br>Appeals Policy

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 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 studentacademic grievance, after it has progressed through (a) and (b) aboverests 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 normally will take place only 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.

# Academic Support Services 

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

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 is not appropriate. For such students the following arrangements are made.

Students who have not declared a major are provided academic advising by counselors in Advising Services. 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 Advising Services counselors for academic advising during the period they complete required coursework. Effective in the fall of 1996, this counselor will work with students to ensure completion of their academic support plan. Upon completion of these requirements, the student is assigned an advisor in his/her major department.

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

Students having questions regarding general academic policies and procedures, as well as about other aspects of University programs, are encouraged to contact Advising Services in Payson Smith Hall on the Portland campus (780-4040), in Upton Hall on the Gorham campus (780-5722), and in Enrollment Services at Lewiston-Auburn College in Lewiston (753-6500).

The University Library provides a full range of services at all three campuses. On the Portland campus, the Albert Brenner Glickman Family Library is located at the comer of Forest Avenue and Bedford Street. The Gorham campus library is located in Bailey Hall. The Lewiston-Auburn College Library is located in the center of the Lewiston-Auburn College building on Westminster Street in Lewiston. During fall and spring semesters, the Portland and Gorham campus libraries are open seven days a week for a total of 96 hours. The Lewiston-Auburn College Library is open Monday-Saturday. Among the services available are circulation, course reserves, informational and research reference, instruction in the use of library resources, electronic database searching, and interlibrary loan.

The collection of the USM Library contains 1.5 million items, including approximately 380,000 volumes; 3,000 subscriptions to periodicals, journals, newspapers, and yearbooks; over 1 million microforms; more than 110,000 state and U.S. government documents; a growing collection of audiovisual materials; and access to a wide variety of electronic information resources. Included in the Library's special collections are the Osher Map Library containing the Osher and Smith Collections of antique maps, globes, atlases, and geographies representing over 25,000 individual maps; the University Archives; and the newly established Jean Byers Sampson Center for Diversity, which includes the African American Archives of Maine, and the Franco-American Archive housed at the Lewiston-Aubum College Library.

Supplementing these collections are the more than 1 million print titles held in the other campuses of the University of Maine System along with the Maine State Library, the state's Law and Legislative Reference Library, and the Bangor Public Library. The holdings of these libraries are represented in the URSUS online catalog and are available to the USM community through URSUS's interlibrary lending system. In addition, the USM community has access to the more than 36 million titles available through the international OCLC online interlibrary loan network.

## Computing Services

## Language Laboratory

Educational Media<br>Services

Testing and<br>Assessment Center

## Academic Support <br> Program

The Library staff is dedicated to 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.

The Computing Services Department provides varied computer support to students, faculty, and staff at the University. Lab facilities for general student use are located on the Gorham, Lewiston-Auburn, and Portland campuses, and at offcampus centers, with access to Windows and Macintosh computers, software applications, laser printers, and the Intemet. A specialized high-end graphic and peripherals resource room is maintained on the Portland campus. Additional information on lab services is available by calling the Information Line at 780-4611.

The Department installs and supports Local Area Networks, e-mail, and Intemet access for University departments. The Res-Net program provides Intemet access to dormitory students, for which application can be made through Resident Student Services. Technical diagnosis, support, and repair are also provided for the University.

Software assistance is provided to the University community, along with specialized software training workshops which are offered throughout the year. Workshop schedules are posted at the labs each semester.

University students, faculty, and staff can purchase personal computers, printers, and peripherals at educationally discounted prices through the Computing Services sales program. The deparmment is located in 144 Luther Bonney Hall on the Portland campus.

The Language Laboratory is available toall students, faculty, and staff for practice and maintenance of language skills, particularly listening and speaking skills. These skills enhance reading and writing abilities by adding auditory memory; leaming to communicate with others in a new language opens doors to different and exciting cultures.

The Language Laboratory currently has 24 audio booths available; hundreds of audio tapes (from textbook-based programs to stories, poetry, and music); two video players with a wide variety of videotapes; and a computer terminal with programs for individual practice. News and other television programs are available from satellite and videotape.

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

A library of nonprint materials is maintained on the Gorham campus, with electronic catalogs maintained in both offices, on campus computer networks, and on the USM web server. Film and videotape rental catalogs are available in both offices for the rental of materials for classroom use.

Instructional materials for classroomuse, such as slides, transparencies, laminations, and audio and video recordings are produced at the graphics production center on the Gorham campus.

Offices are located at 231 Luther Bonney Hall in Portland and 3 Bailey Hall in Gorham.

The Testing and Assessment Center coordinates the administration of various testing programs, i.e., USM's English and mathematics placement examination program, MAT (Miller Analogies Test) program, and the National Test program (GRE, GMAT, LSAT, PRAXIS, TOEFL, etc.) Registration information is available at the Center. The Center conducts student assessment studies and student surveys, assists departments in evaluating programs, develops tests and assessment instruments, and provides technical support to the faculty.

Students are encouraged to contact the Testing and Assessment Center located in G6 Masterton Hall on the Portland campus, for information.

Developmental courses provide students with instruction to help them achieve proficiency in writing (ENG 009), in mathematics (MAT009), and in critical reading skills (RDG 009). In addition to providing developmental courses, the Learning Assistance Program also provides the following support services.

The Learning Center The Center offers tutorial services in mathematics, writing in all disciplines, word processing, study skills and self-instructional materials.

Academic Support for Students with Disabilities This office provides a wide variety of services for students with varying disabilities who are taling creditbearing courses. The services include notetaking, providing test and course accommodations, interpreting, and other appropriate accommodations. Students may be asked to provide documentation. The Office coordinates with the Learning Center, the faculty, and virtually every University deparment.

Students are advised to contact the Office before each semester begins to request accommodations so that they can be implemented in a timely manner. The Office is located in 237 Luther Bonney Hall on the Portland campus. Call 7804706 (voice) or 780-4395 (TTY) to schedule an appointment.

First Year Alternative Experience (FYAE) The First Year Altemaive Experience provides added support to promising students who are academically underprepared, as determined by the Office of Admissions. All students who matriculate at USM through the First Year Alternative Experience are admitted with conditions, as described elsewhere in this catalog. FYAE students may participate in all University activities, with the exception of intercollegiate athletics. This program begins in the fall semester only.

Features of the First Year Alternative Experience include a distinct schedule of courses in a small class environment, academic counseling and close monitoring of student progress, and tutorial support.

To complete FYAE successfully, students must pass the equivalent of 24 credits ( 8 courses). This can be accomplished on a full-time basis in two semesters, or on a half-time basis in four semesters. Some developmental coursework taken may not carry credit toward the degree, but will count in the FYAE sequence. For purposes of academic standing, successful progress of FYAE students will be determined by recalculating all grades earned each semester, not the cumulative grade point average.

For more information about the First Year Alternative Experience, contact the FYAE director at 780-4470.

## Enrollment Management

The Division of Enrollment Management provides comprehensive enrollment services on the Portland and Gorham campuses and provides students with access to coordinated services of admissions, advising and orientation, registration and financial aid at one location on each campus. In addition, the Division of Enrollment Management oversees the Office of University Extension and Public Service.

The Office of Admissions attracts and enrolls academically qualified students who are diverse in age, background, experience, and preparation. Admissions counselors are available on both the Portland and Gorham campuses to meet with prospective students and discuss academic programs and admissions requirements. The Office of Admissions is located in the Admissions House on the Gorham campus. Admissions counselors are also available in the Advising Services Office in Payson Smith Hall on the Portland campus.

Advising Services provides comprehensive academic advising and counseling for students who have undeclared majors, who have been admitted to the University with conditions, and who are non-matriculated or "special." Those students who have declared a major are assigned a faculty advisor in their school or college.

Advising Services is also responsible for evaluating prior learning through CLEP and DANTES examinations, military records, portfolios, and other procedures and for providing transfer credit evaluations for all undergraduate international students. Advising Services is located in Payson Smith Hall on the Portland campus (780-4040). Enrollment services are also available at Lewiston-Auburn College (753-6500).

The Office of Student Financial Aid administers, coordinates, and recommends programs of financial aid to enable students who lack adequate financial resources to attend USM. Offices are located on the Gorham campus in Corthell Hall and in Payson Smith Hall on the Portland campus. For more detailed information about the application process, the funds available and the priority filing dates and deadlines, refer to the Student Financial Aid section of this catalog or call (207) 7805800.

The Office of the Registrar serves as the legal custodian of University academic records and is responsible for the appropriate recording, production, and disbursement of those records. The Office is also responsible for such critical functions as academic honors, sanctions, and dismissals. The Office of the Registrar is in Portland in Advising Services in Payson Smith Hall (780-4842), and in Gorham in Corthell Hall (780-5230), and at Lewiston-Auburn College (753-6500). For information about National Student Exchange opportunities, call 780-4959.

## University Extension and <br> Public Service

## Financial Aid

## Registrar

The Office of University Extension and Public Service is responsible for providing lifelong learning opportunivies to the people of southern Maine. Programs include academic credit courses offered in nontraditional imes and formats, and noncredit programs that support the intellectual, educational, economic, environmental, and cultural interests of Maine people.

## Center for Extended Academic Programs

The Center for Extended Academic Programs coordinates and supports all programs affiliated with WinterSession, Weekend College, English as a Second Language, Off-Campus Centers, Instructional Technologies, National Student Exchange, Early Studies, Senior College, and the Stone House at Wolfe's Neck in Freeport, Maine.

WinterSession In the weeks between fall and spring semesters, USM offers credit courses and special programs. These intensive courses may be used to accelerate one's degree program or to explore one area of howledge in depth and at a fast pace. For information, call (207) 780-4512.

Weekend College Weekend College offers credit courses and special programs at USM from Friday at 4 p.m. through Sunday aftemoon. The courses may be used in one's degree program. Special programs and activities offered weekends are designed to enhance campus life as well as social and cultural opportunities for USM students, staff, and the greater community. For information, call (207) 7804512.

English as a Second Language (ESL) The English as a Second Language Program is designed to meet the academic language needs of the rapidly growing population of non-native speakers of English attending the University. A variety of levels of ESL courses is offered during the year. A noncredit intensive ESL program is offered during the fall and spring semesters, and in July and August. The Intensive English Language Program (IELP) offers 22 hours of instruction per week for adult students who wish to improve their English. For more information, call (207) 780-4419.

Off-Campus Programs The Off-Campus Programs Office coordinates USM's ċredit course offerings at University centers in Saco-Biddeford, Bath-Brunswick, Sanford, and at Windham High School. The centers offer a comprehensive array of services including registration, admissions, financial aid, and academic advising. They may be contacted as follows: Saco-Biddeford Center, 110 Main Street, Suite 101, Saco, ME 04072 (207) 780-4492/282-4111 (800) 696-3391; Sanford Center, 9 Bradeen Street, Springvale, ME 04083, (207) 324-6012 or (800) 6963075; Bath-Brunswick Center, 275 Bath Road, Brunswick, ME 04011, (207) 7258620 or (800) 696-2329. Information on Windham courses is available through the Off-Campus Programs office. Off-Campus Programs also coordinates the of fering of credit courses at business and industry sites. For information call (207) 780-4540.

Instructional Technologies The Office of Instructional Technologies provides support to faculty and departments in creating courses and degree programs to offer over the Education Network of Maine (UNET). In addition to providing instructional design and training techniques, the office gives logistical support to USM faculty members who teach ITV and compressed video courses. For information call (207) 780-4540.

National Student Exchange The National Student Exchange offers students the opportunity to live and learn in another part of the country. Students are able to spend up to an academic year at one of 148 schools while paying in-state tuition rates. Schools involved in the program are located from the east to west coast from the Canadian to the Mexican borders, including three U.S. territories. Many USM students take part in the exchange each year, while students from other states exchange to USM. For information call (207) 780-4765.

Early Studies Program The USM Early Studies Program offers opportunities for high school students to take college courses. Some financial assistance is available. For more information call (207) 780-4895.

Senior College provides intellectually stimulating leaming opportunities and special activities for persons 55 years of age or older. Courses of an academic nature are offered each semester on Fridays. Social and recreational opportunities are provided. Senior College also offers free community forums addressing issues of particular interest to older persons and ones which they feel are important for society to address. In addition, Senior College promotes SAGE (Senior Adult Growth Exchange), Lifeline, and USM-sponsored Elderhostels, as well as the University System's policy of extending free credit classes to persons over 65. For information call 780-4512.

The Stone House at Wolfe's NeckThe Center for Extended Academic Programs also supervises use of the Stone House at Wolfe's Neck, located in Freeport. The Stone House is used as a conference site for small-to medium-sized meetings. For information, call (207) 865-3428.

## Summer Session

Each summer about 4,600 students enroll in more than 350 academic courses; and another 8,000 people attend summer conferences and special institutes held in USM facilities. Examples of special programs are the Stonecoast Writers' Conference, courses for music educators, Childhood Psychopathology Institute, music camp for high school musicians, and several sports camps for youngpeople. Classes are held days and evenings in several schedule formats. Residence hall accommo-
dations and meals are available at reasonable rates. Child care is available for faculty, staff, students, and conference participants. For information, call (207) 780-5617.

## International Programs

The International Programs Office works closely with international students throughout their academic program at USM, including pre-arrival. The staff provides information and support in a wide range of areas including international student orientation, immigration policies and procedures, and on-going adjustment to the campus and community. Through the International Student Associarion, students can stay in contact with other international students on campus and meet students interested in other cultures. The University offers a limited number of merit scholarships to international students. Information about these merit scholarships is available from the graduate and undergraduate admissions offices, (207) 780-4386 or (207) 780-5670. Please call (207) 780-4959 to reach the staff of the Office of International Programs.

## International Study Opportunities

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. International study is facilitated through the Office of International Programs, which maintains links to and information on programs offered throughout the world. Each year students participate in exchange programs in many parts of the world, including England, Ireland, Austria, Russia, the Netherlands, Canada, and Japan. Scholarships for study and travel abroad are a vailable. Students interested in study abroad opportunities should also contact the representative in their school or college, and their academic advisor. Such discussions should begin at least one year before the intended departure. For information on international study opportunities and other services of the office, contact the Office of International Programs at (207) 780-4959.

## Center for Continuing Education

The Center for Continuing Education (CCE) provides lifelong learning opportunities for professionals, the business community, the health care community, and the general public. Courses are short-term, targeted, and skill-based, providing participants with relevant skills and information. The Center offers a variety of programs in specific areas such as human resource management, supervision, organizational leadership, mediaion, facilitation, computer proficiency, continuous quality improvement (in health care), and project management. CCE offers all courses on a customized basis at our facility or on-site. Courses for the general public include art, languages, writing, personal finance, and career development. For complete information call (207) 780-5900 or 800-787-0468.

The Center for Continuing Education coordinates and manages the CEU System for the University of Southern Maine. The Continuing Education Unit is a nationally accepted measurement of participation in noncredit continuing education. Each year, thousands of people use CEUs for retaining professional certifications, licenses, and association memberships. The Center maintains cumulaive transcripts for everyone who takes CEU-bearing programs through one or more of the noncredit program deparments at USM. For information about CEUs at USM call (207) 780-5921.

## Conferences and Meeting Planning Services

The Deparment of Conferences provides planning and coordination to University and community groups and organizations wishing to use the University's conference facilities and services. The Deparment's conference planning and management services are extended to professional and trade associaions, 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. For information call (207) 780-5960.

## Institute for Family-Owned Business

The Ins itute for Family-Owned Business provides a forum for addressing the unique circumstances of starting, owning, and maintaining businesses with other
members of the family. Supported by corporate sponsors and membership fees, the Institute provides workshops, conferences, and networking opportunities on family business issues. For information, call (207) 780-5929 or fax (207) 7805925.

## Lifeline Center for Fitness, Recreation, and Rehabilitation

The Lifeline Center helps individuals and organizations in southem Maine adopt health-enhancing lifestyles by providing leadership and services in fimess, exercise, rehabilitation, health fitness education, recreation, and employee wellness. Structured exercise classes offer step aerobics, finess walking, jogging, weight training, and free-style aerobics. A certificate in fitness instruction is also available. Lifeline is open to all faculty, staff, students, and the general public. For more information call (207) 780-4170, or visit the Lifeline Customer Service Center in the basement of the Sullivan Gymnasium on the Portland campus.

## Student Development

The Division of Student Development provides programs and services to support students in the out-of-classroom aspects of the educational experience. These activities, ranging from intercollegiate sports to resume preparation, join the academic process in expanding the university experience for all students. These programs and services are described in this section.

Athletics is an important and exciting part of the student life at the University of Southem Maine. Whether one is a participant or a spectator, USM teams provide plenty of thrills and action foreveryone involved. Few institutions can match the success of the Huskies' nationally recognized non-scholarship athletic program.

Eight different varsity teams and countless individual performers have participated in national championship competitions, highlighted by the Huskies baseball team that has captured the NCAA National Championship in both 1991 and 1997. In addition, the women's basketball team holds the NCAA record for the longest streak of consecutive 20 -win seasons at any level. Annually, USM has several teams that achieve a national ranking and qualify for participation in postseason play.

Student-athletes grow as individuals by being part of a team and experiencing appropriate competitive opportunities. Through participation in intercollegiate athletics and interaction with a nationally recognized coaching staff, student-athletes are challenged physically, mentally, and emotionally. The athletic arena is a classroomused to teach character, leadership, self-discipline, self-respect, commitment, work ethic, sportsmanship, respect for teammates, opponents, diversity and difference, and the importance of sacrifice, teamwork and cooperation. Student-athletes are held to high standards, are expected to succeed in both academics and athletics, and are held accountable for their actions.

In 1998-1999, USM will sponsor 22 intercollegiate sports: 10 for men, 9 for women, and 3 co-ed offerings. The fall sports lineup includes men's cross country, women's cross country, field hockey, golf, men's soccer, women's soccer, women's tennis, women's volleyball, and sailing. During the winter season USM offers eight sports: men's basketball, women's basketball, men's ice hockey, women's ice hockey, men's indoor track, women's indoor track, cheering, and wrestling. In the spring, student athletes can choose to participate in baseball, softball, men's tennis, men's outdoor track, women's outdoor track, and the continuation of the sailing program. In addition to the 22 varsity programs, the Athletic Department also sponsors club sports teams in men's lacrosse, women's lacrosse, and men's volleyball.

The Huskies compete in the Little East Conference, recognized as one of the most competitive Division III conferences in the nation. In addition to USM, meınbership includes: Eastem Connecticut State University, Keene State College, Plymouth State College, University of Massachusetts Boston, University of Massachusetts Dartmouth, Rhode Island College and Westem ConnecticutState University. USM holds membership affiliation in the National Collegiate Athletic Association (NCAA), the Eastem College Athletic Conference (ECAC) and the Little East Conference (LEC). For more information on USM athletics including ticket information and schedule requests, please call 780-5430.

The Career Services and Cooperative Education Centers provide comprehensive career assistance for all matriculated students. Students are encouraged to visit the Centers early in their academic career to begin preparing for the future. They provide assistance with career decision making, interest testing, a part-time job service, a computerized career exploration service, and workshops to help students design résumés and learn how to interview with employers. They maintain a Career Technology Center to assist students with on-line job searches and research. They are a participating institution in the Maine Recruiting Consortiuma job fair program for graduating seniors that draws employers from across the Northeast.

The Cooperative Education Program helps place students in short-term positions with career-related businesses. In most cases, students who are eligible to

USM Police Department

University Health Services

apply for Cooperative Education placements receive academic credit for the learning experience involved, as well as a salary from the employer. The office also maintains lists of available unpaid intemship opportunities.

The Centers are located on the Gorham campus in Upton Hall and on the Portland campus in Payson Smith Hall. For more information please call 780-4220. Career services are also available at Lewiston-Auburn College (758-6500).

The USM Police Department is responsible for keeping the peace, preventing crime, and delivering a variety of services including security and crowd control, crime investigation, 24-hour police coverage, management of parking and transportation, escort services and educational programs. The offices are located on the Gorham campus in Upton Hall, in Portland Hall, and in the former Steego Building at the comer of Bedford and Winslow Streets (47 Bedford) on the Portland campus (780-5211 or emergency number, 780-5000).

USM students or University of Maine law students may use the services of USM's convenient, affordable, and accessible on-campus health care and counseling centers in Portland and Gorham. All information gathered in both Student Health Services and the Counseling Center is held in confidence. No information is released to University officials, faculty members, parents, friends, or outside agencies except upon written request of the student.

## Student Health Services

Each semester students who take six or more credits are automatically assessed a health fee. This fee entitles students to unlimited free office visits in Student Health Services (SHS). Students taking three to five credits may opt to pay the health fee in the first four weeks of the fall or spring semester. The health fee does not cover lab tests, wellness exams, and a few selected procedures. An optional summer health or fee-for-service arrangement is also available. The health fee is not health insurance. To purchase health insurance, contact SHS for information about the USM Student Health and Accident Insurance for basic coverage, and the Blue Cross Health Insurance for catastrophic coverage.

SHS is staffed by skilled professional nurses, certified nurse practitioners, and physicans who understand college health issues, student budgets, and student diversity. Services available include: required immunizations, diagnosis and treatment of health problems; physical exams, athletic exams, work physicals, gynecological exams; lab services and tests; flu and allergy shots; consultations and referrals; travel information; self-care cold clinic and safer sex supplies; workstudy or volunteer opportunities; health screenings; communicable disease surveillance; and more.

Hours of operation are generally Monday through Friday, 8:00 a.m. - 4:30p.m., with some evening hours. Portland Center is open year round, Gorham is open when residence halls are open. For additional information, call the Portland center in the Sullivan Gym at 780-4211, the Gorham center in Upton Hall at 780-5411, or TTY 780-5646. The immunization hotline is 780-4504.

## Counseling Center

The staff of psychologists and graduate intems at the Counseling Center offer short-term counseling services to undergraduate and graduate students. The first six visits are free; a modest co-payment begins at the seventh session. These services include crisis/emergency assistance; personal counseling (individuals, couples, and groups); and referral services. Consultation services and workshops are also available to student groups, the faculty, and other staff members.

The Centers are located in Payson Smith Hall on the Portland campus and Upton Hall on the Gorham campus. Normal hours are Monday through Friday, 8:00 a.m. - 4:30 p.m., with some evening hours. For more information, call 7804050. For information about counseling services at Lewiston-Auburn College, please call 753-6500.

The Office of Commuter Life within the Department of Portland Student Life offers programs, services, and general support to all commuter students. This office advises two student groups: Portland Events Board that offers a variety of musical events, lectures, family social events, and other activities; and the Com-
muter Student Board, comprised of commuter students of all ages and interests that helps commuter students feel comfortable on campus and provides a voice for commuter issues that arise. The Office is also responsible for the management and coordination of services within the Portland Campus Center.

## Portland Campus Center

The Portland Campus Center is the "living room" of the campus, where students can relax, study, grab a bite to eat, and interact with fellow students, faculty, and staff. There are study areas, a photocopying center, the Center for Campus Involvement and Customer Service, which serves as an information center, clothing and jewelry vendors, the Bookstore, Area Art Gallery, Student Legal Services, the Dining Center, and the Department of Portland Student Life.

The Commuter Student Lounge, located in the Dining Center, provides a place for students to eat, watch TV, use the local phone, leave messages on the message board, or form a study group. In addition, resources for students who are parents are available in the Commuter Student Lounge. For more information call 7804090.

## The Sullivan Gym

The Sullivan Gym is a muli-purpose facility designed with fitness and recreation interests in mind. The main gym has three courts lined for basketball, indoor tennis, badminton, and volleyball. It also offers indoor jogging. There are squash, wallyball, and racquetball courts and a multi-purpose room with a wood floor for aerobics, dance, yoga, marial arts, and more. The Fitness Center offers Universal power circuit stations, Bodymaster free weight equipment, Quinton treadmills, Lifecycles, stairmasters, Exercycles, and a concept II rower. Exercise area in women's lockerroom includes: stationary bike, rower, and Atlas 10 -station weight training machine. Sauna baths are also available.

Students who participate in squash or racquetball are expected to supply their own equipment. Students with University I.D. may borrow sporting equipment from the equipment room. Call 780-4173 for information.

The University provides student housing for approximately 1,100 students in 7 residential units on the Gorham campus and in the city of Portland. Accommodations are coeducational and provide a variety of living oprions for students. The residence halls have their own governance organizations which promote community development and offer educational and recreational hall programs. For more information, call 780-5240, or stop by 100 Upton Hall.

## Portland Hall Nontraditional Housing

Portland Hall offers the USM student a nontraditional housing alternative. Located on Congress Street in downtown Portland, it provides easy access to the Portland campus as well as the entertainment and cultural opportunities of Maine's largest city. Options include single and double rooms and a variety of suites with kitchens. All accommodations have individual baths and are fully draped and carpeted. An on-site dining facility, computer lab, and fitness center make this a nice option. For more information, call 874-3383.

The Department of Resident Student Services fosters community development by working with residence hall students. The Department provides students with essential services such as residence and dining facilities, student group advising, and program delivery.

Some of the areas which comprise Resident Student Services are:

## Resident Student Services, Main Office

Resident Student Services offers residence hall room selection and signup, dining assistance, assistance for a myriad of on-campus housing related issues, telephone assistance, RES-NET signup and assistance (the residence hall-based computer networking project), mediation coordination, and programmatic functions around campus. The main office of Resident Student Services, located in 100 Upton Hall, also serves as a central location for the residence hall staff on campus, and works to make the resident student's experience a positive, educational, and
supported one. Questions regarding on-campus housing and dining can be directed to (207) 780-5240, 100 Upton Hall, Gorham, ME 04038.

## Brooks Student Center

The Resident Student Services, Brooks Student Center office, works to provide students with supportive educational opportunities through events and programs. The office also runs an "Information Desk" throughout the day and evening, so that students passing through can get help as they need it and offer feedback on services offered. The office coordinates with and advises several student groups, and helps to make students' lives outside of the classroom more exciting while they are on campus. Questions may be directed to (207) 780-5470, Brooks Students Center, Gorham, ME 04038.

Dining facilities exist at four separate campus locations. In Gorham, the main University dining facility accommodates 1,000 students and offers regular board meal plans during the academic year. A snack bar, in the Brooks Student Center in Gorham, offers short-order and deli fare, as well as hot foods and meals. On the Portland campus, Portland Hall offers regular board meal service and the Campus Center Cafeteria provides meals a la carte. Snack bars are located in Bailey Hall in Gorham, and in Luther Bonney Hall and the Law Building on the Portland campus. Catering for special functions is available at all locations. Meal plans are available for both resident and commuter students and can be tailored to meet individual needs. For more information, call USM Dining Services at 780-5420.

Greek letter organizations offer students the opportunity to participate in an alternative community emphasizing leadership, community service, academic achievement, and self-governance. Eight social fratemities and sororities are affiliated with USM. For more information, call 780-4171.

The University is currently affiliated with several national honor societies, some tied to academic majors such as history and foreign languages, and some, like Phi Kappa Phi, recognize overall academic achievement. For more information, call 780-4090.

The University has developed a Scholarships and Awards program to recognize outstanding students and each academic year makes applications for scholarships and awards available in January. These honors are given to students at the Recognition Day Ceremony in late spring. Information and applications are available at all Dean's Offices, Financial Aid Offices and Career Centers.

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. Both gyms have weight training facilities and offer aerobic programs. Racquetball and squash courts are available at the Sullivan Gym on the Portland campus.

The Portland Recreation Program offers a wide range of programs specifically focused toward busy commuters that includes aerobics, yoga, martial arts, family fun days, racquetball clinics, theater trips, personal fitness consultations, and relaxation workshops. Outdoor recreation clinics and trips include camping, canoeing, cross-country skiing, and sea kayaking. For more information, call 780-4630, or stop by the office in 104 Sullivan Gym.

The Gorham Recreational Sports Program offers many recreational activities regardless of skill level or previous experience. Team sports include flag football, volleyball, basketball, ultimate frisbee, six on six soccer, softball, beach volleyball, floor hockey, arena football, and bowling. Individual activities include tennis, table tennis, darts, badminton, three-point shoot-out, free-throw competition, and nine-ball. Completion of the new ice arena has made ice hockey, broom ball, and free skating available. The new state-of-the-art fitness facility includes universal machines, free weights, and cardiovascular machines. Aerobics are offered as well. White water rafting, deep sea fishing, and whale watching activities as well as trips to see the Red Sox, Bruins, and Celtics are frequently organized. For more information call 780-5649 or stop by the office located in 102 Hill Gym.

The University maintains lists of available rooms and apartments to assist students who wish to live off-campus. The lists are available at Resident Student

Child Care Services

## Student Government and Organizations

Student Judicial Affairs

The Women's Center and Office of Women's Resources

## Office of Campus Pluralism and Equal Opportunity

Services, 100 Upton Hall, on the Gorham campus and the Portland Student Life Office, Campus Center, on the Portland campus.

University ChildCare Services complements the mission of Student Development by serving more than 250 children of students, faculty, staff, and alumni. Programs are provided for children from infancy to teens, in two facilities on the Portland campus and in Gorham and include: full-day child care (7:30 a.m. - 5:30 p.m.), after and before school and kindergarten care in Gorham, flex-care (child care services on a block basis), infant, toddler, and pre-school care, summer and school vacation camps. Student scholarships, provided by the Student Senate and the University, are available for eligible students. For more information, call 7804125.

A 21-member Student Senate, elected by undergraduates, is the principal goveming body for students. A student activity fee, collected from each student, is used by the Senate to pay for undergraduate activities. More than 40 recognized student organizations welcome involvement.

Students interested in joumalism, literature or broadcasting may join the staff of the University Free Press, a weekly student newspaper; The Review, a literary magazine; or WMPG-FM, the student radio station. Students interested in TV production can become involved in USM's own cable TV station, G-TV, located on the Gorham campus.

Students are encouraged to take advantage of cultural activities, speakers, and special events available free or at minimal cost. Regular performances are given by student groups such as the award-winning Russell Square Players, the University Chorale and the Chamber Orchestra. In Portland, the Southworth Planetarium and the Area Gallery in the Campus Center, and in Gorham, the Art Gallery and the Museum of Cultural Change, offer programs year round. In addition, many student organizations bring noted artists, performers, and speakers to USM. For more information about student organizations and getting involved at USM, call 780-4171.

While at the University, students are expected to conduct their affairs with proper regard for the rights of others and of the University. All members of the University community share a responsibility to maintain an environment where actions are guided by respect, integrity, and reason. When standards of conduct are violated, the University relies upon the Student Conduct Code. It is the responsibility of the Office of Student Judicial Affairs to protect the campus community from disruption and harm by offering a program of educational discipline and by enforcing the Student Conduct Code. If students violate a state or federal law or a University regulation, they may be subject to state, federal, or University disciplinary action. In the enforcement of the Student Conduct Code the University functions in an administrative manner. For a complete copy of the Student Conduct Code, call 780-5242.

The USM Women's Center provides programming and resources for personal, academic, and career development for women.

On the Portland campus, the Women's Center maintains a comfortable space for relaxing, networking, and various gatherings and support groups, and provides programs of support, advocacy, and co-curricular interest to women in the University and the wider community. The Women's Center is a liaison to organizations and agencies in greaterPortland that provide direct service or advocacy for women. The Center also serves as gallery space for art exhibits.

On the Gorham campus, the Office of Women's Resources works with the Office of Gorham Student Life to develop appropriate programming for traditional age students, and advising to the Greek women's organizations (sororities). Ongoing programs of the Women's Center include the Middle School Mentor Program, Career Mentor Program, and support groups around a variety of topics. For more information, call 780-4718.

The Office of Campus Pluralism and Equal Opportunity works with all units of the University to foster a welcoming and inclusive working, learning, and living environment. The Office collaborates with student and employee groups to de-

## Important Campus Policies

velop programs, assists in the recruitment and retention of a diverse staff and student body, works with academic programs to provide instructional support, and sponsors diversity awareness opportunities. The Office oversees University compliance with affirmative action, sexual harrassment, disability, and other civil rights statutes and policies.

In addition to the Student Conduct Code, USM has a number of important University policies which govern campus life. These policies and many others can be found in The USM Navigator, the student handbook, which is available to all new students. In order to review these policies in their entirety, please consult the student handbook or the appropriate department listed.

## HIV/AIDS Policy

The USM HIV/AIDS policy has been established to protect the rights of individuals infected with HIV (Human Immune Deficiency Virus) and the health and safety of all others at the institution. USM will not discriminate in any manner against any person who is infected with HIV, including admissions, facilities access, hiring, housing, promotion, tenure or termination. USM will not require HIV testing for either its students or employees and information about suspected or known HIV infection will be kept confidential. For more information or advice regarding this policy, call 780-4211.

## Alcohol and Substance Abuse Policy

The University of Southern Maine views alcohol and substance abuse as a serious problem both nationally and on-campus and wishes to do everything possible to address it. In compliance with the Drug Free Schools and Communities Act and the Drug Free Workplace Act passed by Congress, the University publishes annually a booklet which informs all students and employees of the University's substance abuse policy, sanctions for violation of the policy, state and federal alcohol and drug laws, offenses and sanctions. Below is a summary of USM's alcohol and substance abuse policy.

The possession, use, or distribution of illegal drugs, as defined by federal, state, and local statutes, is prohibited at any time on University property. Students who possess, use, or distribute illegal drugs are liable for public law enforcement sanctions and University disciplinary action. Use of alcoholic beverages on University property shall be in compliance with state laws and campus regulations and procedures. Violation of such laws, regulations and procedures may result in disciplinary action and, where applicable, criminal proceedings.

Students with substance abuse problems may take advantage of diagnostic, referral, counseling and prevention services available through the University Health Services. For more information, call 780-4050 or 780-5411.

## Crime Prevention and Safety

The University of Southern Maine is committed to safety and crime prevention on campus. Information on campus crime statistics, crime policies and procedures and crime prevention programs is provided each year to the campus community in compliance with the Crime Awareness and Campus Security Act of 1990.

For emergencies, property loss, lost and found or to report suspicious persons or maintenance/safety problems, call the USM Police Department at 780-5211, or emergency 780-5000.

For property loss and safety concerns in the residence halls, students should contact their Resident Assistant or Area Director or Resident Student Services at 780-5240.

For sexual assault or physical or domestic violence, call the USM Police Department ( 24 hours a day) at 780-5211 or emergency 780-5000. Students can call their Resident Assistant or Area Resident Director, 780-5240 (Gorham) or 8743383 (Portland Hall), the USM Counseling Center, 780-4050, or Sexual Assault Response Services, 774-3613.

## Sexual Harassment Policy

Sexual harassment of either employees or students is a violation of federal and state laws. It is the policy of the University of Maine System that no member of
the University community may sexually harass another. In accordance with its policy of complying with non-discrimination laws, the University of Maine System will regard freedom from sexual harassment as an individual employee and student right which will be safeguarded as a matter of policy. Any employee or student will be subject to disciplinary action for violation of this policy. Sexual advances, requests for sexual favors, and other verbal or physical contact of a sexual nature constitute sexual harassment when: 1) submission to such conduct is made either explicitly or implicitly a term or condivon of an individual's employment or education, or 2 ) submission to or rejection of such contact by an individual is used as the basis for academic or employment decisions affecting the individual, or 3) such conduct has the purpose or effect of interfering with an individual's academic or work performance or creating an intimidating, hostile, or offensive employment, educational, or living environment.

Consenting relationships may constitute sexual harassment under this policy. When a professional power differential exists between members of the University of Southem Maine and a romantic or sexual relationship develops, there is a potentialfor abuse of that power, even in relationships of apparent mutual consent. A faculty or staff member should not engage in such relationships. Further, the University prohibits the abuse of power in romantic or sexual relationships.

To assure that power is not abused and to maintain an environment free of sexual harassment, a faculty or staff member must eliminate any current or potential conflict of interest by removing himself or herself from decisions affecting the other person in the relationship. Decisions affecting the other person include grading, evaluating, supervising, or otherwise influencing that person's education, employment, housing, or participation in athletics or any other University activity. It is the policy of the System to ensure fair and impartial investigations that will protect therights of persons filing sexual harassment complaints, the personscomplained against, and the System as a whole.

For a complete copy of the policy, additional information, or to express concem about sexual harassment, call the Office of Campus Pluralism and Equal Opportunity at 780-5094 (TTY 780-5646), or the Office of Civil Rights, U.S. Department of Education, Region 1, John W. McCormack, Post Office and Courthouse Building, Boston, MA 02109, 617-223-9692.

## Sexual Assault Policy

Sexual assault, including rape by an acquaintance or stranger, is prohibited by University policy and State of Maine law. The University of Southern Maine does not tolerate sexual assault in any form. Violators of this policy will be subject to disciplinary measures, up to and including dismissal.

For a complete copy of the University of Southem Maine SexualAssault Policy, you may contact the Office of Student Judicial Affairs at 780-5242.

When sexual assault has occurred, it is important to tell someone who can be trusted. Campus resources include Student Development staff and other University faculty and staff, academic advisers, Resident Assistants (RAs), Resident Directors (RDs), Area Directors (ADs), Greek Advisers, and athletic coaches. Offcampus community resources include your local hospital emergency rooms, rape crisis centers, and local police departments.

## Available Resources

University Health Services, Student Health Services
Services: Medical assessment and follow-up, testing for sexually ransmitted diseases and pregnancy. In Portland (Portland Gym): 780-4211 or in Gorham (Upton Hall): 780-5411.

## University Health Services, Counseling Center

Services: Counseling for student-victims and students related to victims. In Portland (106 Payson Smith), or in Gorham (Upton Hall): 780-4050.

## USM Police Department

Services: 24-hour security and policing function. In Portland (former Steego Bldg., 47 Bedford): 780-5211, and at Lewiston-Aubum 753-6500. In Gorham (Basement, Upton Hall): 780․5211, Emergency: 780-5000.

Office of Student Judicial Affairs
Services: Consultation and filing complaints with student conduct code. In Gorham (125 Upton Hall): 780-5242.

24-hour Community Crisis Centers: May include medical accompaniment to hospital emergency rooms for rape kit/forensic exams, anonymous hot-line counseling and referral services, legal advice and courtroom accompaniment if charges are pressed.Sexual Assault Response Services(Cumberland and York Counties)774-3613/1-800-313-9900
Bath-Brunswick Rape Crisis Hotline ..... 1-800-822-5999
Lewiston-Auburn Sexual Assault Crisis Center ..... 795-2211
Augusta Area Rape Crisis Center ..... 626-0660

# The Core Curriculum 

Director: Wayne Cowart, 246 Luther Bonney Hall, Portland Core Council: Fahey, Hayes, Hitchcock, Irish, Smith, Wood

## Rationale

Goals and Structure

## Requirements

The Core curriculum at USM has been designed to provide undergraduates with a general education, a core of skills, and knowledge that every individual needs either to excel in professional life or to build a rich and fulfilling personal life. It is vital that students view the Core as a set of goals, not a checklist of courses. In the wider world, competency counts. The Core is designed to foster those competencies that, by wide agreement, matter the most. It can only succeed, however, where students make the goals of the Core their own.
A. The basic competence component of the Core aims to develop essential skills in writing, using quantitative information, and critical thinking. These skills are fundamental tools that are relevant to all other courses that students take. Students should complete all courses relevant to the basic competence component of the Core as early as possible after beginning their studies at USM. Whether a first-year student or a transfer, every student should strive to complete all Core competency requirements by the end of the student's first year at USM.
B. The methods of inquiry/ways of knowing component of the Core aims to develop a broad appreciation of the many ways of looking at and understanding the world that humans have found useful in the current era and in the past. In pursuit of this overriding goal, this component of the Core introduces the student to a wide 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.
(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 or understand alien cultures.
(3) The social sciences aim to acquaint the student with the methods and theories used to study the social, political, or economic behavior of groups or individuals.
(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.
In addition to work in one of the four areas enumerated above, each methods of inquiry/ways of knowing course is intended to provide further experience in the three Core competencies, including writing, quantitative analysis and decision making, and critical thinking.
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 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.

Most Core requirements are met by passing one or more courses of specific types. Each course that can be used to satisfy one of the Core requirements has a letter in the series (C-K) added to its name (e.g., ENG 100C, MAT 105D). The letters associated with various requirements are indicated below.

## Basic Competence

In support of the Basic Competence goals of the Core, students are required to take courses (or otherwise demonstrate competency) in each of three areas: (1) English composition, (2) quantitative decision making, and (3) skills of analysis.

The English Composition (C) requirement can be met in any one of four ways:

1) Score 59 or above on the TSWE
(no credit)
2) Score 500 or above on the CLEP General English Composition Test
( 3 credits)
3) Satisfy composition standards in ENG 100C or ENG 101C by the second week of the term (no credit)
4) Successfully complete ENG 100C or ENG 101C or ESL 100C
( 3 credits)
Note: Students must meet USM's writing proficiency requirement before registering for an English composition course (such as ENG 100C or ENG 101C). See the Academic Policies section of the catalog for more information.
The Quantitative Decision Making (D) requirement can be met in one of three ways:
5) Pass a locally administered examination
(no credit)
6) Successfully complete an approved mathematics or statistics "D" course (e.g., MAT 105D, MAT 110D, MAT 120D, PSY 201D, SOC 207D)
7) Pass a CLEP examination in mathematics (see Prior Leaming Assessment Office for details).
Note: a) Students must meet USM's mathematics proficiency requirement before registering for a Quantitaive Decision Making course. b) Students in departments that do not specify mathematics requirements should consult their advisors or the Advising Services Office for guidance in selecting a course in this area.
The Skills of Analysis ( E ) requirement is met by passing an approved " $E$ " course (e.g., various $100-\mathrm{level}$ PHI courses, or LIN 112 E , SOC 210E, etc.) (3 credits) Note: Any $100-1$ evel PHI course can be repeated by taking any other 100 -level PHI course in accordance with the University Repeat Course Policy.

## Methods of Inquiry/Ways of Knowing

The Fine Arts requirement is satisfied by successfully completing one course in each of the following two areas. The courses must be selected from different departments.

1) An approved (F) performance-centered arts course (3 credits)
2) An approved (G) history-centered arts course (3 credits)

The Humanities requirement is satisfied by successfully completing one course in each of the following two areas. The courses must have different prefixes.

1) An approved $(\mathrm{H})$ literature course ( 3 credits)
2) An approved (I) other times/other cultures course
( 3 credits)
The Social Science requirement is satisfied by successfully completing two approved (J) social science courses. The courses must be selected from different departments.
(6 credits)
The Natural Sciences requirement is satisfied by successfully completing one approved (K) natural science course and the laboratory course associated with that "K" course.
(4 credits)
Note: Natural science majors do not have to take "K" courses outside their majors to fulfill the natural science component.

## Interdisciplinary

(3 credits)
The Interdisciplinary requirement is saisfied by successfully completing one course with a COR prefix.
( 3 credits)
Note: a) A prerequisite for all COR courses is the successful completion of both the basic competence English composition (C) and the shills of analysis (E) requirements. b) Any course with a COR prefix can be repeated by taling any other course with a COR prefix in accordance with the University Repeat Course Policy.
Note: Core curriculum requirements differ slightly for engineering majors. See the Deparment of Engineering section of this catalog for specific Core curriculum requirements for engineering majors.

Core Curriculum<br>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 Services Office. Effective with the fall of 1996 , students admitted with conditions are expected to complete their minimum proficiency requirements as stated in their conditional contract. Declared majors should consult their school, college, or department advisors.
2. There can be no more than one overlapbetween the courses a student takes to fulfill the Core curriculum requirements and the courses that count toward the student's major. "Overlap" is defined in terms of each course's three-letter prefix (e.g., ENG, SOC, WST); that is, a student may take only one course toward the Core that has the prefix of the student's major. (The overlapping Core course may itself also count toward the major or it may just share a prefix with the major.)
3. The student must sa isfy the basic competence requirements in English Composition (Area C) and Quantitative Decision Making (Area D) by the time the student completes 60 credits. Students are also strongly encouraged to complete the Skills of Analysis (Area E) requirement as early as possible. Transfer students with more than 45 credit hours need to check with their academic advisor or their academic dean.
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.

All ransfer 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 ransfer credit for an English composition course. If no such course is available for ransfer 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 ransfer credit, the student should refer to the other options noted under the Core curriculum requirements.

## Methods of Inqniry/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 areexempt from this Core curriculum requirement.

Courses Approved to Satisfy Core Curriculum Requirements

In course registration schedules and other publications, courses approved to saisfy 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.

| Basic Competence |  |  |
| :---: | :---: | :---: |
| English Composition |  |  |
| ENG | 100C | College Writing |
| ENG | 101C | Independent Writing |
| ESL | 100C | College Writing |
| HUM | 100C | Composition |
| RSP | 100C | Russell Scholars Writing I |
| Quantitative Decision Making |  |  |
| COS | 101D | Quantitative Decision Making Using Computers |
| GYA | 202D | Research Methods |
| MAT | 105D | Mathematics for Quantitative Decision Making |
| MAT | 109D | Linear Systems |
| MAT | 110D | Business Calculus |
| MAT | 120D | Introduction to Statistics |
| MAT | 140D | Pre-Calculus Mathematics |
| MAT | 152D | Calculus A |
| MAT | 211D | Probability |
| LOS/ |  |  |
| SBS | 328D | Staristics |
| PSY | 201D | Staristics in Psychology |
| SOC | 307D | Statistical Methods for Social Research |
| Skills of Analysis/Philosophy |  |  |
| COS | 120E | Deductive Logic |
| ECO | 103E | Critical Thinking About Economic Issues |
| ENG | 110E | Straight and Crooked Thinking |
| HTY | 377E | Chinese Thought |
| LAC | 101E | Critical Thinking |
| LIN | 112E | Analyzing Language |
| LOS/ |  |  |
| SBS | 370E | Ethics and the Organization |
| PHI | 101E | Introduction to Philosophy: Free Will and Determinism |
| PHI | 102E | Introduction to Philosophy: Quest for Certainty |
| PHI | 103E | Introduction to Philosophy: Human Alienation |
| PHI | 105E | Introduction to Philosophy: Philosophy through Its History |
| PHI | 106E | Introduction to Philosophy: Why Philosophize? |
| PHI | 107E | Introduction to Philosophy: World Philosophy |
| PHI | 109E | Introduction to Philosophy: Law, Politics and Society |
| PHI | 110E | Introduction to Philosophy: Feminist Perspectives |
| PHI | 111E | Introduction to Philosophy: Philosophical Reading (and Wriling) |
| RSP | 104E | Russell Scholars Seminar |
| SOC | 210E | Critical Thinking About Social Issues |
| Methods of Inquiry/Ways of Knowing |  |  |
| Fine Arts |  |  |
| Performance-centered arts |  |  |
| ART | 141F | Fundamental Design I (2-D) |
| AR' | 151F | Fundamental Drawing I |
| COR | 119F | The Illuminated Autobiography |
| COR | 138F | Life Imitates Art: Understanding Human Behavior |
| ENG | 201F | Creaive Writing |
| ENG | 300F | Fiction Writing |
| ENG | 301F | Poetry Writing |
| ENG | 302F | Fiction Workshop |
| ENG | 303F | Poetry Workshop |
| HUM | 105F | Basic Photography |


| MUS | 110F | Fundamentals of Music |
| :---: | :---: | :---: |
| MUS | 130F | Music Theory I |
| MUP | 101F | Applied Music |
| MUP | 102F | Applied Music |
| MUP | 201F | Applied Music |
| MUP | 202F | Applied Music |
| MUS | 334F | Electronic Music I |
| MUS | 400F | Chamber Orchestra |
| MUS | 401F | The University Chorale |
| MUS | 402F | University Concert Band |
| MUS | 405F | The Chamber Singers |
| MUS | 408F | Wind Ensemble |
| THE | 102F | Acting: Performance |
| THE | 103F | Contemporary Dance I |
| THE | 134F | Production Management |
| THE | 135F/ |  |
|  | 136F | Stagecraft \& Lab |
| THE | 170F | Public Speaking |
| THE | 203F | Contemporary Dance II |
| THE | 270F | Oral Interpretation |
| History-centered arts |  |  |
| ART | 101G | Approaches to Art |
| ARH | 110G | Visual Environment |
| ARH | 111G | Art History: Prehistoric to Medieval |
| ARH | 112G | Art History: Renaissance to Modern |
| ARH | 210G | Art History: Cross-Cultural Perspectives |
| ARH | 211G | Gender Identity and Modern Art |
| COR | 214G | Visual Culture of Greece |
| MUS | 100G | Music Appreciation and History |
| MUS | 102G | Music of the Portland Symphony |
| MUS | 103G | Introduction to Jazz |
| MUS | 120G | History of Music I |
| MUS | 121G | History of Music II |
| MUS | 202G | Music in America |
| MUS | 203G | Music in the 20th Century |
| MUS | 205G | Chamber Music Literature |
| MUS | 220G | History of Music III |
| MUS | 221G | History of Music IV |
| THE | 101G | Introduction to Drama |
| THE | 231G | Costuming I |
| THE | 353G | Dramatic Literature and Theatre History III: Romantic to World War II |
| Humanities |  |  |
| Literature |  |  |
| CLA | 283H | The Epic Hero in Ancient Literature |
| CLA | 284H | The Tragic Hero in Ancient Literature |
| COR | 129H | Plato's Myth of the Cave: The Problem of Knowledge |
| COR | 142H | Baseball and Society: A Journey |
| COR | 154H | Culture and Community in American Life |
| COR | 213H | Metaphor \& Myth in Science and Literature |
| COR | 223H | Life \& Literature after Darwin |
| COR | 318H | Photography and Poerry: Two Ways of Speaking |
| ECO | 105H | A Novel Approach to Economics |
| ENG | 120H | Introduction to Literature |
| FRE | 283H | Contemporary French Thinkers (in English translation) |
| FRE | 362H | French Poetry |
| FRE | 363H | The French Theatre |
| GER | 281H | The German Novelle (in English ranslation) |
| GER | 351H | Introduction to German Literature I |
| GER | 352H | Introduction to German Literature II |
| HUM | 223H | Life \& Literature after Darwin |
| HUM | 318H | Photography and Poerry: Two Ways of Speaking |
| HUM | 320H | 18th \& 19th Century African-American Literature \& Culture |


| RUS | 281H | Russian Literature in Translation |
| :---: | :---: | :---: |
| SPA | 281H | Masterpieces of Spanish American and Brazilian Literature (in English translation) |
| SPA | 351H | Readings in Contemporary Spanish Literature |
| SPA | 352 H | Readings in Modern Latin American Literature |
| THE | 150H | Play Analysis |
| Other Times/Other Cultures |  |  |
| ANT | 202I | Origins of Civilization |
| ANT | 220I | North American Indians |
| ANT | 222I | Peoples of the North |
| ANT | 224I | Ancient Mesoamerica |
| ANT | 230I | Hunters and Gatherers |
| ANT | 232I | The Anthropology of Sex and Gender |
| ANT | 250I | Archaeology of South America |
| ANT | 301I | Victims of Progress: Indigenous Peoples in the Modern World |
| ANT | 303I | Food and Culture |
| CLA | 285I | Classical Mythology |
| CLA | 291I | The Golden Age of Greece |
| CLA | 292I | Rome, from Republic to Empire |
| COR | 122I | Introduction to Islamic Civilization |
| COR | 129I | Plato's Myth of the Cave: The Problem of Knowledge |
| COR | 135I | American Studies I |
| COR | 136I | American Studies II |
| COR | 150I | What is 'Race'? |
| COR | 151I | Introduction to Russian Civilization |
| COR | 154I | Culture and Community in American Life |
| COR | 214I | Visual Culture of Greece |
| COR | 330I | Labor, Literature and the Arts |
| ECO | 106I | Economic, Social and Cultural Change |
| ECO | 220I | U.S. Economic and Labor History |
| FRE | 102I | Beginning French II |
| FRE | 107I | Intensive Beginning French |
| FRE | 201I | Intermediate French I |
| FRE | 202I | Intermediate French II |
| FRE | 207I | Intensive Intermediate French |
| FRE | 291I | French Civilization: An Historical Approach (in English) |
| FRE | 292I | Topics in Contemporary Francophone Civilization |
| GEO | 201I | Cultural Geography |
| GER | 102I | Beginning German II |
| GER | 107I | Intensive Beginning German |
| GER | 201I | Intermediate German I |
| GER | 202I | Intermediate German II |
| HTY | 101I | Western Civilization I |
| HTY | 102I | Western Civilization II |
| HTY | 131I | U.S. History to 1877 |
| HTY | 132I | U.S. History Since 1877 |
| HTY | 152I | The Islamic Near East |
| HTY | 161I | Introduction to African History to Partition |
| HTY | 162I | Introduction to African History Since Partition |
| HTY | 171I | Traditional East Asia |
| HTY | 172I | Modern East Asia |
| HTY | 181I | Latin America I |
| HTY | 182I | Latin America II |
| HUM | 135I | American Studies I |
| HUM | 136I | American Studies II |
| HUM | 2461 | The Vietnam Era |
| HUM | 310I | Franco American Studies |
| HUM | 330I | Labor, Literature, and the Arts |
| ITA | 201I | Intermediate Italian I |
| ITA | 202I | Intermediate Italian II |
| LIN | 111I | Language Learning and Bilingualism |


| LIN | 202I | Languages of the World |
| :---: | :---: | :---: |
| PHI | 310I | History of Ancient Philosophy |
| PHI | 315I | Eastern Philosophy |
| PHI | 320I | History of Medieval Philosophy |
| PHI | 330I | History of Early Modem Philosophy |
| PHI | 340I | History of Late Modem Philosophy |
| PHI | 350I | American Philosophy |
| PHI | 360I | Existentialism |
| RSP | 103I | Culture and the Environment |
| RUS | 102I | Beginning Russian II |
| RUS | 201I | Intermediate Russian I |
| RUS | 202I | Intermediate Russian II |
| RUS | 291I | Russian and Soviet Culture and Civilization |
| SPA | 102I | Beginning Spanish II |
| SPA | 107I | Intensive Beginning Spanish |
| SPA | 201I | Intermediate Spanish I |
| SPA | 202I | Intermediate Spanish II |
| SPA | 207I | Intensive Intermediate Spanish |
| SPA | 270I | The Culture and Civilization of Spain |
| WST | 130I | Introduction to Women's Studies |
| Social Sciences |  |  |
| ANT | 101J | Anthropology: The Cultural View |
| ANT | 201J | Human Origins |
| SBU | 165J | Consumer Studies |
| COM | 102J | Introduction to Communication |
| COM | 130J | Interpersonal Communication Skills |
| COR | 110 J | Old and in the Way?: Aging in America |
| COR | 124J | Poverty in America |
| COR | 126J | Global Enlightenment |
| COR | 127J | The Documentary: Its Social, Political and Emotional Impact |
| COR | 131J | Creating and Making Products |
| COR | 134J | Men and Masculinities |
| COR | 138J | Life Imitates Art: Understanding Human Behavior |
| COR | 139J | Natural Resources in the Northeast Borderlands |
| COR | 140J | Global Computing and its Implications |
| COR | 141J | Hate- and Bias-Motivated Crimes |
| COR | 152J | Environmental Issues and Choices |
| COR | 153J | AIDS: Biology, Social Policy, and the Law |
| COR | 155J | Language and Literacy Acquisition |
| COR | 214J | Visual Culture of Greece |
| CRM | 215J | Criminology |
| ECO | 100J | Introduction to Economics |
| ECO | 104J | The U.S. in the World Economy |
| ECO | 201J | Principles of Macroeconomics |
| ECO | 202J | Principles of Microeconomics |
| GEO | 101J | Principles of Geography |
| GEO | 120J | Geography of Maine |
| GEO | 203J | Urban and Regional Development |
| GEO | 207J | Maps: Knowledge, Technology, Society, Culture |
| GEO | 303J | Economic Geography |
| HRD | 207J | Self, Community and the Environment |
| HRD | 333J | Human Growth and Development |
| LIN | 113J | Origins of Language |
| LIN | 185J | Language, Mind, and Society |
| LIN | 201J | Child Language |
| LOS | 325J | State and Local Govemment |
| POS | 101J | Introduction to American Government |
| POS | 102J | People and Politics |
| POS | 104J | Introduction to Intemational Relations |
| PSY | 101J | General Psychology I |
| RSP | 102J | Russell Scholars Seminar |
| SOC | 100J | Introduction to Sociology |


| SOC | 215 J | Criminology |
| :--- | :--- | :--- |
| SWO | 101 J | Introduction to Social Welfare |
| Natural Sciences |  |  |
| ANT | 102 K | Biological Anthropology (with ANT 102 Lab) |
| AST | 100 K | Astronomy |
| AST | 103 K | Astronomy: Activities and Experiments |
| BIO | 100 K | Biological Basis of Human Activity |
| BIO | 101 K | Biological Foundations |
| BIO | 102 K | Biological Experiences |
| BIO | 103 K | Introduction to Marine Biology |
| BIO | 104 K | Marine Biology Laboratory |
| BIO | 105 K | Biological Principles I |
| BIO | 106 K | Laboratory Biology I |
| CHY | 101 K | Introduction to Chemistry |
| CHY | 102 K | Introduction to Laboratory Measurement |
| CHY | 110 K | Chemistry, Life, and the Environment |
| CHY | 113 K | Principles of Chemistry I |
| CHY | 114 K | Laboratory Techniques I |
| GEO | 102 K | Physical Geography |
| GEY | 102 K | Field Lab in Physical Geology |
| GEY | 111 K | Physical Geology |
| GEY | 112 K | Physical Geology Lab |
| GEY | 120 K | Field Geology of Coastal Maine |
| GEO/ |  |  |
| GEY | 360 K | Field Mapping in the Island Environment |
| OCE | 100 K | Introduction to Oceanography |
| OCE | 101 K | Oceanographic Laboratory |
| PHY | 101 K | Introduction to Physics |
| PHY | 102 K | Introduction to Physics Laboratory |
| PHY | 111 K | Elements of Physics I |
| PHY | 121 K | General Physics I |
| PHY | 122 K | General Physics Laboratory I |
| SCI | 100 K | Natural Science Topics |
| SCI | 170 K | Introduction to Physiology |
|  |  |  |
| *Prerequisites for all COR courses: English Composition and Skills of Analy- |  |  |
| sis/Philosophy |  |  |
|  |  |  |

## 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. Cr 3.

## COR 119F The Iluminated 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.

Cr 3.

## COR 122I Introduction to Islamic Civilization

This is a survey course that 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 instutions, 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.

Cr 3 .

## COR 124J Poverty in the USA

This course will examine social, economic, and historical dimensions of poverty. It will introduce students to concepts and ideas from various disci-
plines 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.

Cr 3.

## COR 126J Global Enlightenment

This course is designed to familiarize students with the major problems confroning civilization as we approach the 21 st 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/enviromnental 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.

Cr 3.

## COR 127J The Documentary: Its Social, Political and Emotional Impact

Documentary films have had and continue to have a strong effect on individuals and society. A major goal of this survey is an understanding of the documentary process and an appreciation of the media (news, shorts, features) in which this form is used. Before theend of the semester, students will achieve the ability to analyze the form, structure, style, content, and impact of documentaries.

Cr 3.

## COR 129H/I Plato's Myth of the Cave: The Problem of Knowledge

This course explores muliple interpretations of Plato's myth and what it tells us about knowledge and learning. The myth is used as a springboard into the historical context of ancient Athens and what various disciplines can tell us about that culture. The myth is also examined from contemporary perspectives. The course relies heavily on primary works of the period (Plato, Aristophanes, Homer, Sophocles, Sappho, Thucydides). Cr 3.

## COR 131J Creating and Making Products

We will race a product from its conception to its purchase by consumers. Invention is discussed as a combination of preparation, inspiraion, and work, followed by design, building, and testing of prototypes. A single working model does not a marketable product make. Market analysis, engineering design, manufacturing, plant construction, and enviromnental concerns are studied, as are ethical, aesthetic, and legal considerations. The course includes case studies, readings, and projects. Cr 3.

## COR 134J Men and Masculinities

This course will explore men's identities and activities across various cultures and through their social practices as fathers, lovers, sons, husbands,
workers, friends, athletes, and through other dimensions, such as power, heterosexuality, gay sexuality, social class, race, ethnicity, and age. Drawing heavily on sociological insights and literary examples, this muldidisciplinary course develops comparative understandings of masculinities. Finally, the course tries to go beyond the masculinities, as we have grown up with them, to envision new, more human and enhancing ways men can define themselves as men.

Cr 3.

## COR/HUM 135I American Studies I

Drawing on political and economic history, literature and the arts, this course will study the diverse people, events, and ideas that lelped shape and define the United States from its inception through the latter part of the nineteenth century. Cr 3.

## COR/HUM 136I American Studies II

This course is a continuation of COR/HUM 135I, covering the period extending from the late nineteenth century up to modern times.

Cr 3.

## COR 138F/J Life Imitates Art: <br> Understanding Human Behavior

The focus of this course is the understanding of the self and others. Through the study of basic psychological and theatrical concepts of behavior analysis, students will learn to examine and analyze individual and social behavior in both everyday life and performance setlings.

Cr 3.

## COR 139J Natural Resources in the Northeast Borderlands

This course will provide students with a knowledge of the assumptions and methods of geography, economics, environtnental studies, and planning within the context of the natural resources and cross-border planning and management mechanisms of the northeastern US and easternCanada. Students will understand the basic facts about the renewable resources of the region. They will also be challenged to think about many vital topics from new and different perspectives, ranging from their own cultural biases to the possible future direction of the global economy. Cr 3.

## COR 140J Global Computing and its Implications

The purpose of this course is two-fold. First, it inroduces students to the competencies and actual experience involved in computer networking, i.e., familiarity with sending and receiving electronic mail, saving mail, and word processing associated with the creation of mail; familiarity with listservs, FTP, electronic journals, and Telnet. Second, the research/theory component will be concerned with the literature on various aspects of computer networking.

Cr 3.

## COR 141J Hate- and Bias-Motivated Crimes

A series of guest speakers - experts and activists in the field - will familiarize students with both the
historical and contemporary shape of bias-motivated crime. Students will explore the social and political context of such varied forms of violence, as well as the ways in which social and law enforcement policies have facilitated and/or inhibited bias-motivated crime.

Cr 3.

## COR 142H Baseball and Society: A Journey

This course studies baseball as an American institution. It combines academic study with a journey: from Portland, Maine, through Cooperstown and the Hall of Fame, to Baltimore's Camden Yards. During the bus joumey, participants will talk, study, see films, go to ball games at various levels of play, interview players from the past and executives of the present. Some of the topics will include the history and literature of baseball, the Negro Leagues, and the integration of major league baseball. Cr 3.

## COR 148I Northern Ireland: History, Culture, and Conflict

This course will proceed roughly chronologically from the home rule movements of the late nineteenth century through a series of primary documents that reveal the history, culture, attitudes, and contradictions of the most contested states in the West. Primary materials will include historical and political analyses, govemment documents, speeches, sermons, songs, wall murals, popular celebrations, films, plays, stories, and poems. The goal of the course will be to gain a comprehensive and integrated understanding of the strife-torn statelet. The course will include an enhanced writing component and an emphasis on discussion and regular student participation.

Cr 3 .

## COR 149I/J An Introduction to Global Culture: Godzilla Meets Bambi

It has become commonplace to say we live in a shrinking world, a world where the global and the local are becoming increasingly enmeshed. Whether it be in the evolution of global technologies and institutions of communication, the development of ransnational economic relations of production and exchange, or the emergence of global concems such as environmental degradation, the local and the global are becoming interrelated in ways which challenge traditional conceptions of culture, economics, and politics. This course provides students with ways of understanding these global transformations and the ways in which they affect their everyday lives.

Cr 3.

## COR 150I What is 'Race'?

The concept of race is one of the most contentious ideas of modern society. This course will examine history and biology of race, and trace the development of the idea of race in American culture. Students will examine evolution to understand diversity in the human species. The course will integrate this information with historical attempts to define race to gain a better understanding of race and racial issues.

Cr 3.

## COR 151I Introduction to Russian

## Civilization

The course will introduce students to this remarkable slice of human experience and help them discover the myriad ways in which Russian history, society, and culture have enriched our modern heritage of ideas, beliefs, and artistic expressions. Major themes in the course will include the remarkable achievements of the Russian peoples in a cen-turies-long struggle against geographical adversity, economic hardship, political brutalization, and repeated foreign invasion; the struggle of the individual to carve out a secure niche in Russian society in the face of social and religious collectivism and against the oppressive power of an autocratic state; and, the manifold ways in which Russians have striven throughout their history both to describe and to find "the good society."

Cr 3.

## COR 152J Environmental Issues and Choices

This course focuses on the global environment within the context of geography. Environmental issues constitute one of the central themes of physical and social/cultural/human geography. To understand the environment within a global context, it must be remembered that each culture develops a system of value preferences and orientation. Groups occupying similar geographic habitats or employing similar (or the same) economic systems, but with contrasting value systems, appraise and use the environment differently.

Cr 3.

## COR 153J AIDS: Biology, Sexual Policy, and the Law

AIDS is by definition a multidisciplinary phenomenon that greatly impacts social policy, health care systems, personal relationships, the criminal justice system, and the legal system. To address the biomedical, ethical, and legal issues raised by AIDS in society, this course will inform students of the legal and public policy ramifications of AIDS while grounding this analysis in the biological and virologic facts of the disease. By offering such a multidisciplinary course, we hope that students will develop the skills necessary to grapple with multifaceted social/public health/legal problems. Cr 3.

## COR 154H/I Culture and Community in American Life

This course will study the American experience through the lens of community as Americans have defined, created, and developed that notion over the past 300 years. Starting with an exploration of the communities of the indigenous people of this region, and of the first European arrivals, we will examine communities built by various ethmic and cultural groups who have emigrated to the U.S., along with communimes that spring from other identities. The perspective of the course will be both global and local, studying American educational theory and practice over the decades, while looking specifically at the way community las been
shaped by various ethnic and cultural groups in Maine.

COR 155J Language and Literacy Acquisition
This course will help students gain understanding of their own learning and the role of language and literacy in that leaming. They will gain the background they need to facilitate language and literacy acquisition in others, and they will identify and examine common assumptions about language and literacy and the impact of those assumptions within society. The course will be of particular interest to those who have an interest in children, human development, the human mind, and human society.

## COR 213H Metaphor in Literature, Religion, and Science

A comparative study of literature, religion, and science, focusing on aims, methods, and values, and on the nature of truth and creativity in each discipline. Readings in fiction, poetry, religion, and modern physical and biological science will provide a basis for discussion of the metaphoric nature of literary, religious, and scientific discourse. The goal is to demonstrate that all three areas of human endeavor rely heavily on the metaphoric nature of language in their search for meaning and truth. This team-taught course will consist primarily of careful reading of texts, small-group discussion, and position papers. No college science background is required.

Cr 3.

## COR 214 G, I, J Visual Culture of Greece

This is an intensive four-week course taught for one week in Portland and three weeks in Greece. The course includes possible trips to the historic and contemporary areas of Athens and Lesvos. The course explores two major themes: What is the significance of different spatial environments? How is the image of ancient Greece shaped by modern needs? With each assignment, students will docu-
ment their perceptions with journals and photographs. The course culminates with student presentation porffolios. (Core credit can be applied to any two of the three areas listed above. Consult Summer Session for details.) Cr 6.

## COR 223H 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. Cr 3.

## COR 318H Photography and Poetry: Two <br> Ways of Speaking

This course deals with two modes of creative expression, photography and poetry. Its purpose is to help students read intelligently and sensitively both photographs and poems and to assist them in exploring connections between the two types of expression. A more far-reaching goal is to increase student understanding of the relationship between art and reality and of the complex nature of that knowledge provided us by the arts. Cr 3.

## COR 330I Labor, Literature, and the Arts

This course is designed to explore in an interdisciplinary fashion the life experiences of working people in an industrial society using history, fiction, poetry, visual arts, and music. In it, we examine the role of working people in the formulation of aspects of American culture. We will study cultural expressions of the work experience in industrial society both to better understand "where we come from," and to raise questions about where we want to go in contemporary society. Cr 3.

# University Honors Program 

Director: Janice Thompson (Nursing)
Honors Faculty: Caffentzis (Philosophy), Conway (Philosophy), Gavin (Philosophy), Hinckley (ForeignLanguages and Classics), Houlihan (Business), Kent (Theater), Murphy (Philosophy)

The Honors Program is designed for the undergraduate who enjoys challenging coursework and a convivial atmosphere. Students whoenterthe program work closely with faculty in a series of four seminar-style courses (colloquia) - with a maximum of 15 students per class. Drawing from many disciplines, these courses seek to tap and develop the curiosity, creativity, and motivation of every student. All Honors Program work stresses independent leaming, original thinking, and the development of skills in research, writing, and oral expression. Full- or parttime students within any major are eligible to apply and there is no residential requirement, allowing for a dynamic mix of traditional and nontraditional age students.

In addition to the four colloquia sequence, Honors students take an advanced seminar and complete an Honors thesis. Seminar topics vary from year to year. The student-selected thesis project is advised by a committee of the student's choosing and is the final requirement in the Program to graduate with General University Honors.

The Honors Program is more than a series of courses. Students are part of a creative social and intellectual community centered at the Honors House, 102 Bedford Street, on the Portland campus. The Honors House contains three seminar rooms, a student lounge, and the Program's faculty and administrative offices. Students come to the Honors House to attend classes, study, meet with professors, and socialize. The intimacy of this leaming community creates a unique sense of support and camaraderie. Speakers, seminars, discussion panels, artistic presentations, and social events are sponsored by the Program throughout the academic year, bringing together faculty, students and staff in a friendly and democratic atmosphere.

Honors Program work is rewarding for all highly motivated students, regardless of their academic interests or career plans. It emphasizes the development of independent thinking and communication skills, and as such, it provides an excellent background for students preparing for graduate school or the job market. These skills are also put to use within the Program, as students are encouraged to participate fully in all decisions affecting the Program through theHonors Student Association and the student-elected representatives to the Honors Faculty Board. Most important, the Program develops a love of inquiry and education that stems from, and goes well beyond, the acquisition of specific hnowledge.

Honors Program Requirements

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

| HON | 101 | Honors Colloquium IA | (4 credits) |
| :--- | :--- | :--- | :--- |
| HON | 102 | Honors Colloquium IB | (4 credits) |
| HON | 201 | Honors Colloquium IIA | (4 credits) |
| HON | 202 | Honors Colloquium IB | (4 credits) |
| HON | 301 | Honors Seminar | (3 credits) |
| HON | 311 | Thesis I (Workshop) | (2 credits) |
| HON | 312 | Thesis $\Pi$ | (4 credits) |

Honors students may also choose from the following elective Honors courses:
HON 100 Writing in Honors (3 credits)

HON 321 Honors Directed Research (3 credits)
HON 331 Honors Directed Study (3 credits)
Courses taken in the Honors Program may not be taken on a pass-fail basis.

Core Curriculum
Requirements

## Departmental Major Requirements

Admission to the Honors Program

Successful completion of the Honors Colloquia (HON 101, HON 102, HON 201, and HON202) will satisfy the following Core curriculum requirements: Core Interdisciplinary, 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. Additionally, completion of HON 100, Writing in Honors, will satisfy the English Composition (Area C) of the Core 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 their departmental advisors conceming the use of Honors Program courses to satisfy departmental major requirements.

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, and admission to the Honors Program is based on criteria designed to identify such students. Many factors are considered: the applicant's overall academic record; SAT and other test scores; exrracurricular activities; recommendatons; work experience; application essay; and an interview with an Honors faculty member. The Honors Program seeks a diverse group of students to provide a stimulating environment for all paricipants.

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, 96 Falmouth St., P.O. Box 9300, Portland, Maine 04104-9300, (207) 780-4330, for an Honors Application Form. To be considered for September, a completed application should be received at Honors House by May 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 a member of the Honors faculty. Applicants are notified of admissions decisions as soon as they are made or generally by June 1 .

To remain in the Honors Program, a student must maintain a minimum class standing within the University as well as within Honors courses. These two standards of progress, Overall Class Standing and Successful Completion of Honors Courses, are in addition to those set forth by the University.

Overall Class Standing To continue to remain in the Honors Program, students must maintain an overall grade point average according to the number of USM credits accomplished. The minimum GPA and credit hours are as follows:

| Earned Credit Hours | For Good Standing |
| :---: | :---: |
| $1-22$ | 2.5 |
| $23-52$ | 3.0 |
| $53-82$ | 3.25 |
| $83+$ | 3.4 |

These standards take effect when students begin the Honors Program. Students beginning the program with lower GPAs than required for good standing will be required to meet with the program director in their first semester of study to develop an academic plan to achieve good standing.

Success ful Completion of Honors Courses In addition to maintaining an overall minimum grade point average, Honors Program students must successfully complete Honors courses. These minimum grades serve as additional prerequisites for any subsequent Honors courses. The following minimum course grades have been established for program participants, recognizing the demanding nature of the Honors Program:

| Course | Minimum Grade Required |
| :--- | :---: |
| HON 100, HON 101 | C+ |
| HON 102, 301 | B- |
| HON 201, 202 | B |

## Graduating with General University Honors

In the event that an Honors Program student fails to meet these standards of progress, at the Honors Program director's discretion, the student may be placed on probation with the Honors Program and required to meet with the director to work out a plan to achieve the minimum GPA and grades required for good standing. Students not able to achieve the minimum GPA and grades within the time frame agreed upon in the plan, who do not meet with the director to develop a plan, or who, after achieving good standing after probation again do not meet minimum standards, may be dismissed from the Honors Program.

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 3.4 grade point average in all University work including Honors courses, will graduate with General University Honors. 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 (see Graduation with Distinction in the Academic Policies section of this catalog).

## HON 100 Thinking and Writing in Honors

This course combines the basic mechanics of a college writing course with an introduction to text analysis and critical thinling. It is specifically designed to provide skills that will be used in all the Honors courses. It is highly recommended for all entering Honors students.

Cr 3.

## HON 101 Honors Colloquium IA:

## Wisdom Stories from Four Worlds

The worlds of Greece, Rome, ancient Israel, and the early Christian Middle East structured their cultures in ways that have profoundly affected our own. All have unique ways of defining origins, the relationship of the individual to society, and the nature of truth and justice. This course questions how our own present-day stories are related to those of our past.

Cr 4.

## HON 102 Honors Colloquium IB:

Cultural Clashes: Retrieval, Reinvention, and Cross-Fertilization
This course will examine the clash of religious institutions and political systems, with particular reference to the Christian, Judaic, and Islamic societies that emerged after the breakup of the Roman Empire. What were the critical tensions between "high" and "low" cultures, women's and men's voices, contemplation and performance, and mysticism and scholasticism? What are the medieval influences on culture wars today? Cr 4.

## HON 201 Honors Colloquium IIA: Scientific Revolutions and Critiques

What is science? How did this "way of knowing" develop, and what does it say about those who structure their ideas of "reality" by means of it? Is is particularly Western? Masculine? An offshoot of the Enlightenment? This course will move back and forth in time, first looking critically at science as an institution, then examining scientific literature and thought from important transition points in the past and present.

Cr 4.

## HON 202 Honors Colloquium IIB:

Progress, Process, or Permanence
"All that is solid melts into air" (Karl Marx) is an
apt metaphor for this course which examines concepts of certainty and úncertainty from various 19thand 20th-century perspectives. Who has the answers? Are there any answers? Can there be such a thing as "progress," and does our "modern" perspective (whatever that is) give us a unique point of view for addressing these issues? $\quad \mathrm{Cr} 4$.

## HON 301 Honors Seruinar

A different seminar on a topic of general interest will be offered at least once a year. The seminars will normally focus on perspectives fromnon-Westem cultures.

Cr 3.

## HON 311 Honors Thesis I: Workshop

Each Honors student will plan and carry out a major thesis project as the final stage of Honors work. This workshop course will acquaint students with research methods for the project and assist them in the development and evaluation of project outlines. It will involve both group meetings and individual work with the student's project mentors.

Cr 2.

## HON 312 Honors Thesis II

This course will consist largely of independent research and writing, with assistance from the project mentors, carrying on the preliminary work done in Thesis I. The project will be completed, and the oral defense scheduled, at the end of the course.

Cr4.

## HON 321 Honors Directed Research

This optional course allows an Honors student with interests in a particular subject area to do research in that area under the direction of a faculty supervisor. The research may be carried out in any subject area, with the approval of the director.

Cr 3.

## HON 331 Honors Directed Study

This optional course allows an Honors student to design a reading course in collaboration with a faculty supervisor. It is of particular value to students with self-designed majors who may need to supplement existing courses with additional material. Approval of the director is required.

Cr 3.

# Russell Scholars Program 

Coordinator: Stephen J. Romanoff (Humanities)

Russell Scholars Faculty: Atkinson (Human Resource Development), Ennamorati (Basic Studies), Kilroy (Theatre), Kimball (Education), Tizon (Geography \& Anthropology).

The Russell Scholars Program is a residential, undergraduate learning community of highly motivated students and faculty dedicated to the achievement of educational goals through collaborative learning, out-of-class activities, and community service. The Russell Scholars Program is designed for above-average-toexcellent students who wish to pursue their studies in a small learning community, and who wish to receive regular counseling in the mastery of critical thinking. Russell Scholars will develop a commitment to learning and community service, an ability to transfer competence, an intercultural knowledge, a personal and ethical integrity, and an ability to work as part of a team. Approximately 40 first- and second-year students from all majors are admitted to the Russell Scholars each year and work with their individual mentoring committees comprised of faculty and peer mentors, as well as guest mentors from the greater USM and public communities.

Russell Scholars have their own curriculum which satisfies many Core requirements and electives, in coordination with their regular major courses of study. Extensive co-curricular and social activities enrich the learning community experience. All Russell Scholars have at least one optional out-of-state or out-of-country learning experience for which they receive full academic credit. Russell Scholars reside at Woodward Hall, a newly remodeled residence hall located on the Gorham campus. Here students can study, socialize, attend seminars, concerts, and readings, and meet with mentors. There are frequent opportunities for Russell Scholars, their faculty members, and guests to discuss ideas and issues in a relaxed social setting. Special events in the arts, sciences, and humanities are regularly initiated and produced by Russell Scholars and are made available to the entire community.

To graduate as a Russell Scholar, a student must successfully complete two writing courses or equivalents, three RSP seminars, and six Learning Community Labs.

| First Year |  |  |  |
| :---: | :---: | :---: | :---: |
| RSP | 100C | Russell Scholars Writing | (3 credits) |
| RSP | 101C | Russell Scholars Independent Writing | (3 credits) |
| RSP | 102J | Russell Scholars Seminar IA | (3 credits) |
| RSP | 103I | Russell Scholars Seminar IB | (3 credits) |
| RSP | 110 | Learning Community Laboratory IA | (1 credit ) |
| RSP | 111 | Learning Community Laboratory IB | (1 credit ) |
| Second Year |  |  |  |
| RSP | 202E | Russell Scholars Seminar IIA | (3 credits) |
| RSP | 210 | Learning Community Laboratory IIA | (1 credit ) |
| RSP | 211 | Learning Community Laboratory IIB | (1 credit ) |
| Third Year |  |  |  |
| RSP | 300 | Russell Scholars Seminar III | (3 credits) |
| RSP | 340 | Global Campus | Variable credit |
| RSP | 310 | Learning Community Laboratory III | (1 credit ) |
| Fourth Year |  |  |  |
| RSP | 401 | Community Service Internship | Variable credit |
| RSP | 402 | Russell Scholar Capstone Seminar | (3 credits) |
| RSP | 410 | Learning Community Laboratory | (1 credit ) |

Many Russell Scholars courses will satisfy the USM Core requirements. Students should consult with their mentor conceming the use of additional Russell Scholars courses to satisfy additional Core curriculum requirements.

Some Russell Scholars courses may be counted toward the number of credits that departments require for graduation as a major. Students enrolled in the Russell

Scholars Program should consult with their departmental advisors concerning the use of Russell Scholars courses to satisfy departmental major requirements.

Admission to the Russell Scholars Program

Any full-ime, residential student in good academic standing is eligible to be a Russell Scholar. Other criteria for admission include: completion of application to the program, letters of recommendation, an application essay, and an interview with a member of the Russell Scholars faculty.

Students interested in the Russell Scholars Program must complete an applicaion separate from the application to the University. Those with questions about the Russell Scholars Program may call or write The Russell Scholars Program, University of Southem Maine, Woodward Hall, 37 College Avenue, Gorham, Maine 04038, (207) 780-5757 or 5751. Application materials will be forwarded upon request. Upon receipt of a completed application, students will be contacted for an interview, whiclı may take place in person or by telephone. Applications are acted upon as they are received; hence, they should be submitted as early as possible.

To remain in the Russell Scholars Program, a student must remain a full-time, residential student in good standing with the University; be enrolled in at least one course per semester in the Russell Scholars cirriculum; and demonstrate a genuine desire to remain in the program.

## RSP 100C Russell Scholars Writing I

This course is designed to prepare students for all areas of writing, with emphasis on mechanics and analysis of both student and professional writing. Writing assignments will reflect the issues examined in RSP 102J Russell Scholars Seminar, and the student's major field of study. In addition to providing students with opportunities to improve their use of language through multiple readings, writing assignments, and presentations, students will apply the writing principles discussed in class to their own compositions. Cr 3.

## RSP 101C Russell Scholars Independent Writing

This course is offered as a continuation of RSP 100C to help students define and meet their writing goals. Classes meet twice a week, but the course is conducted primarily in weekly individual conferences. Independent Writing emphasizes style, organization, and development, with some emphasis on mechanics. Students must exercise the self-discipline necessary to work independently. Cr 3.

## RSP 102J Russell Scholars Seminar: Self and Communication

This seminar will explore the process of self-discovery, building a foundation of self-knowledge, maintaining self-esteem, and communicating this inner self and personal vision to others in everyday life. It will examine issues ranging from the classic view of knowing one's self to practical concerns of effective interpersonal interactions. This seminar addresses several areas, including sociology, psychology, communication, and human growth and development. Due to the interdisciplinary nature of this course, it will be important to draw upon several sources which are written from a variety of disciplinary vantage points.

Cr. 3

## RSP 103J Russell Scholars Seminar: Culture and the Environment

This course will utilize scientific and humanistic anthropological theories and understandings to explore contemporary issues and dilemmas concerning the environment. It will consider values and approaches of different cultures in order to better understand the current problems of environmental damage and pollution, population growth, lifestyle impacts on ecology, ethnic conflict, and other threats to cultural survival and ecological balance. The seminar will attempt to analyze contemporary problems locally and globally, and to explore possible resolutions to these problems. An example of culturaltypes will be examined, including forager, agriculturalists, and industrial nation-states, in terms of their relationship with and values about the environment.

Cr 3 .

## RSP 104E Russell Scholars Seminar: Modes of Analysis and Critical Thinking

This course is designed to provide students with methods of analysis and tools for critical thinking. Students will examine inductive and deductive logic applied to problem definition, methods of analysis, and tentative conclusions. Using case studies and field experiences, students will learn to develop and critique arguments. In addition, students will leam to differentiate between arguments based on fact and arguments based on value. Library research, analysis of written and visual texts, and field projects serve to involve students in the process of analysis and critical thought. Students will make written and oral presentations of their findings.

Cr 3.

## RSP 105F Russell Scholars Seminar: Acting Performance

This course provides an introduction to performance skills and fundamental raining in acting techniques, including stage voice, movement, scene study, and
performance. Through lecture, performance assignments, improvisation, and scene study, the student will be introduced to the skills required to create a stage performance successfully.

Cr 3.

## RSP110 Russell Scholars Learning

 Community LaboratoryThis forum for all Russell Scholars will convene bi-weekly in a casual learning environment to address topics such as campus issues, current events, and student interests. Russell Scholars Lab also takes students out of the classroom atmosphere by integrating field trips to enhance the learning experience

RSP 111 Russell Scholars Learning
Community Laboratory
RSP 111 is a continuation of RSP $110 . \quad \mathrm{Cr} 1$.
RSP 210 Russell Scholars Learning
Community Laboratory
RSP 210 is a continuation of RSP $111 . \quad \mathrm{Cr} 1$.
RSP 211 Russell Scholars Learning Community Laboratory
RSP 211 is a continuation of RSP $210 . \quad$ Cr 1.
RSP 310 Russell Scholars Learning
Community Laboratory
RSP 310 is a continuation of RSP 211.
Cr 1 .

RSP 311 Russell Scholars Learning
Community Laboratory
RSP 311 is a continuation of $\operatorname{RSP} 310 . \quad \mathrm{Cr} 1$.

# Women's Studies 

Director: Nancy K. Gish, 94 Bedford St., Portland<br>Women's Studies Council: Cameron, Carroll, Chapkis, Cole, Deprez, Eagan, English, Feiner, Gish, Goldstein, Holden, Kent, Kissen, Laz, Loclridge, Long, MacPherson, McCall, Rosenthal,Tizon, Walker, Wininger

The women's studies major 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 pasts and on analyzing and re-thinking contemporary societies. Subject matter may include, for example, the philosophy of Simone de Beauvoir, the politics of Angela Davis, or the construction of race and gender in contemporary films. Courses also focus on such issues as gender construction of science, the effect of gender-biased language, inequities in work and pay, and the psycho-social development of women. Although women are central to the subject matter of women's studies courses, feminist analysis goes beyond specific issues of gender to challenge our traditional assumptions and histories. The women's studies major introduces students to new ways of thinking about such topics as technology, gender, and oppression. The program offers a major leading to a bachelor of arts degree. Students may also minor in women's studies.

Women's studies includes a core curriculum, WST sponsored topics courses, and departmental electives such as Earlier Women Writers, Sociology of Gender, or History of Women in the United States. 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. Women's studies students develop skills in analysis, critical thinking, writing, and practical application of theoretical understanding as well as a broad, integrated vision of society and culture.

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

## Programs and Requirements

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

The women's studies major consists of a minimum of 24 hours of required courses and 18 hours of women's studies elective or related courses.

Required Courses (select at least 24 hours)

| All of the following ( $\mathbf{1 5}$ hours) |  |  |
| :---: | :---: | :---: |
| WST | 130I | Introduction to Women's Studies |
| WST | 280 | Women, Knowledge, \& Power |
| WST | 380 | Politics of Difference |
| WST | 390 | Contemporary Feminist Theories |
| WST | 400 | Senior Seminar |
| Either of the following (3 hours) |  |  |
| WST | 485 | Internship |
| WST | 486 | Thesis |

One Topics Course from TWO of the following subject areas (6 hours)
WST 235 Topics in Gender \& Science, Technology, \& Health I
WST 335 Topics in Gender \& Science, Technology, \& Health II
WST 435 Topics in Gender \& Science, Technology, \& Health III
WST 245 Topics in Women, Culture, \& the Arts I
WST 345 Topics in Women, Culture, \& the Arts II
WST 445 Topics in Women, Culture, \& the Arts III
WST 255 Topics in Women, History, \& Resistance I
WST $355 \quad$ Topics in Women, History, \& Resistance II
WST 455 Topics in Women, History, \& Resistance III

| WST | 265 | Topics in Women, Gender, \& Institutions I |
| :--- | :--- | :--- |
| WST | 365 | Topics in Women, Gender, \& Institutions II |
| WST | 465 | Topics in Women, Gender, \& Institutions II |
| Women's Studies Elective and Related Courses: (at least 18 hours) |  |  |
| Any WST course may be used for elective credit. |  |  |
| Students must take one course focusing on periods before 1800 and one |  |  |
| dealing with cultures not in the Western mainstream. Students may take no |  |  |
| than three electives from one department or program. |  |  |
| WST | 220 | Topics in Women's Studies |
| WST | 230 | Psycho-social Development of Women |
| WST | 320 | Advanced Topics in Women's Studies |
| WST | 470 | Women's Studies Independent Study |
| ANT | 232 I | Anthropology of Sex \& Gender |
| ARH | $211 G$ | Gender Identity and Modern Art |
| ARH | 218 | Women in Art |
| BUS | 349 | Women and Management |
| COM | 484 | Women in Film |
| CRM | 317 | Gender and Crime |
| ECO | 322 | Economics of Gender and Discrimination |
| ENG | 379 | Earlier Women Writers |
| ENG | 387 | Contemporary Women Writers |
| ENG | 451 | Medieval Women Writers |
| GEO | 302 | Women, Work, and Space |
| HTY | 339 | European Women's History |
| HTY | 364 | History of Women inthe United States |
| HTY | 394 | History of Women in Maine |
| PHI | 110 E | Inroduction to Philosophy: Feminist Perspectives |
| PHI | 265 | Feminist Philosophy |
| PHI | 290 | Women Philosophers of Africa and the Diaspora |
| POS | 201 | Women and Politics |
| PSY | 235 | Psychology of Women |
| RUS | 281 H | Russian Literature in Translation: Women Writers |
| SOC | 316 | Sociology of Gender |
| SOC | 330 | Sociology of the Family |
| SOC | 358 | Sociology of Women's Work |
| SOC | 380 | Sociology of Sexuality |
| SWO | 456 | Women, Welfare, and the State |
| THE | 451 | 20th Century Women Playwrights |
| ANES | 650 | Women in Public |
| ANES | 665 | Sex \& Gender in New England |

## Minor in Women's Studies

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

The women's studies minor consists of a minimum of 9 hours of required courses and 9 hours of women's studies elective or related courses.

Required Courses ( 9 hours)
Both of the following (6 hours)
WST 130I Introduction to Women's Studies
WST $280 \quad$ Women, Knowledge, \& Power
Either of the following ( $\mathbf{3}$ hours)
WST $380 \quad$ Politics of Difference
WST 390 Contemporary Feminist Theories
Women's Studies Elective and Related Courses (at least 9 hours. Two of the courses must be at the 300 -level or above)

WST 220 Topics in Women's Studies
WST 230 Psycho-social Development of Women
WST 320 Advanced Topics in Women's Studies
WST 235 Topics in Gender \& Science, Technology, \& Health I
WST 335 Topics in Gender \& Science, Technology, \& Health II
WST 435 Topics in Gender \& Science, Technology, \& Health III
WST 245 Topics in Women, Culture, \& the Arts I

| WST | 345 | Topics in Women, Culture, \& theArts II |
| :--- | :--- | :--- |
| WST | 445 | Topics in Women, Culture, \& theArts III |
| WST | 255 | Topics in Women, History, \& Resistance I |
| WST | 355 | Topics in Women, History, \& Resistance II |
| WST | 455 | Topics in Women, History, \& Resistance III |
| WST | 265 | Topics in Women, Gender, \& Institutions I |
| WST | 365 | Topics in Women, Gender, \& Institutions II |
| WST | 465 | Topics in Women, Gender, \& Institutions III |
| WST | 470 | Independent Study |
| ANT | 232 I | Anthropology of Sex \& Gender |
| ARH | $211 G$ | Gender Identity and Modern Art |
| ARH | 218 | Wornen in Art |
| BUS | 349 | Women and Management |
| COM | 484 | Women in Film |
| RM | 317 | Gender and Crime |
| ECO | 322 | Economics of Gender and Discrimination |
| ENG | 379 | Earlier Women Writers |
| ENG | 387 | Contemporary Women Writers |
| ENG | 451 | Medieval Women Writers |
| GEO | 302 | Women, Work, and Space |
| HTY | 339 | European Women's History |
| HTY | 364 | History of Women in the United States |
| HTY | 394 | History of Women in Maine |
| PHI | $110 E$ | Introduction to Philosophy: Feminist Perspectives |
| PH | 265 | Feminist Philosophy |
| PHI | 290 | Women Philosophers of Africa and the Diaspora |
| POS | 201 | Women and Politics |
| PSY | 235 | Psychology of Women |
| RUS | 281 H | Russian Literature in Translation: Women Writers |
| SOC | 316 | Sociology of Gender |
| SOC | 330 | Sociology of the Family |
| SOC | 358 | Sociology of Women's Work |
| SOC | 380 | Sociology of Sexuality |
| SWO | 456 | Women, Welfare, and the State |
| THE | 451 | 20th Century Women Playwrights |
| ANES | 650 | Women in Public |
| ANES | 665 | Sex \& Gender in New England |
|  |  |  |

## 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 major. Courses taken pass/fail are not acceptable. Admission to the major requires a GPA of 2.5.

## Curriculum Summary and Guide

The women's studies curriculum is built upon a shared commitment to the principles of educational excellence and educational opportunity. It is structured to ensure that students are exposed to the sophisticated body of knowledge that now defines women's studies as a discipline, even while allowing students the opportunity to develop shills in research, writing, and analysis. Consequently, there are prerequisites for upper-division courses. The first-year student is encouraged to complete Core curriculum requirements, including Introduction to Women's Studies. In the second year, students should take Women, Knowledge, \& Power, followed by Contemporary Feminist Theories and Politics of Difference. Students who minor in another discipline should also begin the suggested sequence in that year. Third-year schedules should include at least two women's studies-sponsored topics courses, drawn from two of our four subject areas. Thus a student might take WST 335 Topics in Gender \& Science, Technology, \& Health I, in the fall,
and WST 465 Topics in Women, Gender, \& Institutions III, in the spring. While any course offered under these categories will address the general goal outlined in the catalog, the specific content of the topics courses will change from semester to semester. Course descriptions by individual instructors will therefore be published and distributed during the preregistration period. Fourth-year students should take the Senior Seminar and should follow either the internship or thesis option. These courses offer advanced experience in feminist theories, research, and practice, while allowing students to pursue their own interests under careful guidance. Students must also complete elective requirements and any minor requirements in their fourth year.

## Declaration of Major

Students are encouraged to explore a variety of disciplines and courses before declaring a major in women's studies: they should take a minimum of 30 hours of Arts and Sciences courses, including at least one women's studies course.

## WST 1301 Introduction to Women's Studies

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

Cr 3 .

## WST 280 Women, Knowledge, \& Power

This course examines the ways in which the politics of knowledge production shape our culture and its gender relations. It explores both the role of educational institutions as they function to promote antifeminist culture, and the ways women have historically resisted, subverted, appropriated, and reformed raditional bodies of thought. Throughout, attention will be given to how competition, intimidation, and other factors can inhibit the formation of feminist communities of scholars/learners. Students will practice and be encouraged to appreciate the benefits of different modes of interpretation and writing, including personal narrative, sociohistorical work, and contemporary cultural analysis. Prerequisites: WST 130 I or permission of instructor. Offered fall semester.

Cr 3.

## WST 380 The Politics of Difference

This course will introduce students to some of the complex relationships among the histories and goals of Western feminisms and those of specific nondominant cultures, inside or outside the United States. Central to the course are the ways that "differences" are embedded and enacted in the context of power relations in the larger society. While the specific content of this course is flexible, it will
reat the advantages and disadvantages of using race, ethnicity, class, and sexuality as categories of analysis. Assignments should reinforce those skills learned in WST 280. Prerequisites: WST 280 or permission of instructor. Offered every third semester.

Cr 3.

## WST 390 Contemporary Feminist Theories

This course will introduce students to the efforts of many academic feminists to organize, appropriate, and/or subvert what is sometimes termed "poststructuralist" thought, an enormous body of knowledge that, although generated largely in France, Italy, Great Britain, and North America, has often affected non-Western feminisms as well. The focus of this course will vary depending on the instructor, but it should be based on the intimate relationships between feminist theories and feminist practice. At least one section of this course will be devoted to focused political analysis of a single subject: pornography, free speech and censorship, reproductive technologies, sexual harassment, pay equity, domestic violence, etc. Students will be asked to write a theoretically informed research paper on a topic of their own choosing. Prerequisites: WST 280 or permission of instructor. Offered spring semester.

Сг 3 .

## WST 400 Senior Seminar

The seminar will allow students to explore a topic in some detail. Topics will change from semester to semester, but each will be broad enough to support and generate divergent approaches and points of view. Possible topics include "Women and the Law," "The Ethics of Care," "Post-colonial Feminisms," "Women and the Politics of Community," "Feminist Aesthetics," "Science and Technologies of Reproduction." Students will be asked to write a research paper on a topic of their own choosing. Prerequisite: senior standing.

Cr 3 .

## WST 485 Internship

Students will have the opportunity to do an internship or a thesis. The internship requires students to work closely with a group, business, or organization for one semester, after which they will report to the Women's Studies Council. Prerequisites: senior standing and women's studies major or minor.

Сг 3-6.

## WST 486 Thesis

Students will have the opportunity to do a thesis or an internship. The thesis allows students to pursue guided research on a topic of their choosing. The minimum length for a thesis is 30 pages, and it should include a substantial bibliography. Thesis students should choose three readers, including an advisor whose interests and scholarship are in line with their own. Prerequisites: senior standing and women's studies major or minor.

Cr 3 .

## Topics Courses

## WST 235, 335, 435 Topics in Gender \& Science, Technology, \& Health I, II, III

Courses in this category will include a critique of traditional science, technology, and medicine; representation of feminist possibilities and communilies at work on issues of knowledge, health, and power, reconstructions of science, technology, and health care based on new theories and practices. Each of these courses will ask similar questions: How have scientific thinking and gendered technologies affected women's bodily experience? Is sciencefiction coming to pass in new reproductive technologies and genetic projects? How has science's view of the female and feminine been problematized by reading works of fiction? Can feminists escape the difficulties of writing about or prescribing for others? Does science create racial as well as sexual subjects? How can it be used (to quote bell hooks) to "talk race and fight racism?" Prerequisite: WST 435 requires permission of the instructor.

Cr 3.

## WST 245, 345, 445 Topics in Women, Culture, \& the Arts I, II, III

Courses in this category will examine some aspect of women's relationships to specific vehicles of "culture," including the plastic, literary, and performing arts. They may focus on women as producers of culture; on how women and femininity have been represented in written, visual, or oral texts; or on feminism and cultural or aesthetic theory. Possible subjects may include feminist philosophy, feminism and film theory, women and the history of music, women and popular culture. Prerequisite: WST 445 requires permission of the instructor.

Cr 3.

WST 255, 355, 455 Topics in Women, History, \& Resistance I, II, III
Courses in this category will explore the political worlds of women in general, and laboring women in particular, which have often been obscured by tradivional histories that narrowly define politics as a set of formal institutions and practices. These courses explore forms of female activism located not only in governments, political parties, and unions but also in female collaborative activities and grassroots organization. Emphasis will be placed on the relationship between female activism and social, economic, and cultural change. Topics include women in third world struggles for national liberation; working class women in contemporary and historical movements; struggles for equal rights; the nineteenth century women's movement; women in peasant revolts; everyday forms of female resistance; union organizing; women and the politics of identity. Prerequisite: WST 455 requires permission of the instructor.

Cr 3.

## WST 265, 365, 465 Topics in Women, Gender, \& Institutions I, II, III

Courses in this category will focus on gender relations and the construction of the category "women" in the context of social structures and institurions. Both social structures and institutions are based on and reinforce assumptions about sex and gender, women and men, and masculinity and femininity. And both ultimately shape the experiences of women and men in society. These courses will examine the experiences of women and men as gendered beings and the way those experiences follow from, perpetuate, and/or alter institutions. The emphasis may be on industrial or non-industrial societies, and instutions for analysis will vary. Possibilities include law and legal institutions, economic instutions, subsistence strategies in nonindustrial societies, systems of stratification, conceptual systems, and education. Prerequisite: WST 465 requires permission of the instructor. Cr 3.

## Elective Courses

## WST 220 Topics in Women's Studies

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 230 Psycho-social Development of Women

This course is designed to introduce, investigate, and critique raditional developmental theory as well as the current research which seeks to expand the basic lenowledge 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 320 Advanced Topics in Women's Studies

Advanced 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 470 Independent Study

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

Cr 3.

## College of Arts and Sciences

## Departmental Organization

Dean: Stephen Worchel; Associate Deans: Julien Murphy, Richard West; Director of Student Academic Affairs and Administration: Margaret A. Fahey; Coordinator of Scheduling: Maurice J. Chabot; Academic Counselor/Manager CAS Advising: Pamela Edwards

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.

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

| Art | History |
| :--- | :--- |
| Biological Sciences | Mathematics and Statistics |
| Chemistry | Music |
| Communication | Philosophy |
| Criminology | Physics |
| Economics | Political Science |
| English | Psychology |
| Environmental Science and Policy | Social Work |
| Foreign Languages and Classics | Sociology |
| Geography-Anthropology | Theare |
| Geosciences |  |

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 the Department of Geosciences; and bachelor of music in performance (B.M.) and bachelor of music in music education (B.M.) is offered by the Music Department.

| Art | History |
| :--- | :--- |
| Biology | Mathematics |
| Chemistry | Music |
| Communication | Philosophy |
| Criminology | Physics |
| Economics | Political Science |
| English | Psychology |
| Environmental Science and Policy | Sociology |
| French | Social Work |
| Geography-Anthropology | Theare |
| Geosciences |  |

Self-Designed
a) Group Contract: Biotechnology
Classical Studies
ForeignLanguages
French Studies
German Studies
Hispanic Studies
b) Individual Contract

International Studies
Linguistics
Media Studies
Russian Studies
Social Science

Requirements for all Baccalaureate Degree Candidates

Associate of Arts Degree<br>Program in Liberal Arts ( 60 credits)

## Other Educational Opportunities

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 produceevidence (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 section on Core curriculum

## Departmental or Program Requirements

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. Students are required to complete mathematics and English proficiencies prior to declaring a major in the College of Arts and Sciences.

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 Career Services 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. Graduates of this program may ransfer 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 section 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 conribute 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. Gen-
eral guidelines for the independent study term may be obtained from departments.

## Double Majors

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

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

## School of Applied Science Minors

The School of Applied Science offers minors in computer science, electrical engineering, and industrial technology. Industrial technology minors include concentrations in computer applications, environmental safety and health, industrial management, and manufacturing technology. For more information, see the School of Applied Science section of this catalog.

## Teacher Certification

Students who wish to prepare for a career in teaching at the elementary, middle, or secondary levels work with both the College of Arts and Sciences and the College of Education and Human Development through the Extended Teacher Education Program (ETEP), which offer coursework and experiences at the undergraduate and post-baccalaureate levels.

Undergraduates who seek teacher certification follow these steps:

1. Undergraduate Level
a. College of Arts and Sciences: Students complete a baccalaureate degree with a major in the liberal arts, in a subject related to the desired teaching level and subject;
b. College of Education and Human Development: Students complete the 18 -credit minor in educational studies (recommended, but optional)
2. Post-Baccalaureate Level College of Education and Human Development
a. Complete the one-year certification program (approximately 33 graduate credits)
b. Complete the master of science in education degree (optional-an additional 18 credits taken over two years during the summer and on weekends)
Additional information on the Extended Teacher Education Program can be found in the College of Education and Human Development 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 American and 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.

## ARS 100 Exploring Careers in the Liberal Arts and Sciences

This course is designed for students participating in the University's Cooperative Education Program. In addition to their cooperative education placement, students will read texts, meet for a series of seminars, keep journals, and write a final paper. The focus of these activities is to help students integrate knowledge gained both in the classroom and through independent study with observations and experiences obtained in the field. Offered on a pass/ fail basis. May be repeated for credit, up to a maximum of 12 credits.

Cr 3-6.

## ARS 123 Topics of Human Sexuality

The purpose of this course is to provide individuals with a thorough understanding and accurate information conceming 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 atlitudes, 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.

Сг 3.

## ARS 223 Attitudes: Human Sexuality

The purpose of this course is to allow individuals to better understand their sexual feelings, attitudes, and relationships. Emphasis will be placed on developing shills necessary in dealing with one's own
sexuality, as well as the sexuality of others. Topic areas will include sexual communication skills, body images and sensory awareness, values clarification, male and female sexual identity, sexual assertiveness, overcoming sexual dysfunctions, sexual lifestyles, understanding sexual deviancy, sexual scripting. The course will rely heavily on lecture, group process, and role playing. Cr 3.

## SDM 400 Senior Thesis for Self-Designed Majors

This course provides senior SDES independent contract majors an opportunity to receive credit for the required senior thesis or project. Thesis or project must be developed in consultation with student's faculty advisors and approved in advance by the SDES Committee. Prerequisites: admission to self-designed major program and senior standing. Cr 1-6.

## SDM 401 Senior Seminar in Social Science

The capstone to the major and required for the degree, this seminar explores the nature and the craft of social science. The topic will vary but will always be a particular theme or set of issues that span various social science disciplines, such as Competing Methodologies in Social Science, Ethnohistory, United States Studies, etc. Students are expected, through discussion and writing, to apply the lnowledge and skills acquired in previous social science courses. Prerequisite: The course is open only to social science majors or students majoring in one of the eight disciplines that make up the social science major. Students must also be seniors or second semester juniors.

Cr 3.

# Self-Designed Major Programs 

Self-Designed Major Committee: Conway, Harris, Johnson, Kilroy, LangleyTumbaugh, O'Mahoney-Damon, Suscavage, West

The self-designed major program allows students to receive a bachelor of arts degree. This program offers many opportunities for students to study traditional subjects as well as new fields of inquiry that the University does not offerthrough existing deparments. The mulidisciplinary format of self-designed majors allows students the flexibility of pursuing their educational interests in a topical or thematic context rather than through an established discipline.

There are two types of self-designed major programs, (a) individual contract and (b) group contract programs. Students may work for a self-designed major degree through either type of program. All programs are approved and administered by the Self-Designed Major Committee.

## A. Individual Contract Programs

The individual self-designed major allows the student to design a multidisciplinary program not available through a department major or a group contract program. The Self-Designed Major Committee reviews student proposals at its regularly scheduled meetings throughout the academic year. Proposals should be approved normally during the student's sophomore year. 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 | International Studies |
| :--- | :--- |
| Classical Studies | Linguistics |
| Foreign Languages | Media Studies |
| French Studies | Russian Studies |
| German Studies | Social Science |
| Hispanic Studies |  |

Students interested in any of the above programs should contact the coordinator of that group contract program for more information.

## Biotechnology

Coordinator: Ah-Kau Ng, 117 Science Building, Portland and Foundationfor Blood Research, Scarborough
Steering Committee: Duboise, Gainey, Knight, Ng, Pelsue, Rhodes, Ricci, Weber
The biotechnology self-designed major is an interdisciplinary degree program designed to provide students with a liberal arts education emphasizing cellular and molecular biology.

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.

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.

The minimum number of credits (exclusive of the University's Core curriculum) required for the self-designed major in biotechnology: 82 or 84 .

Biology (39 credit hours)
2 semesters Freshman Biology (BIO 105K, 106K, 107, 108)
Genetics (BIO 301)
Genetics Laboratory (BIO 302)
Microbiology (BIO 311, 312)
Cell and Molecular Biology (BIO 409, 410)
Immunology (BIO 499/AIM 599)
Cellular Immunology Laboratory (AIM 511/611)
Molecular Immunology Laboratory (AIM 521/621)
Molecular Biology (AIM 530/AIM 670)
Molecular Biology Laboratory (AIM 531/AIM 671)
Chemistry ( 27 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)
Physics (8 or 10 credit hours)
2 semesters Introductory Physics (PHY 121K, 122K, 123, 124 or PHY 111K, 112)
Mathematics ( 8 credit hours)
1 semester Calculus (MAT 152D)
1 semester Staistics (MAT 220)

## Classical Studies (Concentration in either Greek or Latin)

Coordinator: Peter Aicher, 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 grade requirements, please refer to the Foreign Languages and Classics section of this catalog.

For the concentration in Latin, the studentakes 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:

| CLA | 283H | Epic Hero |
| :--- | :--- | :--- |
| CLA | 284H | Tragic Hero |
| CLA | 285I | Classical Mythology |
| CLA | 291I | Golden Age of Greece |
| CLA | 292I | Rome, from Republic to Empire |

Also, the student chooses two courses from the following electives:

| ARH | 111 G | History of Art I |
| :--- | :--- | :--- |
| ARH | 212 | Classical Art |
| HTY | 303 | History of the Ancient NearEast and Greece |
| HTY | 304 | History of Rome |
| PHI | 310 | Ancient Philosophy |
| POS | 390 | Political and Social Thought I |

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 or 38 , depending on the selection of languages. For grade requirements, please refer to the Foreign Languages and Classics section of this catalog.

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:

French: FRE 301, 302, 331, 291I, or 292I; and 367, 369
German: GER 321, 322, 351H, 352H, 281H, 470
Greek: GRE 251, 252, two semesters of GRE 470, CLA 291I or HTY 303, and either CLA $283 \mathrm{H}, 284 \mathrm{H}$ or 285 I

Latin: LAT 251, 252, two semesters of LAT 470, CLA 292I or HTY 304, and either CLA 283 H or 284 H
Russian: RUS 281H, 301, 302, 321, 351, 470
Spanish: SPA 303, 331*, 332*, 351H, 352H; 281H or 270 I or 450
(*SPA 301, 302 are prerequisites)
In addition, it is strongly recommended that students take CLA 171 or an IndoEuropean linguistics course.

## French Studies



## 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. For grade requirements, please refer to the Foreign Languages and Classics section of this catalog.

German Language and Literature

| GER | $321-322$ | Composition/Conversation |
| :--- | :--- | :--- |
| GER | $351 \mathrm{H}-$ |  |
|  | 352 H | Introduction to German Literature |
| GER | 281 H | The German Novelle |
| GER | 470 | Independent Study |
| ocial 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 three) |  |  |
| :--- | :--- | :--- |
| CLA | 171 | Etymology for Everyone |
| CLA | 283 H | The Epic Hero in Ancient Literature |
| CLA | 284 H | The Tragic Hero in Ancient Literature |
| CLA | 285 H | Classical Mythology |
| ENG | 332 | Introduction to Linguistics |
| ENG | 341 | Contemporary Critical Theories |
| ENG | 316 | The Bible |
| PHI | 340 | History of Late Modern Philosophy |
| Course substitutions can be made in the Social Sciences and Humanities cat- |  |  |
| egories 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. For grade requirements, please refer to the Foreign Languages and Classics section of this catalog.

Required Courses
Spanish Language and Literature

| SPA | $* 301$ | Practice in Conversation |
| :--- | :---: | :--- |
| SPA | 302 | Practice in Writing |
| SPA | 303 | Speaking Through Reading |
| SPA | $* 331$ | Advanced Conversation |
| SPA | 332 | Advanced Grammar and Stylistics |
| SPA | 351 H | Readings in Contemporary Spanish Literature |
| SPA | 352 H | Readings in Modern Latin American Literature |

History and Culture
SPA 270I The Culture and Civilization of Spain
HTY 181I History of Latin America I
HTY 182I History of Latin America II
*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)

| SPA | 281 H | Masterpieces of Spanish American and Brazilian <br> Literature (in English translation) |
| :--- | :--- | :--- |
| SPA | 450 | Topics in Hispanic Language and Literature |
| HTY | 381 | Latin America and the United States |
| HTY | 383 | The Society and Culture of Latin America |
| ECO | 370 | International Economics |
| GEO | 220 | International Geography |
| ANT | 205 | Latin American Cultural History |
| ANT | 250 | Archaeology of South America |

At least two semesters of another Romance language are strongly recommended. Course substitutions can be made in the electives upon prior approval.

## Russian Studies

Coordinator: Charlotte Rosenthal, 55 Exeter Street, Portland
The minimum number of credits (exclusive of the University's Core curriculum) required for the self-designed major in Russian studies: 36. For grade requirements, please refer to the Foreign Languages and Classics section of this catalog.

Humanities

| RUS | 281H | Russian Literature in English Translation |
| :--- | :---: | :--- |
| RUS | 291I | Russian Culture and Civilization (in English) |
| RUS | 301 | Advanced Intermediate Russian I |
| RUS | 302 | Advanced Intermediate Russian II |
| RUS | 321 | Advanced Russian |
| RUS | 351 | Seminar in Russian Literature |
| RUS | 470 | Independent Study |
| Social Sciences* |  |  |
| HTY |  | 317 |


| HTY | 318 | Russia and the Soviet Union since 1855 |
| :--- | :--- | :--- |
| POS | 336 | Govemment and Politics of Russia |

POS $\quad 336$ Govemment and Politics of Russia
POS 339 Russian Foreign Policy
Other courses recommended, but not required, for the self-designed major in Russian studies:

| POS | 104J | Introduction to Intemational Relations |
| :---: | :---: | :---: |
| POS | 337 | Post-Leninist Politics |
| HTY | 101 I | Westem Civilization I |
| HTY | 102I | Westem Civilization II |
| GEO | 101J | Principles of Geography |
| SOC | 311 | Social Change in Eastem Europe |
| *Note that all upper division courses have prerequisites. |  |  |

## International Studies

International Studies Council: Woshinsky, director; Bjelic, Holden, Medley, Rogoff, Rosenthal, Tizon, Williams, Wininger

The Intemational Studies program serves students interested in world affairs. A wide range of students with a diverse set of interests in global issues will find the program adaptable to their needs. It prepares graduates for a varied set of careers in intemational affairs. Students may go on to work in government, business, intergovemmental organizations, nonprofit institutions, and teaching. From the broadest perspective, intemational studies nurtures a solid understanding of world problems. It provides the analytical skills for understanding vital issues of the emerging global community.

To receive the bachelor's degree with a specialization in international studies, a student must complete a minimum of 120 credits. These include all University proficiency and Core requirements, competency (to third-year level) in a foreign language, and 48 hours of coursework within the intemational studies program.

The 48 credits within the program must be distributed as follows:
24 hours taken from the list of approved courses (see program director) in one of the program's Core departments: political science, economics, history.
9 hours of approved courses in each of the program's other two Core departments. Note that at least two courses taken in economics must be at the 300level; at least two courses in political science must be at the 200-level; and in history two courses other than Westem Civilization I and II must be taken.
6 hours of approved courses taken in at least $t w o$ of the other departments which participate in this program. INS courses, as well as certain COR courses (see program director), count toward this requirement as credit from one participating department.
In addition to the courses listed above, students must achieve competency in a foreign language through the third-year level. This competency may be achieved through coursework at USM, through transfer credits from another university, through some intensive summer study program at an American university, through study abroad, or through background (having lived abroad, being a foreign student, etc.)

In all cases of doubt, the final decision as to whether a student has completed the program's language requirement rests with the USM Department of Foreign Languages. Students who can show that they have achieved at least third-year level in some language other than English need take no foreign language courses at USM, although they may do so if they wish. Only courses above third-year level in any language will count toward the 48 -hour requirement for this major.

Once a year, the director of the International Studies program will issue a minicalendar listing all USM courses acceptable for requirements in this major. Students must refer to this calendar when choosing courses. The director may, in rare cases, decide that a course not listed in the mini-calendar could fulfill a particular student's major requirements. For example, a new COR course with an intemational focus might qualify as an exception, or some experimental offering under the 199 designation. Exceptions of this sort are unusual; they must be given by the director to the student in writing, with a copy placed in the student's files.

Those students who wish to undertake independent research projects may do so with INS 480 and INS 481 . Exceptional students will be encouraged to do a senior thesis. This endeavor will provide six hours of academic credit and will normally
result in a sound, scholarly paper of $50-$ plus pages. A final defense of the paper, involving three faculty readers, is required. Students awarded a grade of at least 90 on the thesis will be recognized as having graduated "With Honors in Intemational Studies."

For admittance into the program, the student must have:
completed a minimum of 30 credit hours in arts and sciences. Of these, at least 15 credit hours must be completed in CAS courses at USM;
achieved a GPA of 2.5 or better in USM courses, including a minimum of 2.8 or better in CAS courses at USM;
completed USM's minimum proficiency requirements.
To graduate from this program, the student:
must have completed 48 hours of coursework, distributed in the manner described above;
must have attained a GPA at USM of 2.5 or better, including a GPA of 2.8 or better in CAS courses at USM;
must have attained grades of C - or higher in all international studies courses, including courses in foreign language. No course taken on a pass/fail basis will count toward this major.

Students who wish to graduate with honors in this major must: maintain a GPA of 3.2 or better;
be recommended by a faculty member who teaches courses within the program, one who is willing to supervise a thesis;
be approved by the program's Council of Faculty Advisers;
take six hours of coursework, beyond the 48-hour minimum, under the Independent Study and Senior Thesis designations;
write a thesis of approximately 50 pages, then present it to, and defend it before, a committee composed of three faculty members approved by the director of the program;
obtain a grade of 90 or better on the thesis, as determined by the three faculty members who read it and hear the student's defense.

In the special case of students who complete a thesis, but obtain a grade of less than 90 (or students who complete a thesis with a grade of 90 or better, but whose final GPA drops below 3.2), those students will still receive six hours of course credit for their thesis work, even though they will not be able to graduate with honors. A student's grade for those six hours of coursework will be determined by the thesis committee. A thesis grade of less than C - cannot count toward completion of any requirements within the Intemational Studies program.

All students in this program are slrongly encouraged to engage in a program of study abroad. A summer, a semester, or even a year or more abroad will greatly enhance any student's understanding of world affairs. The director will work closely with any student who wishes to explore this option and will make every effort to facilitate this possibility for the student.

## INS 480 Independent Study I

This course is intended for advanced students in intemational studies who want to develop their research skills and lnowledge of particular subjects 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 the program. Prerequisite: advanced standing in the program.

Cr 3.

## INS 481 Independent Study II

This course is intended for the exceptional student who wishes to carry out two independent study projects during an undergraduate career. The course description and prerequisites are identical to those given above for INS 480.

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 intemational scope. For internship arrangements and course responsibilities, consult the director of
the program. This course is open only to advanced students in intemational 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. Students will engage in intensive analysis of classical and current works. Prerequisite: advanced standing in the program or permission of the instructor.

Cr 3.

## INS 495 Senior Thesis

Selected students in intemational studies program will be encouraged to write a senior thesis. The topic should be chosen in consultation with a faculty advisor. Normally, it will be a two-semester project for the student's senior year. Extensive collaboraion between student and thesis advisor is expected. The final paper should be approximately 50 pages in length and will be evaluated by a committee consisting of the thesis advisor and two additional faculty members appointed by the program director.

Cr 3.

## Linguistics

## Requirements

Coordinators: Wayne Cowart and Dana McDaniel, 65 Exeter Street, Portland Linguistics Council: Bjelic, Cowart, K. Gilbert (Me. Med. Ctr.), Kinsella, McDaniel, W. Nye, (Baxter School for the Deaf), Rusch, Tizon, Wood

Language plays a crucial role in almost every aspect of human life. It is fundamental to commerce, government, education, science, technology, the arts, and the mass media. The field of linguistics is devoted to the study of language, its nature, its uses, and its limitations. Because of its wide relevance, undergraduate study in linguistics can be a springboard to careers in many areas.

The Linguistics program is targeted on two career areas where linguistics is of practical relevance. One of these includes certain health and social service professions, particularly language disorders, speech and language therapy, audiology, and services for the Deaf. Another area is education, particularly such specialties as learning disabilities (such as dyslexia), literacy education, English as a Second Language, Deaf education, and foreign language teaching. In all of these areas there are entry-level positions for which graduates may qualify with an appropriately designed major in linguistics. In each case, however, students must consult carefully with the faculty to determine what particular requirements they must satisfy to pursue particular careers. Appropriate programs can also be designed for students with interests in computer science (user interface design, speech recognition, parsing, database query systems, etc.), government and law (intemational law, interpretation of legal codes, treaties, texts, etc., language policy, diplomacy, ranslaion, etc.), and other areas. Among the areas of graduate study where a background in linguistics can be valuable are (in addition to linguis ics itself) cognitive science, psychology, foreign languages, speech science, computer science/artificial intelligence, anthropology and philosophy.

The goals of the program are 1) to help each student develop an understanding of the nature of natural language, and 2) to help each student compile a record of achievement that will facilitate the student's search for employment or further education.

Number of credits required to complete the self-designed major in linguistics: 45 (exclusive of the Core curriculum). To enroll in the program, students must have completed LIN 185 J with a grade of at least B.
a. Linguistics Core: LIN 185J, LIN 311-314 (15 hours)
b. Research component: LIN 390, LIN 498 (6-9 hours, depending on whether LIN 498 is taken once or twice). Note that the statistics prerequisite for LIN

390 does not count toward the 45 -hour requirement.
c. Language component: For these purposes, a second language is any natural language other than the student's native language. Linguistics majors must demonstrate competency in a second language up to at least the level expected of students completingfour semesters of study of that language. Students who have not mastered another language before entering the program may apply up to 12 hours of language study toward the satisfaction of the 45 -hour requirement in linguistics. Students who come to the program having already demonstrated competency in a second language (e.g., native speakers of some language other than English) may apply up to 12 hours of further language study to the 45 -hour requirement, or may take an additional 12 hours of approved linguistics electives. The language requirement can be waived on a case by case basis for students who (in addition to the linguistics major) complete a major or minor in certain language-related areas, such as computer science, psychology, philosophy, or English. (0-12 hours)
d. Electives: From 9 to 24 hours of electives will be required to meet the 45hour requirement for the program. A minimum of two elective courses must be drawn from courses whose primary focus is linguistic. These include, for example, the series of 400 -level LIN courses and the series of linguistics courses offered by the English Department (specifically, ENG 330, ENG 331, and ENG 336).
Scheduling: In the ideal case, students should enroll in the program before registering for the second semester of the sophomore year.

Once admitted to the major, the student should take LIN 311, LIN 312, LIN 313, LIN 314, and an approved statistics course (MAT 120D or PSY 201D) at the earliest opportunity. The research methods course (LIN 390) should be taken during the spring of the student's junior year.

During the fall of the senior year, the student should enroll for thesis hours. At the end of the fall semester of the senior year, the student must submit a researchbased thesis to the linguistics program faculty. It is intended that this paper will be available as a credential when students are applying to graduate school. Early in the spring semester of the student's junior year, the student should select a thesis advisor with whom to work on the thesis project. Faculty members from all relevant departments may serve as thesis advisors, subject to the approval of the Linguistics Council.

Students enrolled in the program are expected to maintain regular contact with the program faculty and to participate in or attend various program events (guest lectures, colloquia, etc.) that will be scheduled from time to time.

Electives: Electives may be drawn from courses offered by a wide variety of other departments and programs. The student must consult with his or her advisor in composing a coherent set of electives. Special care should be taken in this matter. The elective courses chosen should support the thesis work the student expects to do. There should be a clear relation between the selected electives and some identifiable theme within the study of language. Possible areas of focus include (but are not limited to): language and human development, language disorders, psychology of language, speech and phonetics, signed language, grammar of English or linguisic perspectives on English or a foreign language, syntax, language change, language and evolution, computational linguistics, philosophy of language, sociolinguistics, etc.

## Minor in Linguistics

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

A minor in linguistics consists of LIN 185J, at least three courses from LIN 311-314, and two electives. Electives may be drawn from the list of 400-level LIN courses or the list of approved linguistics electives in English and other programs. Students may also use one course in the series LIN 111I-202 as an elective toward the minor in linguistics.

## LIN 111I Language Learning and Bilingualism

Most of the world's people have a daily need to produce and understand one or more languages beyond their native language. In short, most of the people in the world are to some degree bilingual. This course reviews some of the many aspects of bilingualism. These include the effects that a first language exerts on second and later languages, the psychology and neurology of bilingualism, and the social and political aspects of being bilingual.

Cr 3.

## LIN 112E Analyzing Language

In this course students will become aware of their tacit knowledge of the rules and principles that guide language usage. They will learn how to formulate these rules and how to test and evaluate claims about the form that the rules take. Students will thereby develop shills in analysis and argumentation that are applicable in many areas of study. The course will concentrate on the analysis of sentence structure, but will also deal with the sound system, word structure, meaning, and language acquisition.

Cr 3 .

## LIN 113J Origins of Language

The course provides a rigorous examination of two views about how humans developed the ability to use language. One view is that language was deliberately invented and relies on human capacities whose original "purpose" had nothing to do with language. Another is that language ability depends upon specific biological traits that emerged because of their contribution to language. This debate leads to a variety of questions about the nature of language, the functions it serves, and the way children acquire it. The course draws on many kinds of evidence, from fossil skulls to patterns of change in modern languages over the last several hundred years.

Cr 3.

## LIN 121 Beginning American Sign Language I

This is a beginning course in American Sign Language (ASL). It will include extensive study of receptive and expressive use of ASL, as well as an introductory discussion of Deaf culture. Course content covers basic principles in the use of sign, sign vocabulary, and aspects of the grammar of ASL. In addition to class sessions, students will use written and videotape materials out of class.

Cr 3.

## LIN 122 Beginning American Sign Language II

This is the second beginning course in American Sign Language (ASL). Prerequisite: LIN 121 or equivalent.

Cr 3.

## LIN 185J Language, Mind, and Society

This course approaches language as a biological and psychological phenomenon central to an adequate understanding of human nature. It deals with
linguistic questions concerning the grammars of natural languages and how these may vary across cultures and across time, but also with questions about how the human mind and brain both provide for and constrain linguistic ability. The course also addresses questions about how language develops in the child, how it deteriorates under the influence of disease and injury, how it evolved in the history of the species, and what functions it plays in human life. The course does not assume any background in linguistics or foreign languages. Cr 3.

## LIN 201J Child Language

An introductory overview of the phenomena of communication and language development. The course deals with the process by which children become able to understand, to speak, and to use effectively their native language. It touches on the development of the sound system, word learning, the emergence of sentence structure, and the development of communicative competence. Cr 3.

## LIN 2021 Languages of the World

An introductory overview of the world's languages. This course is intended to convey a sense of the diversity of human language and exposes students to some of the great variety of sound systems, wordbuilding systems, sentence patterns and communicative practices that are found across the thousands of linguisic communities in the world today. The course looks at the deep commonalities that unite diverse linguistic systems. The historical relationship and sociopolitical status of languages are also discussed.

Cr 3.

## LIN 221 Intermediate American Sign Language I

This is the third in a four-course sequence in American Sign Language (ASL). The course includes extensive work on receptive and expressive use of ASL. It emphasizes the grammatical structure of ASL, particularly its morphology, syntax, and semantics. In addition to class sessions, students will use written and videotape materials out of class. Prerequisite: LIN 122 or equivalent.

Cr 3.

## LIN 222 Intermediate American Sign <br> Language II

Continuation of LIN 221. Prerequisite: LIN 221 or equivalent. Cr 3.

## LIN 231 Introduction to InterpretingASL/ English

This course provides an overview of the field of ASL/English interpretation. Emphasis is placed on exploring interpretation as a career option by identifying requisite responsibilities, skills, and aptitudes; the process of becoming an interpreter; employment options; and current issues in the field. Prerequisites: LIN 185J and LIN 121; or permission of the instructor.

Cr 3.

## LIN 311 Phonetics

An introduction to speech sounds, covering the
basic elements of articulatory and acoustic phonetics and of speech perception. The course also reviews the process by which infants come to be competent at perceiving and producing the sounds of their native language. Topics discussed will also include the contributions of selected brain regions to the use of sounds and the cross-linguistic variation in sounds. Prerequisite: LIN 185J. Cr 3.

## LIN 312 Phonology and Morphology

An introduction to the derivation of words in natural language. The course covers the sound system, the processes by which words are dynamically derived from other words, and the processes by which words are inflected to mark the roles they assume in sentences. Particular attention is also given to the great variety of word-building systems that occur in the world's languages and to the means by which children acquire the phonological and morphological processes of their native language. Prerequisite: LIN 185 J .

Cr 3.

## LIN 313 Syntax

This is an introduction to the role of sentences and sentence structure in natural language. The course addresses the questions: What makes a particular string of words usable as a sentence? Why are some strings acceptable while others are not? What is the nature of the knowledge humans bring to the process of forming and interpreting sentences? How is this knowledge acquired? Why is the ability to produce and understand well-formed sentences disrupted by injury to specific brain regions? How and why do the sentence patterns that are typical of a language community change over time? Prerequisite: LIN 185J.

Сг 3.

## LIN 314 Semantics

An introduction to the study of meaning in natural language. The course explores questions about the nature of meanings and how they are related to minds. Another concern is the relation between words and sentences, on one hand, and the objects, events and relations we experience in the world, on the other. How are words linked to things in the world? How do words refer or describe? What is it for a sentence to be true? Prerequisite: LIN 185J.

Cr 3.

## LIN 330 Contrastive Analysis: ASL and English

This course examines the major linguistic features of ASL and English. Students will gain an understanding of the basic similarities and differences in morphology, phonology, syntax, semantics and pragmatics, as well as the values, beliefs, and norms of the Deaf and non-Deaf communities. Prerequisites: LIN 312, LIN 313 and LIN 122 or permission.

Сг 3.

## LIN 331 ASL/English Interpreting

In this course students will study the process of interpreting several theoretical models, practice requisite skills, and apply skills to the translation process. Prerequisite: LIN 231, LIN 222, and LIN 330; or permission of the instructor.

Cr 4.

## LN 390 Introduction to Language Research

An introduction to basic aspects of the experimental study of human linguistic abilities. This will include coverage of the identification of viable research questions, literature reviews, special considerations for materials preparation for language experiments, research design, sampling, control of arifacts, data handling, analysis, some special staistical considerations, and reporting conventions. Students will also be introduced to various computer resources relevant to these matters. Prerequisites: LIN 185J and one of the following: PSY 201D (Statistics in Psychology), MAT 120D (Introducion to Staistics); or an equivalent course. Cr 3.

## LIN 421 First Language Acquisition: Syntax

A detailed examination of the process of acquiring language in young children that concentrates on sentence structure. The course considers how children extract from the speech they hear the information that is critical to their developing ability to form sentences. It reviews questions about the nature of grammar and how grammars might be structured to facilitate language acquisition, and how various kinds of early experience do and do not contribute to acquisition. Prerequisites: LIN 185J, LIN 313.

Сг 3.

## LIN 422 A Cognitive Perspective on Syntax

An introduction to the activities of the brain and mind that listeners and readers use to understand sentences, as well as to the mental representaions that these processes construct. The course considers how the words of speech and writing are integrated into coherent phrases and sentences, and how listeners use the structure of sentences to help determine their interpretation. The course considers how various common sentence forms ease or disrupt the processes of comprehension. Prerequisites: LIN 185J, LIN313.

Cr 3.

## LIN 498 Thesis

Students enrolled in the self-designed major in linguistics are required to write a research-based senior thesis. The topic for this project must be selected in consultaion with the student's advisor and approved by the Linguistics Council. Students must give a presentation and defense of their projects upon completion. The finished thesis must be approved by the Linguistics Council and should be completed by the end of the fall semester of the student's senior year. This course may be taken for credit twice. Prerequisites: LIN 185J, LIN 311-314, approval of project proposal.

Cr 3.

## Programs and Requirements

Director: Daniel Panici, 68 High Street, Portland
Media Studies Council: Hope, Kilroy, Klvana, Lasky, Panici, Swartz, Woshinksy
Set in a liberal arts context, the media studies program allows students to study modern media through the application of various theoretical frameworks and skills. By emphasizing theory and practice, the program challenges the student to analyze and practice the creation, dissemination, utilization, and evaluation of mediated messages.

Upon completion of the media major, students will have developed: (a) an understanding of the interdependence between media and society; (b) a concern for improving the knowlege, skills, and values of the student in the development of a professional identity; (c) an understanding of the values that guide the production of media content; (d) the ability to anticipate and promote changes within the media; (e) a recognition of the need for advancing knowlege about media through both theoretical and applied research; and (f) the ability to communicate clearly and persuasively in a variety of writing contexts.

The minimum number of credits (exclusive of the University's Core curriculum) required for the self-designed major is 39 .

Students majoring in media studies will need to complete the following for graduation: (1) the Core curriculum at USM; (2) the media studies major core requirements of 12 credit hours; (3) 15 credit hours from one concentration (professional writing; media theory, history and criticism; or multimedia production and design); and (4) an additional 12 hours consisting of two courses from each of the other two concentrations.

Students must meet proficiencies in mathematics and writing before they can begin their media studies program. Students are advised to first take The Writing Process and Foundations in Media Studies before proceeding in the major. These courses should be taken concurrently, and the student must receive a C or better in each of these courses.

## Media Studies Core (12 hours)

There are four core courses in the media studies curriculum. The Writing Process and Foundations in Media Studies are the two introductory courses to the major. They should be taken together in the same semester. Students need to receive a C grade in each or the course will need to be repeated. A grade of C in ENG 100 C is required in order to enroll in The Writing Process course.

Seniors in media studies must take theCommunity Involvement Practicum and the Senior Project. These two courses constitute the advanced core courses in the major.

## Media Studies Concentrations

Choose one of the following concentrations ( 15 credits) and choose any two courses from each of the other two concentrations ( 12 credits).

## A. Professional Writing Concenration

The media studies program offers a concentration in professional writing to majors who want to pursue an effective sequence of courses in the craft of writing and who also want interdisciplinary writing experience. The professional writing concentration also offers a wide variety of local and national internships in media writing and in creative writing to prepare students for related careers.

In addition to the required 15 hours of courses, students must complete a Senior Project, including a portfolio of their writing; and they must complete a Community Involvement Practicum.

Professional writing concentration majors are urged to take more than the required number of writing courses in order to enhance their writing background. Further information about the professional writing concentration is available from the media studies program.

| Core courses (select two) |  |  |
| :--- | :--- | :--- |
| COM | 274 | Writing for Non-Print Media |
| ENG | 201 | Creative Writing |
| ENG | 309 | Newswriting |


| Electives (select three) Any course not taken in the concentration core may be used as an elective. |  |  |
| :---: | :---: | :---: |
| Creative Writing |  |  |
| ENG | 300 | Fiction Writing |
| ENG | 301 | Poetry Writing |
| ENG | 302 | Fiction Workshop |
| ENG | 303 | Poetry Workshop |
| MES | 499 | Topics in Professional Writing |
| Stonecoast Writers' Conference |  |  |
| JournalismBroadcasting |  |  |
| ENG | 309 | Newswriting |
| MES | 2XX | Broadcast Newswriting |
| MES | 3XX | Opinion Writing |
| ENG | 3XX | Topics in Joumalism: American Culture \& World Communication |
| ENG | 3XX | Topics in Journalism: Right to Privacy |
| ENG | 3XX | Media and the Open Society |
| ENG | 3XX | Studies in Rhetoric |
| COM | 369 | Broadcast Copywriting |
| THE | 355 | Journalistic Drama Criticism |
| Screenwriting/Playwriting |  |  |
| THE | 250 | Playwriting |
| THE | 350 | Advanced Playwriting |
| MES | 299 | Screenwriting |
| Technical Writing |  |  |
| ITP | 210 | Technical Writing |
| B. Media Theory, History, and Criticism Concentration |  |  |
| Core courses (select two) |  |  |
| COM | 284 | Introduction to Film |
| COM | 374 | Television Criticism and Aesthetics |
| ENG | 299 | Introduction to Cultural Studies |
| Electives (select three) Any course not taken in the concentration core may be used as an elective. |  |  |
| ARH | 273 | Film as Image and Idea |
| BUS | 360 | Marketing |
| BUS | 363 | Advertising |
| BUS | 365 | Consumer Behavior |
| COM | 286 | History of Film to 1945 |
| COM | 287 | History of Film from 1945 |
| COM | 384 | Film and Cultural Studies |
| COM | 394 | Theories of Film |
| COM | 440 | Topics in Media Studies |
| COM | 484 | Topics in Film |
| CRM | 320 | Filmand Social Order |
| MES | 2XX | Public Relations and the Media |
| PHI | 221 | Philosophy of Film |
| POS | 256 | Media and Politics |
| SBU | 100 | Introduction to Business |
| SBU | 165J | Consumer Studies |
| C. Multimedia Production and Design Concentration |  |  |
| Core courses (select two) |  |  |
| ARH | 110 | Visual Environment, or |
| ART | 141F | Fundamentals of Design I |
| ABU | 180 | Inroduction to Computers, or |
| ITT | 181 | Introduction to Computers |
| Inroduction to Multimedia (new course under development) |  |  |
| Electives (select three) Any course not taken in the concentration core may be used as an elective |  |  |
| COM | 260 | Television Production I |
| COM | 360 | Television Studio Production II |
| COM | 382 | Video Field Production I |


| COM | 482 | Video Field Production II |
| :--- | :--- | :--- |
| ITT | 241 | Graphic Reproduction |
| ITT | 282 | Computer Aided Drafting and Design |
| ITT | 342 | Advanced Graphic Reproduction |
| ITT | 343 | Desktop Publishing and Design |
| TCE | 370 | Networking Computers |
| TCE | 482 | Presentation and Hypermedia |
| THE | 224 | Acting for the Camera |
| Multimedia Production I* |  |  |
| Mulimedia Production I* |  |  |
| Radio Production at WMPG |  |  |
| *new courses under development |  |  |

Beyond the 39 credit hours, students may elect to enroll in the Internship in Media Studies ( $1-15$ credits). Students have completed internships at WGME NewsChannel 13, WCSH-TV NewsCenter 6, WMTW-TV Channel 8 News, WPXT-TV FOX 51, Motion Media Film and Video, Casco Bay Weekly and The Portland Newspapers. Internships have also been completed at MTV and Good Morning America in New York City, and at several film companies in Los Angeles. Students may also intern at on-campus student media outlets such as The Review, Free Press, WMPG, and USM TV.

Note: While the following media studies courses are under development, their course numbers may vary during the academic year 1998-1999. Please contact the Media Studies office for details.

## MES 150 Writing Process

This course is designed to provide students with professional writing skills and to make students conversant with a variety of discourses which pertain to media studies. Such discourses may include cultural theory, mass communication, media production, and writing in the media (creative writing, screenwriting, journalistic writing, broadcast writing, advertising, and public relations, among others). This course is linked with Foundations of Media Studies; students are encouraged to enroll concurrently in MES 180 Foundations of Media Studies. Prerequisite: media studies major. Cr 3.

## MES 180 Foundations of Media Studies

This course examines the historical, philosophical, technological, economic, political, and sociological aspects of print (books, magazines, and newspapers) and electronic media (radio, television, film, sound recordings). In addition, the effects of mass
media will be explored. Students are encouraged to enroll concurrently in MES 150. Prerequisite: media studies major or communications major.

Cr 3.

## MES 400 Senior Project

This course offers graduating seniors in media studies an opportunity to complete a substantive piece of work (e.g., a screenplay, short documentary, creative writing portfolio, CD-ROM) in preparation for graduate work or professional placement. Students will present their work to an audience of faculty and peers. Students will further develop career strategies by participating in professional development workshops. Prerequisites: MES 150, MES 180, and senior standing. Cr 3.

## MES 450 Community Involvement Practicum

This course gives students the opportunity to work with organizations outside the University in a professional context. Students will be divided into groups and will work with nonprofit organizations to develop projects, such as a multimedia presentation, a video, or a research report. Prerequisites: MES 150, 180, and senior standing. Cr 3.

Coordinator: Dana McDaniel, 65 Exeter Sureet, Portland<br>Steering Committee: Faculty Members: Anspach, Bjelic, Hillard, Hodges, Padula, Woshinsky

The group contract major in social science is a multidisciplinary program consisting of the following eight disciplines: criminology, economics, geography-anthropology, history, linguistics, political science, sociology, and women's studies. In order to declare a major in social science, students musthavemetthe University's C and D Core requirements and must have a GPA of at least 2.5. Students who wish to declare a major in social science must submit a completed application form (available from the coordinator's office) to a member of the steering com-

## Option I

## Option II

## Capstone Course

mittee. Each student must take a minimum of 51 credits to complete the major. Students must receive a grade of C - or higher in courses taken to fulfill the major.

Students choose between Options I and II below. The following two requirements apply to all students, regardless of Option: 1.) Every student's social science curriculum must include at least one of the following social science methods courses: CRM 220, ANT 103, HTY 200, LIN 390, POS 103, SOC 301; 2.) All students must take a 3-credit capstone course, SDM 401, in addition to the requirements specified under their Option.

Students select one of the eight disciplines as a concentration. They must complete 21-23 credits (usually seven courses) in that discipline, as specified below.

| Discipline <br> Criminology | Requirements for Concentration <br> CRM215J, CRM 216, CRM 220, CRM310, CRM <br> 311, CRM 317, CRM 334 |
| :--- | :--- |
| Economics | ECO 201, ECO 202, ECO 301, and four 3-credit <br> courses that are 300-level or above |
| Geography-Anthropology | two courses from GEO 101J, GEO 102K, GEO <br> 201I; two courses from ANT 101J, ANT 102K, <br> ANT 103; and three 3-credit GEO and/or ANT <br> courses that are 200-level or above |
| History | seven 3-credit HTY courses, at least four of which <br> are 200-level or above |
| Linguistics | LLN 185J, either LLN 113J or LDN 201J, and five |
|  | 3-credit LIN courses that are 300-level or above |

Political Science POS 101J, POS 102J, three courses from the five POS areas - no more than one per area (see Political Science section in catalog), and six additional POS credits

Sociology SOC 100J, SOC 210, SOC 300, SOC 301, SOC 312, and two additional 3-credit SOC courses

Women's Studies
WST 280, WST 380, WST 390, WST 235, WST 245 , WST 255 , WST 265 ; if any of the latter four courses are not offered, they may be replaced by WST 220, WST 320
Students choosing Option I also take 27 credits outside of their concentration. The 27 credits must be divided equally among three of the remaining seven disciplines (three courses in each), and at least nine of the 27 credits must be upper division level (200 or above). Note that these courses are not restricted to the courses listed above as requirements for the concentrations.

Students select one interdisciplinary topic within the social sciences as a concentration. In consultation with their advisor, they design a curriculum that consists of at least 30 credits ( 10 courses) on their topic from at least two (but no more than six) of the eight disciplines. At least 18 of the 30 credits must be above the introductory level.

Students choosing Option II also take 18 credits in two disciplines not included in their concentration - three courses in each discipline. At least six of the 18 credits must be upper division level (200 or above).

All social science majors (regardless of Option) must take SDM 401 in their senior year or during the second semester of their junior year. The purpose of this course is to bring together the lonowledge and experience students have acquired through the major, and to allow them to apply that knowledge.

Notes:

1. University policy states that there can be no more than one overlap between
the courses taken to fulfill the Core curriculum requirements and the courses that count toward the student's major. "Overlap" is defined in terms of the three-letter prefix (e.g., ENG, SOC, WST); that is, a student may take only one course toward the Core that has the prefix of the student's major. (The overlapping Core courses may itself also counttoward the major or it may just share a prefix with the major.)

In the case of the social science major, which is multidisciplinary, the overlap policy is interpreted as follows. A student may take only one Core course with a prefix that corresponds to the disciplines included in that student's social science major. For example, a student with Option I whose major consists of courses in sociology, women's studies, history, and political science could count toward the Core only one course that had a SOC, WST, HTY, or POS prefix; Core courses with prefixes corresponding to other social science disciplines (e.g., LIN, ECO) would not be overlaps for this student.
2. Students who intend to teach social studies at the secondary level should consult with their advisor to design a curriculum that includes the specific social science courses required by the state of Maine for certificaion.
3. Students who have already taken more than nine credits of 100 -level courses in the social sciences and who, due to prerequisites, are required to take more $100-$ level courses should consider consuling with their advisor about possible alternalive arrangements.

## SDM 401 Senior Seminar in Social Science

The capstone to the major and required for the degree, this seminar explores the nature and the craft of social science. The topic will vary but will always be a particular theme or set of issues that span various social science disciplines, such as Competing Methodologies in Social Science, Ethnohistory, United States Studies, etc. Students are expected,
through discussion and writing, to apply the lnowledge and skills acquired in previous social science courses. Prerequisite: The course is open only to social science majors or students majoring in one of the eight disciplines that make up the social science major. Students must also be seniors or second semester juniors.

Cr 3.

## Art

Chair of the Department: Donna Cassidy, 109 Robie Andrews Hall, Gorham Professors: Franklin, Hewitt, Ubans; Associate Professors: Burk, Cassidy, Marasco, Rakovan, Schiferl, Shaughnessy; Assistant Professors: Grant, Rainey, Wilson; Director of Exhibitions and Programs: Eyler; Studio Technician: Holleman

The Department of Art offers four-year degree programs in studio arts, art history and art education. Students may select a bachelor of fine art (B.F.A.) with concentrations in ceramics, drawing, painting, photography, printmaking, and sculpture. A concentration in art education is available to B.F.A. candidates who wish to teach art. The bachelor of art (B.A.) in studio art combines a liberal arts education with emphasis on the visual arts. A bachelor of art (B.A.) in art with a concentration in art history is also offered. For those who already have a B.F.A. or M.F.A. and wish to teach art, the Department offers the Extended Teacher Education Program in art education. Application for this program is handled by the College of Education and Human Development.

The Department prides itself on giving students a rigorous studio experience, an historical understanding of the complexity of art practices, and the critical shills needed to produce informed visual artists, art educators, and art historians. Our goal is to graduate artists and art professionals who possess a thorough grounding in their field (both practical and theoretical), who honor the creative process, and who have a strong basis for writing about, criticizing, and bringing context to works of art. The Department is not tied to a specific stylistic look or approach to art making or practice, but instead emphasizes students' ability to think creatively, to include their own point of view, and to defend their choices with an informed voice.

Applicants 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, who transfer into the Department of Art from another discipline, must obtain a change of major form and submit this form with a current transcript to the chair of the Department of Art.

A student is then 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, Art History: Prehistoric to Medieval, and Art History: Renaissance to Present before matriculating as an art major in the Department of Art.

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. Portfolios are not required for the art history concentration. This must be done during or no later than one semester beyond completion of the art foundation courses. If the student completed the art foundation at another institution, a portfolio must be submitted at the next scheduled opportunity and no later than the second semester at USM. The portfolio should consist of no more than 12 works within specific categories.

Each work submitted is to be labeled on the back with the student's name and category. No slides, glass, three-dimensional work, or work larger than $36^{\prime \prime} \times 36^{\prime \prime}$ (including matting) will be accepted. Presentation should be considered for the joint purpose of appearance and protection. The Department cannot accept responsibility for damage or loss to the work. All three-dimensional work must be represented by a minimum of two photographs of each work, matted or in plastic sleeves. The categories and numbers of work for each category are as follows:

Two-dimensional works (3 pieces) should be taken from and/or exhibit skills in the visual design of the flat page;

Three-dimensional works ( 2 pieces) should exhibit (in photographs) capabilities in the physical development and articulation of form and space;

Drawing category (3 pieces) should contain works of any medium exhibiting skills and concepts of drawing;

Self-portrait (1 piece) should be executed from life and may be in any medium but should be a representational depiction rendered by hand; and

Open submissions ( 3 pieces) may be work in any medium as long as it con-
forms to the overall guidelines of this review.
Portfolios that do not adhere to the established procedures will not be accepted for review.

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

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

Students already enrolled in the University who wish to change their major to art also must follow the departmental admission procedures conceming submission of portfolio, as described above.

Students are also required to participate in the Department's Junior Review during the fall semester in which they obtain junior status ( 53 credits). A workshop in procedures for exhibiting artwork and one in photographing artwork are offered annually.

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

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

## Bachelor of Fine Arts (B.F.A.) Degree in Studio Arts

The minimum number of credits (exclusive of the Univerity's Core curriculum) required for the major: 87 .

There are degree concentrations in ceramics, drawing, painting, plotography, printmaking, and sculpture.

Art Foundation (18 credits)
ART $\quad 111 \mathrm{G} \quad$ Art History: Prehistory to Medieval
ART $\quad 112 \mathrm{G} \quad$ Art History: Renaissance to Present
ART 141 F Fundamental Design I (2-D)
ART 142 Fundamental Design II (3-D)
ART 151 F Fundamental Drawing I
ART 152 Fundamental Drawing II
Upper Level Foundation Requirements ( 6 credits)
ART 241 Design
ART 251 Drawing
Upper Level Art History Requirements (9 credits*)
ARH 200- or 300 -level Art History Elective
ARH 200- or 300-level Art History Elective
ARH 411 Philosophy of Art (or PHI 220)
Studio Requirements (9 credits)
Do three of five 200-level courses other than your concentration

| ART | 231 | Ceramics |
| :--- | :--- | :--- |
| ART | 261 | Painting |
| ART | 271 | Photography |
| ART | 281 | Printmaling |
| ART | 291 | Sculpture |

Concentration Requirements ( 21 credits)
ART 2XX Introductory Studio
ART 3X1 Intermediate Studio I
ART 3X2 Intermediate Studio II
ART 4X1 Advanced Studio I
ART 4X2 Advanced Studio II
ART XXX Required Elective in concentration**
ART 401 Senior Seminar
Studio Courses (Elective \& Required) (24 credits*)
Any 200-, 300-, or 400-level studio courses.
ART Studio Electives

Students are required to submit a portfolio for acceptance to the Department prior to enrolling in any 200 -level or above studio courses. Completion of the Junior Review and the Senior Exhibition are also required.
*See specific requirements and recommendations in your area of concentration.
**Can be met by one of the following: ART 400 Internship in the Visual Arts, ART 407 Independent Study, ART 408Ad vanced Problems, or approved course within discipline, including summer course offerings, Haystack School of Crafts courses, or ART 412 Topics in Studio Arts.

## Concentration Requirements and/ or Recommended Courses

Each concentration has additional requirements or course recommendations as follows:

Ceramics: ART 351 Intermediate Drawing I and ART 352 Intermediate Drawing II are both required.

Drawing: Recommended upper-level art history courses are ARH 317 Contemporary Art; ARH 316 Modern Art and/or ARH 217 Asian Art; or any ARH non-Western Art.

Painting: ART 351 Intermediate Drawing I and ART 352 Intermediate Drawing II are both required; recommended upper-level art history courses are ARH 214 Renaissance Art or ARH 212 Classical Art; and ARH 316 Modern Art or ARH 315 Nineteenth Century European Art.

Photography: Recommended studio course isART291 Sculpture; recommended upper-level art history is ARH 316 Modern Art.

Printmaking: No additional requirements and/or recommendations.
Sculpture: Recommended studio course isART271 Photography; recommended upper-level art history is ARH 217 Asian Art or any ARH non-western Art, and ARH 317 Contemporary Art. Note: ART 249 2-D and 3-D Figure Study (offered summers only) also satisfies the required elective in concentration for sculpture.

## Transfer Students

To receive a B.F.A. degree in art from USM, a student ransferring to USM must complete at least two 3-credit studio courses in their area of concentration and one 3 -credit art history course at USM.

## Bachelor of Fine Arts with a Concentration in Art Education

The bachelor of fine arts with a concentration in art education offers an indepth studio experience as well as a professional course of study in art education leading to teacher certification in Maine. The Extended Teacher Education Program in art education offers all courses for teacher certification in Maine for those who have a B.F.A., M.F.A., or M.A. in art. Both art education programs are guided by a conceptual framework that proposes that individuals need to be prepared for work in an increasingly complex and culturally diverse world, and that such work is best done through collaboration and reflective inquiry.

The minimum number of credits (exclusive of the University's Core curriculum) required for this degree is 90 . The 90 credits include 9 hours of electives in art, art history, and design. It is recommended that students majoring in art education take COR 119F Illuminated Autobiography as part of the University's Core requirements.

Art Foundation (18 credits)

| ARH | 111 G | Art History: Prehistory to Medieval |
| :--- | :--- | :--- |
| ARH | 112 G | Art History: Renaissance to Present |
| ART | 141 F | Fundamental Design I (2-D) |
| ART | 142 | Fundamental Design II (3-D) |
| ART | 151 F | Fundamental Drawing I |
| ART | 152 | Fundamental Drawing II |

Students are required to submit a portfolio for acceptance to the Department prior to enrolling in any 200 -level or above studio courses. Completion of the junior review and senior exhibition are also required.

Upper Level Art History Requirements (6 credits)
ARH 200- or 300-level Art History Elective

ARH 411 Philosophy of Ait (or PHI 220)

Art Studio Requirements (21 credits)

| ART | 231 | Ceramics |
| :--- | :--- | :--- |
| ART | 241 | Design |
| ART | 251 | Drawing |
| ART | 261 | Painting |
| ART | 271 | Photography |
| ART | 281 | Prin making |
| ART | 291 | Sculpture |

Art Studio Concentration Requirements (9 credits)
This may be taken in either drawing, ceramics, painting, photography, printmaking, or sculpture.

| ART | 3XX | Intermediate I |
| :--- | :--- | :--- |
| ART | 3XX | Intermediate II |
| ART | 4XX | Advanced I |

Professional Education Requirements ( 27 credits excluding HRD 333J)
One of either
EDU $200 \quad$ Education in the United States
or
EDU 210 Theoretical Foundations of Learning
HRD 333J Human Growth and Development**
AED 221 Practicum in Art Education
AED $321 \quad$ Principles and Procedures in Art Educaion*
AED 421 Seminar in Art Education*
EDU 324 Student Teaching I*
EDU 324 Student Teaching II*
AED 424 Exceptionality in Art Education*
Interview for candidacy and written permission of the instructor is required prior to student teaching for continuation within the program.
*A 2.5 minimum grade point average (GPA) must be maintained to register for AED 321, EDU 324, AED 421, AED 424, and to graduate from the program.
**HRD 333J counts as a University Core requirement and a Professional Education requirement.

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

## Bachelor of Arts (B.A.)

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

ArtFoundation (18 credits)
ARH 111G Art History: Prehistoric to Medieval
ARH 112G Art History: Renaissance to Present
ART 141F Fundamental Design I (2-D)
ART $142 \quad$ Fundamental Design II (3-D)
ART 151 F Fundamental Drawing I
ART 152 Fundamental Drawing II
Art History Requirements (9 credits)
ARH 200 - or 300 -level art history elective
ARH 200- or 300 -level art history elective
ARH 411 Philosophy of Art (or PIII 220)
Studio Art Requirement ( 18 credits, all electives)
Electives (44 credits)
No more than 60 credit hours with ART designation may be used to fulfill 120 credit-hours degree requirement.

## B.A. in Art with a Concentration in Art History

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

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

The minimum number of credits required for the major: 45.
Art Foundation (18 credits)

| ARH | 111G | Art History: Prehistoric to Medieval |
| :---: | :---: | :---: |
| ARH | 112G | Art History: Renaissance to Present |
| ART | 141F | Fundamental Design I (2-D) |
| ART | 142 | Fundamental Design II (3-D) |
| ART | 151F | Fundamental Drawing I |
| ART | 152 | Fundamental Drawing II |
| Upper Level Requirements ( 27 credits) |  |  |
| ARH | 212, 213, |  |
|  | or 214 | Classical, Medieval, or Renaissance |
| ARH | $\begin{aligned} & 216,31 \\ & 316 \text {, or } \end{aligned}$ |  |
|  | 317 | 19th- or 20th-Century Western Art |
| ARH | 210 or |  |
|  | 217 | Non-Western Art |
| ARH | 410 | Seminar in Art History |
| ARH | 411 | Philosophy of Art (or PHI 220) |

(May substitute ARH 412 Topics in Art History with permission of the Art Department Chair.)

Art History elective (upper level course) (3 credits)
Approved upper level electives from one or more of the following areas: Art History, History, Anthropology, Literature, Classics. Students should consult with their art history advisor to select appropriate courses. (9 credits)

## 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.

Course Fees
A course fee is assessed in ceramics, drawing, painting, photography, printmaking, and sculpture courses.

## ART 101G Approaches to Art

Selected experiences using original works, lecture, slides, films, and other means to expose the student to 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 Gallery Practice

This is an introduction to operations of the USM Art galleries and other New England galleries and

## Art History

## ARH 110G Visual Environment

This course focuses on understanding, designing, and interpreting the visual environment through analysis of visual forms, hands-on exercises, and in-depth investigation of works in their cultural context. The course covers the power of images, the role of illusion, and the interpretation of visual forms in daily life. Students will learn how to analyze effective uses of color, shapes, and spatial relationships in examples such as street signs, fine
museums and contemporary issues affecting curatorial practice. The course includes practical experience, field trips, readings, discussions, and oral presentations. Students will collaborate as a class on a curatorial project. Each student will gain practical experience in selected areas, chosen from among the following: registration, art handling and installation, publicity design and promotion, and education. Prerequisite: art foundation courses.

Cr 3.
art, meeting spaces, city planning, bar graphs, and photographs.

Cr 3 .

## ARH 111G Art History: Prehistoric to <br> 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 stu-
dents 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 the Present

Examination and discussion of the painting, sculpture, and architecture from the Renaissance to the present. The course emphasizes the relationship of the visual arts to social, political, religious, and cultural trends and introduces students to various methods of art-historical interpretation. Prerequisite: none, but preference given candidates for matriculation in the Deparment of Art, or those with permission of the instructor.

Cr 3.

## ARH 210 Art History: Cross-Cultural Perspectives

The course covers global issues in art history. Major topic areas include a) how art conveys cultural values and biases, b) why foreign styles are adopted, c) why different values produce different forms. Prerequisite: ENG 100C.

Cr 3.

## ARH 211 Gender Identity and Modern Art

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

Cr 3.

## ARH 212 Classical Art

A survey of ancient art and architecture with special emphasis on the key monuments of Greek and Roman art and their influence on later artistic periods. Prerequisite: ARH 111G.

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.

## 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 EighteenthCentury 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

(Seventeenth through Nineteenth Centuries) Survey of painting, sculpture, and architecture from Colonial times to 1900 in the United States. 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 AsianArt

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 inArt

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, videotapes, 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 1900-1950 and including the growth and development of the modem"isms." Prerequisite: ARH 112G.

Cr 3.

## ARH317 Contemporary Art (1950-Present)

An examination and discussion of development in the visual arts since 1950. Prerequisite: ARH 112G.

Cr 3.

## ARH 410 Seminar in Art History

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

Cr 3.

## 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 under-
standing of the fine arts. Readings and discussion of writers from ancient to modern times. Prerequisite: senior art majors.

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.

## Studio Art

## ART 141F Fundamental Design I (2-D)

A studio introduction to the basic elements of twodimensional and color relationships. Cr 3 .

ART 142 Fundamental Design II (3-D)
A studio introduction to the basic elements of threedimensional relationships and "the aggregate," an extended project interrelating the two- and threedimensional. Prerequisite: ART 141F. 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 220 Foundations of Computer Imaging

This course will help create awareness and understanding of the computer as a creative medium. This course will investigaterelationships between painting and drawing applications and how these applications create and define mass, volume, planes, color, and dynamic visual properties. This lnowledge is then applied in hands-on exploration and instruction with applications. Prerequisite: art foundation and permission of instructor.

Cr 3.

## ART 231 Ceramics

An introduction to methods and processes of clay forming, including modeling, press molding, handbuilding, and the potter's wheel. Emphasis on form and texture, with aspects of glaze composition and firing procedures. Prerequisite: art foundation.

Cr 3.

## ART 241 Design

An interdisciplinary course which considers notions of time, movement, and space in both two and three dimensions. Students will investigate the ways in which design strategies influence meaning. Alternative approaches, including community-based and collaborative projects, will be explored. Prerequisite: art foundation.

Cr 3.

## ART 249 2-D and 3-D Figure Study

A studio course in the study of the human figure, including drawing, modeling, and readings in artistic anatomy, supplemented by historical study of

ARH 418 Independent Study in Art History
An opportunity for the student who has demonstrated competence in a specific area of study to work independently with scheduled tutoring from a faculty member of the student's choice. Prerequisites: permission of instructor and Art Department chair. $\quad \mathrm{Cr} 1$ to 6.
figurative art. (Offered summers only.) Prerequisite: art foundation or permission of instructor.

Cr 3.

## ART 251 Drawing

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

Cr 3.

## ART 259 Landscape Drawing

This course will concentrate on drawing the landscape at various Maine locations. Assigned problems will focus on aspects of the following: pictorial composition and design, analysis of landscape forms and structures, and methods for creating the illusion of outdoor light and space. A variety of both wet and dry media will be used. The course will include daily critiques, illustrated talks using original works as well as slides of masters, and museum visits. (Offered summers only.) Prerequisite: art foundation or permission of instructor. Cr 3.

## ART 261 Painting

An introduction to basic aspects of the painting process as related to visual perception and technique. Prerequisite: art foundation.

Cr 3.

## ART 269 Landscape Painting

An investigation of the painting process as related to visual perception of the natural environment. This course will take place outdoors at Wolfe Neck Farm. (Offered summers only.) Prerequisite: art foundation or permission of instructor.

Cr 3.

## ART 271 Photography

Photography as a creative medium. Inroduction 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 foundation.

Cr 3.

## ART 281 Printmaking

Introduction to the rudimentary materials and methods of basic printmaking media of intaglio and relief. Prerequisite: art foundation.

Cr 3.

## ART 291 Sculpture

A course directed towards the developing awareness of basic elements of sculptural form and the discipline of making objects. Prerequisite: art foundation.

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 handbuilding sculptures. Prerequisite: ART 231. Cr 3/3.

## ART 351/352 Intermediate Drawing

Continued drawing with emphasis on independent direction. Prerequisite: ART $251 . \quad \mathrm{Cr} 3 / 3$.

## 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 $261 . \quad$ 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.

## ART 371/372 Intermediate Photography

Exploration of concepts and techniques of photography with emphasis on individual forms of expression. ART371 is black and white photography,ART 372 is color photography. Prerequisite: ART 271.

## ART 381/382 Intermediate Printmaking

Application of the basic lnowledge of prin making as it concems image-making, with an emphasis on lithography and silkscreen printing. 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 400 Internship in the Visual Arts

The purpose of the internship is to allow students to work in an area that pertains to the visual arts and is related to their own activities and career intentions. Possibilities for internships include, but are not limited to, galleries, arts-related businesses, museums, practicing arists, scholars, nonprofit organizations, and cultural institutions. Pass-fail only. Prerequisite: permission of the instructor. Cr 1-3.

## ART 401 Senior Seminar in Studio Art

Designed for B.F.A. senior status students, this course will provide a cross-disciplinary critique of the student's project and will culminate in a senior exhibition. Questions regarding current theoretical practices and strategies will be examined through readings, slides, and visiting artist lectures in order to provide a basis for understanding the student's
artistic choices. Prerequisite: senior status/B.F.A. degree students.

Cr 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 chair.

Cr 1 to 6.

## ART 408 Independent Study in Art

An opportunity for the student who has demonstrated competence in a specific area of study to work independently with scheduled tutoring from a faculty member of the student's choice. Prerequisites: permission of instructor and Art Department chair.

Cr 1 to 6.

## ART 412 Topics in Studio Art

A course on a selected topic in the studio arts. To be offered at least once each year. Prerequisite: permission of the instructor.

Cr 3.

## ART 431/432 Advanced Ceramics

Investigation and realization of advanced ceramics projects with an emphasis on personal development and professional attitudes. Prerequisites: ART 331 and 332 .

Cr 3/3.

## ART 451/452 Advanced Drawing

Making personal and complete drawings and series of drawings. Emphasis on individual concepts and personal expression. Prerequisites: ART 351 and 352 .

Cr 3/3.

## ART 461/462 Advanced Painting

Continuation of Intermediate Painting. Emphasis on individual concepts and personal expression. Prerequisites: ART 361 and 362.

Cr 3/3.

## ART 471/472 Advanced Photography

Investigation of advanced photography projects with emphasis on personal expression and individual concepts of image-making. Prerequisites: ART 371 and 372.

Cr 3/3.

## ART 481/482 Advanced Printmaking

Advanced investigation of preferred prinlmaking media. Prerequisites: ART 381 and ART 382.

$$
\mathrm{Cr} 3 / 3
$$

## ART 491/492 Advanced Sculpture

Continuation of Intermediate Sculpture with emphasis on the pursuit of personal imagery. Prerequisites: ART 391 and $392 . \quad$ Cr $3 / 3$.

## ART Independent Study Term

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

## 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 artmaking and learning is relevant to prospective art and classroom teachers. Prerequisites: sophomore standing or above and art foundation. Cr 3.

## AED 321 Principles and Procedures in Art Education

History and philosophy of art education, theories of child art, relationship of goals to art education strategies, development of a workable set of beliefs about arteducation through readings, writings, discussion, observation, interview, and field experiences. Intended for the art education major. Prerequisites: AED 221 and art foundation. Cr 3.

## AED 407 Advanced Problems in Art Education

An opportunity for the student to do advanced work in art education related problems. A total of 6 credits may be taken. Prerequisites: completion of the sequence of courses in the related discipline and permission of the instructor and Art Department chair.

Cr 1 to 6 .

## AED 412 Topics in Art Education

A course on a selected topic in art education to scheduled supervision from a faculty member of the student's choice. Prerequisites: permission of the Department of Art and the dean of the College.

Cr 12-15.

## AED 421 Seminar in Art Education

This seminar examines art curriculum design and evaluation. Critical issues in art education for the
emerging art education professional today are explored through discussion, writings, and readings. This course is to be taken while student teaching. Prerequisite: AED 321.

Cr 3 .

## AED 424 Exceptionality in Art Education

This course examines characteristics of exceptional learners (including any mildly to moderately impaired or handicapped student who requires special assistance and any student who exhibits gifted or talented behavior in the arts), strategies for teaching these students in the art classroom, and services available to them in the school and community. The focus will be on lesson planning, leaming-teaching styles and strategies, and classroom management for mainstreaming in the art classroom. Prerequisite: AED 321 or permission of instructor.

Сr 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 clioice. Prerequisites: permission of the instructor and Art Department chair.

Cr 1 to 6.

## EDU 324 Student Teaching

The student teaching year consists of two semesters. During the fall semester, students are in an elementary (I) school half-time for eight weeks and in a secondary school (II) half-time forthe remaining eight weeks. During the spring semester, experiences are in the same schools full-time for eight weeks each. Students are under direct supervision of supervising teachers and a University supervisor.

Cr 12.

# Biological Sciences 

Chair of the Department: Thomas J. Knight, 201 Science Building, Portland Health Professions Advisor: Patricia M. O'Mahoney-Damon, 206 Science Building, Portland, Professors: Gainey, Mazurkiewicz, Najarian; Associate Professors: Knight, O'Mahoney-Damon, Weber; Assistant Professors: Maher, Mullen, Theodose; Adjunct Professors: Ng, Pennuto

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 to the community level. Other biology courses may be elected to suit individual interests and needs. The required courses in chemistry. mathematics, 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 Deparment also offers a self-designed major in biotechnology in conjunc-

## Programs and Requirements

tion with the Departments of Chemistry and Applied Immunology. 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 aplitude 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 Deparments 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: 71. 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 105 K ,

106K Biological Principles I and Laboratory
BIO 107, 108 Biological Principles II and Laboratory
BIO 301 Genetics
BIO 317 Evolution
One lecture/laboratory combination from each of the following four areas:
AREA 1: Organismal Biology

| BIO | 205 | Comparative Vertebrate Anatomy |
| :--- | :--- | :--- |
| BIO | 231 | Botany |
| BIO | 291 | Omithology |
| BIO | 304 | Embryological Development |
| BIO | 335 | Entomology |
| BIO | 351 | Invertebrate Zoology |
| BIO | 353 | Vertebrate Zoology |
| BIO | 361,362 | Parasitology and Laboratory |

AREA 2: Community-Ecosystem
BIO 331, 332 Ecological Principles and Field Ecology
BIO 337 Marine Ecology
BIO 341 Limnology
BIO 383 Plant Ecology
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, 410 Cell and Molecular Biology and Laboratory
In addition to BIO $105 \mathrm{~K}, 106 \mathrm{~K}, 107,108,301$ and one course from the four stipulated areas, biology majors are required to take either two additional biology lecture courses or one biology lecture/laboratory course, with prefix numbers of 200 or above.

| The bi | major m | so satisfactorily |
| :---: | :---: | :---: |
| CHY | $\begin{aligned} & 113 \mathrm{~K}, \\ & 114 \mathrm{~K}, \end{aligned}$ | Principles of Chemistry I and II and Laboratory |
|  | 115, 116 |  |
| CHY | 251,252 | Organic Chemistry I and II and Laboratory |
|  | 253, 254 |  |
| MAT | 220 | Statistics |
| MAT | 152 | Calculus A |
| PHY | 111K, |  |
|  | 112 K | Elements of Physics I and II |

PHY $\quad 121 \mathrm{~K}, \quad$ General Physics I and II and Laboratory
122 K,
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; orBIO 106K, BIO 111, 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.

## Laboratory Fees

A laboratory fee is assessed in biology laboratory courses.

## BIO 100K Biological Basics of Human Activities

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 101 K and BIO 100 K . Prerequisite: Prior or concurrent regisration in BIO 101 K or BIO 100 K .

Cr 1 .

## BIO 103K 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.

Сr 3.

## BIO 104K Marine Biology Laboratory

An examination of prototype organisms will be used to illustrate their varied roles in the ocean. Prior or concurrent registration in BIO 103 K . Cr 1.

## BIO 105K Biological Principles I

An introduction to scientific principles underlying the unity and diversity oflife. 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 105 K or BIO 111. Cr 1.5.

## BIO 107 Biological Principles II

An in roduction to the structure, function, andecological relationships of living organisms. Prerequisites: grades of C or higher in BIO 105 K and BIO 106K.

## BIO 108 Laboratory Biology II

Laboratory experiences illustrating topics introduced in BIO 107. Must be taken concurrently with BIO 107.

Cr 1.5.

## BIO 111 Human Anatomy and Physiology I

The course starts with the study of cell chemistry, structure, and function. Students will be introduced to the principles of genetics, reproduction, growth and development and to the study of the integumentary and skeletal system. Prerequisite: satisfactory completion of minimum proficiency requirements.

Cr 3.

## BIO 205 Comparative Vertebrate Anatomy

The comparative study of vertebrate organ systems from an adaptational and evolutionary point of view. Lecture three hours/week; one four-hour laboratory/ week. Prerequisites: grade of C or higher in BIO 105 K and BIO 106 K .

## BIO 211 Human Anatomy and Physiology II

This course focuses on many of the organ systems of the human body. The structure and function of the muscular, nervous, endocrine, cardiovascular, respiratory, digestive, and urinary systems will be discussed. Prerequisite: grade of C orhigher in BIO 105 K or BIO 111.

Cr 3.

## 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 106 K ; BIO 211 or concurrently.

## 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 105 K and BIO 106 K .

Cr4.5.

## 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.

Сг 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 105 K , and college chemistry.

Cr 3.

## BIO 282 Microbiology and Human Disease

 LaboratoryLaboratory techniques in the cultivation, identification, and control of microorganisms. Prerequisite: BIO 281 or concurrently.

Cr 2.

## BIO 291 Ornithology

This course studies the basic biology of birds: their life histories, migration, ecology, and economic importance, with emphasis on species found in Eastem North America. Numerous field trips to a variety of habitats will be taken for purposes of field identification. Students are responsible for their own appropriate outdoor clothing and footwear and for binoculars. Prerequisites: A grade of C or higher in BIO 107 and BIO 108, or permission of instructor.

Cr4.5.

## BIO301 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 302 Genetics Laboratory

Laboratory experiments in genetics. This course is optional for those who have taken or are taling BIO 301. Selected topics from BIO 301 will be studied by means of group and individual projects. Prerequisite: Prior or concurrent registration in BIO 301.

## BIO 304 Embryological Development

An integrated lecture-laboratory course covering embryological development from fertilization
through organogenesis. Prerequisite: a grade of C or higher inBIO 301, or permission of the instructor.

## 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 105 K , 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 106K, BIO 311 orconcurrently.

Cr 2.

## BIO 317 Evolution

A study of the process of prebiological and biological evolution. Prerequisites: BIO 105K, 106K, 107 , and 108.

Сг 3.

## BIO 331 Ecological Principles

A scientific study of interactions determining the distribution and abundance of organisms. 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 northeastem U.S. Prerequisite: grade of C or higher in BIO 107.

Сг 3.

## BIO 334 Ichthyology Laboratory

Laboratory and field methods for collecting, idenvifying, 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.

Сr 3.

## BIO 337 Marine Ecology

A comparative ecological study of coastal and oceanic environments. Lecture, three hours/week; weekly four-hour field trip. Prerequisites: Grade of C or higher in BIO 107 and BIO $108 . \quad$ Cr 5.

BIO 341 Limnology
This course is the study of inland waters with special concern for the factors which influence the living populations within these waters. Lecture: three hours/week; one four-hour laboratory/week. Prerequisites: Grade of C or higher in BIO 107/108 and one year of college chemistry.

Cr 5.

## BIO 345 Pathophysiology

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

Cr 3.

## BIO 351 Invertebrate Zoology

The morphology, physiology and evolution of invertebrate animals. Three hours of lecture and one four-hour laboratory per week. Prerequisites: a grade of C or higher in BIO 107 and BIO 108.

## BIO 353 Vertebrate Zoology

This course will study the systematics, distribution, behavior, and ecology of vertebrates (animals with backbones). Emphasis will be on animals of the Americas. Lecture: three hours/ week; one fourhour laboratory/week. Prerequisites: grade of C or higher in BIO 107 and BIO 108.

Cr 5.

## BIO 361 Parasitology

The life histories and host-parasite relationships of animal parasites, with emphasis on those of humans. Prerequisite: grade of C or higher in BIO 105 K .

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 one year of college chemistry or permission of instructor.

Cr 4.5.

## BIO 383 Plant Ecology

This course examines plant ecology at the population, community, and ecosystem levels. Plant adaptaions to the environment are also discussed, with emphasis on how these traits influence community and ecosystem processes. Weekly field trips are required. Prerequisites: Grade of C or higher in BIO 107 and BIO 108.

Cr 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; MAT 220.

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; 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; MAT 220.

Cr 2.

## BIO 405 Animal Behavior

This course is a study of the principles of behavioral organization in vertebrate and invertebrate animals, with emphasis on behavior under natural conditions. Prerequisite: grade of C or higher in BIO 107 or BIO 211, or permission of instructor.

Cr 3.

## BIO 406 Animal Behavior Laboratory

This course is a laboratory and field examination of behavioral principles in animals. Prerequisite: BIO 405 or concurrently.

Cr 2.

## BIO 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 <br> 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 421 Biology Seminar

Weekly oralreports and discussions by students and staff on biological topics of current interest. Prerequisite: 16 hours of biology or permission of instructor. May be repeated.

Cr 1 or 2.

## BIO 431 Immunology

This course presents the fundamentals of immunology, especially as they relate to human disease. Prerequisites: BIO 105 K , one year of college chemistry (both with a grade of C or higher), and junior standing; or permission of instructor. Cr 3.

## 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: Nancy R. Gordon, 363A Science Building, Portland Professors: Rhodes, Ricci, Stebbins; Associate Professors: Gordon, Newton; Assistant Professor: Tracy; Professors Emeriti: Smith, Sottery, Whitten

The field of chemistry is concemed with the structure of matter, its transformations, and the energy changes related to these transformations. Deparmental 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 tbis field with a thorough and practical education that will be useful in teaching or in industrial, technical, or graduate work.

Toachieve 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 racks 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 corequisites necessary for different courses.

To graduate as a chemisry major in any of the three programs, 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

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

The courses include: CHY 113K \& 114K; 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 deparment). In addition PHY 121K, 122K; 123, 124; MAT 152D, 153; COS 160/170 (C++) or a math/computer science course approved by the Chemistry Department are required (a total of 22 more hours).

## 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 tbis track is 64 .

The courses include: CHY 113K \& 114K; 115 \& 116; 231 \& 232; 251 \& 252; $253 \& 254 ; 361 \& 362 ; 363 ; 371 \& 372 ; 373 \& 374 ; 401$ (withthe 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 witbin the Department). Additional requirements are: PHY 121 K \& 122 K ; 123 \& 124; MAT 152D \& 153; and COS $160 / 170$ or a matb/computer science course approved by the Chemistry Department (a total of 22 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 tbis track: 63.

The courses include: CHY 113K \& 114K; 115 \& 116; 231 \& 232; 251 \& 252; $253 \& 254 ; 371 \& 372 ; 321$ or 345 or 361 ; and 401 (a minimum of 31 hours witbin the department). In addition PHY 121 K \& $122 \mathrm{~K} ; 123 \& 124$; MAT 152D; COS $160 / 170$ or a math/computer science course approved by the Chemistry Department are required (a total of 18 hours). In addition, a candidate for the B.S. degree must elect 15 hours of CHY 490, Senior Research.

As a general rule, candidates for the B.S. degree in applied chemistry should complete the majority of their formal coursework at the University by the end of their junior year. The fourth year in the B.S. program consists partly of the intensive independent study and field experience in a specific application of chemistry. After a reasonable orientation period, the student will participate in the day-to-day

## Admission <br> Requirements

Laboratory Fees
operations of a laboratory (or alternative facility) as a functioning member of the staff. Supervision of the applied chemistry major during this period will be provided by a suitable qualified staff member of the host facility and by a member of the chemistry faculty, who will also supervise the independent study.

## Minor in Chemistry

The minimum number of credits (exclusive of the Core curriculum) required for the minor: 17 .

The minor consists of CHY $113 \mathrm{~K}, 114 \mathrm{~K}, 115,116$ and either of the following two groups of courses: 231,232,251,252, or 321, 371, 373, and 374.

| CHY | $113 \mathrm{~K} / 114 \mathrm{~K}$ | General Chemistry I with Laboratory | $(4$ credits) |
| :--- | :--- | :--- | :--- |
| CHY | $115 / 116$ | General Chemistry II with Laboratory | $(4$ credits |
| CHY | $231 / 232$ | Analytical Chemistry with Laboratory | $(4$ credits) |
| CHY | $251 / 252$ | Organic Chemistry I with Laboratory | $(5$ credits) |
| Total hours |  | ( 17 credits) |  |

or

| CHY | $113 \mathrm{~K} / 114 \mathrm{~K}$ | General Chemistry I with Laboratory | (4 credits) |
| :--- | :--- | :--- | ---: |
| CHY | $115 / 116$ | General Chemistry II with Laboratory | (4 credits) |
| CHY | 321 | Inorganic Chemistry | (3 credits) |
| CHY | 371 | Physical Chemistry I | (3 credits) |
| CHY | $373 / 374$ | Physical Chemistry II with Laboratory | $(5$ credits |
| Total hours |  | (19 credits) |  |

## Minor in Biochemistry

The minimum number of credits required (exclusive of Core courses) for the minor: 23. The minor consists of CHY $113 \mathrm{~K}, 114 \mathrm{~K}, 115,116,251,252,253,254$, 361 (Biochemistry), and either 362 (Biochemisry Laboratory) or 363 (Biochemistry II). The biochemistry minor is not open to chemistry majors.

## Biotechnology

The Department, in conjunction with the Department of Biological Sciences, also offers an interdepartmental major in biotechnology. See Interdepartmental Major Programs section of this catalog.

Students who apply for admission to the chemistry program should have completed college preparatory courses in chemistry, physics, and mathematics. At least two years of algebra and a semester each of geomery and rigonometry are recommended as part of the student's high school program. (Freshmen in the chemistry program who lack this preparation in mathematics are required to take MAT 140D, Precalculus Mathematics.)

A laboratory fee is assessed in chemisry laboratory courses.

## 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. 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.Twolectures and one recitation session per week. No prerequisite. Not open to students who have already passed a chemistry course numbered 101 or higher.

Сг 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; stoichi-
ometry; radio-chemistry; gases; acids, bases and buffers; and energy relationships in chemical processes. Three hours lecture per week (usually concurrent with CHY 102K). Prerequisite: high school algebra. Not appropriate for science majors, premed, pre-vet or pre-dentistry students. Сг 3.

## CHY 102K Introduction to Laboratory <br> 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; tiration. One recitation and two laboratory hours per week. Corequisite: CHY 101K. Not appropriate for chemistry or biology majors.

Сг 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 nutrivion; pharmaceuticals; medical applications of radiochemistry. Three lecture hours per week (usually concurrent with CHY 104). Prerequisite: a grade of C or better in CHY 101K. Not appropriatefor 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 105 Chemistry for Health Sciences

A one-semester introduction to general, organic, and biological chemistry, emphasizing principles that are important for students studying the health sciences. Topics include measurement; atomic structure; bonding; states of matter, solutions; pH , acids, and bases; selected functional groups in organic chemistry; lipids, carbohydrates, and proteins; and metabolism of glucose and fatty acids. This course is not suitable for chemistry majors, biology majors, or preprofessionals (pre-medical, pre-dental, pre-veterinary). Four 50 -minute lectures per week. Prerequisite: one year of high school algebra. Cr 4.

## CHY 106 Chemistry Laboratory for Health Sciences

Experiments in this laboratory are designed to illustrate principles from CHY 105. Aims of the course are to develop skill in using common laboratory equipment, measuring and analyzing data, and reporting results of lab work. One four-hour meeting per week, comprising recitation and quizzes, laboratory work, and analysis of data. Students will need a scientific calculator with statistical functions. Corequisite or prerequisite: CHY 105. Cr 2.

## CHY 110K Chemistry, Life, and the Environment

An introduction to chemistry and its importance to society. This course is centered on the nature of atoms and molecules, and how the structures of molecules give rise to the beneficial and harmful ef-
fects of chemicals. Classroom examples include medicines, consumer products, pollutants, and the molecules of life. Laboratory and home experiments include examining the chemical content of foods. Although this course is designed to salisfy the Natural Sciences (Area-K) requirement of the Core curriculum, it is also recommended as preparation for students who plan to take CHY 105 or CHY 113 but who have little or no background in chemistry.Three one-hour lectures and one threehour laboratory per week. Prerequisite: completion of all Core Basic Competence requirements. Cr 4.

## CHY 113K Principles of Chemistry I

A presentation of fundamental principles of chemical science. These principles will be presented in quan itative terms and illustrated by examples of their applications in laboratories and in ordinary nonlaboratory experience. This course and CHY 114 (normally taken concurrently) provide the basis forfurther study of chemistry. Prerequisite: high school algebra.

Cr 3.

## CHY 114K 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 113K.

Cr 1.

## CHY 115 Principles of Chemistry II

A continuation of CHY 113 K . This course is designed to provide the foundation for all further studies in chemistry and is a prerequisite for all upperlevel chemistry courses. Prerequisite: a grade of C or better in CHY 113 K .

Сг 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 K . Corequisite: CHY 115. Cr 1.

## CHY 231 Analytical Chemistry

A survey of principles and applications of modern analyical chemistry and related calculations. Topics include volumetric and gravimetric analysis, electroanalysis, spectrophotometry, separations, statistics, and error analysis. Two lecture hours per week with an optional hour of problem-solving recitation. Prerequisite: a grade of C or better in CHY 115.

Cr 2.
CHY 232 Analytical Chemistry Laboratory
Quantitative experimental determination by means of classical and instrumental methods. Techniques used include itration, gravimetric analysis, extracion, spectrophotometry, electroanalysis, and chromatography. Precision, accuracy, and statistical error analysis of results are emphasized. Four lab 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 $115 . \quad$ 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 elimination, 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, preparation of derivatives, and the interpretation of spectra to assist in the 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, and 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.

Сг 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; cenrifugation; 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 2.

## 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; comformational 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 perweek. 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 2.

## 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 115, MAT 152, and PHY 123.

## Cr 3.

## CHY 372 Physical Chemistry Laboratory I

Experiments illustrating material presented in CHY 371 , such as thermochemistry, 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 116. Prerequisite or corequisite: CHY 371 . Cr 2.

## CHY 373 Physical Chemistry II

Additional principles of theoretical chemistry: reaction linetics, 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: CHY373. 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 infrared regions; chromatography; electrochemistry; mass spectrometry; and magnetic resonance. Two lectures per week. Prerequisite or corequisite: CHY 231 and CHY 371 or permission.

Cr 2.

## CHY 378 Instrumental Analysis Laboratory

Experiments will be performed in low resolution ultraviolet and infrared absorption spectroscopy, flame spectroscopy, and atomic absorption. Prerequisite: a grade of C or better in CHY 232 and CHY 371. One hour of pre-lab recitation and three laboratory hours per week.

Cr 2.

## CHY 401 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 2.0 GPAin 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: Russell J. Kivatisky, 51 College Avenue, Gorham Professor: Shedletsky; Associate Professors: Lasky, Loclridge, West; Assistant Professors: Kivatisky, Panici

Over 2,500 years ago, people were required to defend themselves in Greek democracy, and the power of the spoken word was central to their participation. Many of the communication principles that we believe today were taught in ancient Greece when Aristotle studied rhetoric, the art of persuasion. Throughout history, communication has been the vehicle by which influential speakers made a difference in the lives of others. Figures such as Susan B. Anthony, Dr. Martin Luther King, Jr., and Mahatma Ghandi have used communication effectively to incite change.

With the dawn of the 21st century nearing, communication inquiry remains at the center of our society's events. Today, the field has broadened its focus to include knowledge gained from other academic disciplines-sociology, psychology, and anthropology. Writers and thinkers have explored the effects of communication on attitudes, interpersonal relationships, group decision making, and organizational behavior. Television, film, and video have expanded the scope of the

## Programs and Requirements

discipline, and the computer continues toshape thinking and behavior in our society and is an influential force.

Today's employers are very clear in the ranking of "communication skills" at the top of desirable and employable skills. However, they also recognize the importance of augmenting those skills with theoretical knowledge. Therefore, faculty and students in the Department consider a number of issues which simultaneously take skill and theory into consideration. For instance, among the topics explored by the Department are gender communication, meaning-making, business and professional communication, video production, media and public policy, family communicaion, and other current topics. Understanding the process of communication in our world today is as important to democracy as public speaking was for the ancient Greeks.

## Bachelor of Arts

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

In addition to COM 102J, students must complete the following before continuing in the major: English Composition, Skills of Analysis/Philosophy, and Quantitative Decision Making (MAT 120D). (Be advised that MAT 120D is a prerequisite to most required upper level communicalion courses.) A grade of Cor better is required in all communication courses to receive major credit in the Department.

Major Requirements (36 credits)
A student should plan to take at least two academic years to complete the degree after taking COM 102J.

Communication Theory Core ( 9 credits)
COM 102J Introduction to Communication

COM 300 Research Methods in Communication
COM 495 Theories of Communication
(should be taken during senior year)
Foundations of Communication Theory ( 15 credits)
COM 265 Intrapersonal Communication
or
COM 375 Meaning and Communication
COM 272 Rhetorical Theory
COM 280 Mass Media and Human Interaction
COM 330 Theories of Interpersonal Communication COM 390 Theories of Organizational Communication
Communication Electives ( 9 credits)
Students can take any three courses offered through the Department of Communication to fulfill this requirement.

The communication intermship program and independent studies do not satisfy these credits but can be used toward the 120 credits needed in order to graduate. Students should consult the Department chair for details about the internship program and individual faculty members for independent studies.

Senior Seminar (3 credits)
Students seeking this 24 -credit minor in communication should complete all the requirements necessary to declare a major in communication and complete the Communication Theory Core and Foundations of Communication Theory requirements of the major.

## COM 102J Introduction to Communication

This course is designed to provide students with a conceptual framework of the basic theoretical elements of human communication. Students will develop a working hnowledge of theories that explain a wide scope of communication phenomena. Topics will include conflict, self-concept, self-disclosure, decision making, ethics, agenda setting, and the function of silence. These subjects will be dis-
cussed in a range of contexts, including nonverbal, interpersonal, small group, organiza ional, and mass media. Students will be encouraged to adapt communication principles to their various fields of endeavor.

Cr 3.

## COM 130J Interpersonal Communication <br> Skills

Blending research and theory in interpersonal communication, this course provides a thorough intro-
duction to the subject while emphasizing skill development and application. Among the topics to be covered are perception, listening, verbal and nonverbal communication, conversational skills, culture, stages of recreational development, and the role of the self in each of these topics. Students will be asked to expand their critical thinking abilities in these areas, thereby enhancing their personal empowerment as a communicator with varied types of individuals.

Cr 3.

## COM 234 Communication and AIDS

This course will examine how communication research and theory function in discussions of AIDS. Topics include compliance gaining, media deception, self-disclosure, relationship termination, and sex talk. Prerequisite: COM 102J.

## COM 250 Business and Professional

## Communication

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

Cr 3.

## COM 260 Television Studio Production I

This course is designed to develop the fundamental skills of visualization, storytelling, and technological awareness in the service of ideas. Course content will explore the procedures and knowledge needed for each stage of production: pre-production, setup and rehearsal, production, and post-production. Coursework will acknowledge the essenial blend between practical and theoretical lnowledge. A sense of respect for the team process of television production and the value of team collaboration will be stressed. Prerequisite: COM 102J or media studies major who has completed one of the core courses in that major. Cr 4.

## COM 265 Intrapersonal Communication

This course examines our ability to use what we lnow 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.

Cr 3.

## COM 272 Rhetorical Theory

A course designed to help students understand the basic principles of persuasion. The course deals with
persuasion as a social phenomenon. The perspeclive 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.

Cr 3.

## COM 274 Writing for the Non-Print Media

This writing-intensive course is designed to provide students with the requisite professional writing skills needed in public relations, adver ising, television, radio, and film. Assignments will address current practices in the industry. Prerequisite: COM 102J or media studies major who has completed one of the core courses in that major. 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 conceming 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. Cr 3.

## COM 280 Mass Media and Human

## Interaction

This course 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. 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.

Cr 3.

## COM 286 History of Film to 1945

This course surveys the major films, filmmakers, and cinema institutions from the invention of moviemaking at the end of the nineteenth century through World War II. Films will be explored
through four perspectives: as aristic expressions, as economic propositions, as products of and catalysts for social influences, and as representations of technological advances. Prerequisite: COM 284.

## COM 288 History of Film since 1945

This course continues the survey of film history begun in COM 286. Major films, filmmakers, and cinema instutions of each era in film history from WorldWarII until the present will be studied. Films will be explored through four perspectives: as artistic expressions, as economic propositions, as products of and catalysts for social influences, and as representations of technological advances. Prerequisite: COM 284.

Cr 3.

## COM 294 Television Processes

The purpose of this course is to enhance understanding of TV processes by introducing students to several basic visual aspects of reality as mediated through a camera lens. Topics covered will include techniques of lighting, camera angles, perspective, shot distance, cutting to continuity, and montage. Students will use 35 mm cameras to produce assignments on color slides. These will be used in class discussion in conjunction with illustrations taken from magazines that demonstrate the same techniques. In addition to leaming some rudiments of visual language, students will examine visual persuasive strategies. The course is open to all communication majors who have access to a 35 mm camera with manual controls. Automatic camera controls are optional. Prior experience with photographic procedures is helpful but not necessary since all students will receive instruction leading to a working knowledge of photographic techniques. 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; idenificaion 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. Prerequisites: COM 102J and MAT 120D.

Cr 3.

## COM 330 Theories of Interpersonal Communication

A study of the current thinking in interpersonal communication which emphasizes specific theories of human interaction. Students will be exposed to research in the interpersonal setting and will apply findings to their personal relationships. The course will help students foster effective traditional and nontraditional relationships with a variety of people. Prerequisites: COM 102J and COM 300. Cr 3.

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

Cr 3.

## COM 340 Small Group Communication

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

Cr 3.

## COM 360 Television Studio Production II

This course continues to explore the concepts introduced in COM 260. More complex assignments will be given to hone skills in writing, directing, and producing. Prerequisite: COM 260 and major in communication or media studies.

Cr 4.

## COM 364 Broadcast Copywriting

This course is designed to teach theories and basic skills about writing copy for radio, television, and cable. The forms of copy discussed in this class include commercials, promotional copy, public service announcements, and cross media ad campaigns. The major objective of this course is to enable the student to function effectively within a variety of copywriting setings. Prerequisites: COM 274 and majors in communication or media studies.

Cr 3.

## COM 370 Media and Social Change

This course analyzes how news media coverage affects social change. Students explore how and why the media cover social movements the way they do, and look closely at news coverage of the civil rights, black power, antiwar, women's and men's movements. Both print and TV news are examined through readings, discussion and original research. Prerequisites: COM 102J and COM 280.

Cr 3.
COM 374 Television Criticism and Aesthetics
The purpose of this course is to introduce students to the variety of critical approaches applied to the analysis of television content. The course investigates issues in popular culture and mass culture. In addition, the readings review raditional and contemporary television criticism. The final part of the course will provide a critical context for viewing the television medium within the framework of video culture. Prerequisites: COM 102J and COM 280 or media studies major who has completed one of the core courses in that major.

Cr 3.

## COM 375 Meaning and Communication

This course examines the assignment of meaning to verbal behavior, especially conversational exchange. Researchers have paid special attention to the ways in which words and actions take on meaning in context. We will focus on the full communicative event involving talk, i.e., context, pragmatics, gramunatical 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.

## COM 382 Video Field Production I

This course is primarily concerned with the development of critical evaluation skills needed in assessing and analyzing the video medium as a communication vehicle. Students will engage in actual video production projects. Prerequisites: COM 260 and major in communication or media studies.

Cr 4.

## COM 384 Film and Cultural Studies

This course will investigate how the discipline of cultural studies can be applied to the analysis and criticism of film. Students will read influential essays by writers such as Roland Barthes, Stuart Hall, and Teresa de Lauretis and discuss the implications of these writings for the study of the film medium. During the semester, students will view and critique films from a cultural studies perspective. Prerequisite: COM 284 and major in communication or media studies.

Cr 3.

## COM 390 Theories of Organizational

## Communication

This course is designed to introduce students to organization theory and behavior through the medium of metaphor. Using different metaphors, the course draws attention to significant aspects of the process of organizing, and provides a means for understanding and managing organizational situations. Students are responsible for conducting onsite field studies and preparing written and oral presentations of their findings. Prerequisites: COM 102J and COM $300 . \quad$ Cr 3.

## COM 394 Theories 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 contribumions 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 langnage, how it relates to reality and what functions it serves. Students will apply these notions in their examination of the of-
ten conflicting relationships among the various theories as well as between film theory and film criticism. Prerequisites: COM 284 and major in communication or media studies.

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. Prerequisites: COM 102J, COM 265, COM 300 and junior or senior standing.

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 experise (i.e., organizational communication, mass communication, interpersonal communication). Prerequisites: COM 102J and a precise definition of the project and director's consent. Pass/Fail only. Restricted to majors only, or permission of the instructor.

Cr var.

## COM 432 Topics in Interpersonal Communication

This seminar is designed to investigate significant issues in interpersonal communication. The course will be theoretical in nature, exploring a particular topic in depth each semester. Topics vary from semester to semester. Such topics as conversational analysis, friendship, deception, relationship termination, and conflict may be selected for the course. A research project is required. Prerequisites: COM 102J, COM 300, and COM 330.

Cr 3.

## COM 440 Topics in Media Studies

This seminar is designed to provide a critical investigation of various topics and issues related to mass media. Such topics as the media consumer; political broadcasting; sports, media, and society; and broadcast history could be selected. Each student is expected to complete a research project on the topic for the semester. Prerequisite: COM or media studies major, and junior or senior standing.

Cr 3.

## COM 475 Topics in Organizational Communication

This course focuses on the cultural/interpretive approach to understanding organizational communication. Students will study and discuss the basic assumptions of naturalistic and critical schools of thought, and will read exemplar essays presenting research and conceptual development within these domains. Topics will include symbolic convergence, account analysis, role performance, organizational power, organizational climate, and socialization. Prerequisites: COM 102J, COM 300, and junior or senior standing.

Cr 3.

## COM 482 Video Field Production II

This course continues to explore the concepts introduced in COM 382. Students will thoroughly investigate pre-production planning, production techniques, and post-production execution in order to communicate clearly in the video medium. More complex assignments will be given to hone skills in writing, directing, and producing. Prerequisite: COM 382 and major in communication or media studies. Cr 4.

## COM 484 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. Prerequisites: COM 284 and junior or senior standing in the communication or media studies major.

Cr 3.

## COM 485 Sex-Related Differences in Communication

This seminar on sex-related differences in communication is designed primarily to evaluate critically the research literature. It is concemed 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). Prerequisites: COM 102J, COM 300 and junior or senior standing.

Cr 3 .

## COM 486 Women in Film

This course will explore the depiction of women in film. Films will be analyzed in the context of the political and ideological subtexts they contain. The purpose of the analysis is to understand a film and to be able to relate it to the society that it reflects and sometimes affects.

Cr 3.

## COM 490 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 102J, COM 280, COM 300 and junior or senior standing.

Cr 3 .

## COM 491 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. Prerequisites: COM 102J, COM 300 and junior or senior standing.

Сг 3-6.

## COM 492 Video Field Production Practicum

Students will participate in the production of documentary videos and single-camera, on-location work. This course may be repeated up to a total of 4 credits. Prerequisite: opento majors in media studies only.

Cr 0.5 to 1.0 .

## COM 493 Television Studio Production Practicum

Students will participate in the production of original teleplays and scripts to be produced within a television studio setting. This course may be repeated up to a total of 4 credits. Prerequisite: open to majors in media arts concentration only.

Cr 0.5 to 1.0 .

## COM 494 Media Arts Internship

This program offers internships with media organizations in Maine as well as across the country. Radio and television broadcast organizations and film and video production organizations are the predominant assignments. Prerequisite: junior or senior standing.

Cr var.

## COM 495 Theories of Communication

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. Prerequisites: COM 102J, COM 265, COM 272, COM 280, COM 300, COM 330, COM 390 and junior or senior standing.

Cr 3.

# Criminology 

Chair of the Department: Piers Beirne, 1 Chamberlain Ave., Portland Professors: Beirne, Messerschmidt; Associate Professor: Bjelic; Assistant Professors: Cook, Wachholz

The Department of Criminology offers a four-year program leading to a bachelor of arts degree in criminology. The program provides students with a liberal arts education whose focus is the complex relations among crime, law, and society, and which emphasizes the social sciences. The curriculum is a rigorous series of courses which provides students with a comprehensive knowledge of crime and crime control in contemporary, historical, and comparative perspective. The core of the curriculum is an integrated set of required courses. These courses are designed as a cumulative set of experiences and must be taken in sequence. Eleclive courses enable students to place their criminological interests in a broader perspective.

Many students in the program are interested in social and human service occupations related to criminal, juvenile, and social justice. The program also prepares students for a wide variety of other career options and provides an excellent basis for graduate study in criminology, other social sciences, and law.

## Student Participation

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 Deparment. Representatives of the Criminology Students' Association are elected by members of the Association each April, although vacancies sometimes occur during the year. Students who are interested in this sort of participation are encouraged to contact Departmental faculty.

## Internships

The Deparment of Criminology offers a strong and established internship program. Credit internships actively seek to bring together student academic work and community involvement. Students interested in an internship placement are encouraged to meet with the internship coordinator.

## Colloquia

The Department of 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. A schedule of current colloquia is available in the Deparment office.

## Programs and Requirements

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

Required Courses ( 27 credits)
SOC 100J Introduction to Sociology

CRM 215J Criminology
CRM 216 White-Collar Crime
CRM 220 Criminological Inquiry or CRM 222 Field Studies in Informal Social Order
CRM 310 Classical Theories of Social Order
CRM 317 Gender and Crime
CRM 330 Crime and Social Control
CRM 334 Law and State
CRM 401 Comparaive Criminology
Elective Courses (12 credits)
Students are also required to choose four elective courses ( 12 hours) from the following courses. Two of these four electives must be taken from criminology. The remaining two electives must be chosen from the other courses listed below.

Criminology

| CRM | 217 | Crime in Maine |
| :--- | :--- | :--- |
| CRM | 220 | Criminological Inquiry |


| CRM | 222 | Field Studies in Informal Social Order |
| :--- | :--- | :--- |
| CRM | 230 | Introduction to the Criminal Justice System |
| CRM | 301 | Criminological Theory |
| CRM | 320 | Film and Social Order |
| CRM | 337 | Youth Crime |
| CRM | 340 | Criminal Law |
| CRM | 345 | Criminology in Sweden |
| CRM | 350 | Topics in Criminology |
| CRM | 360 | The Death Penalty |
| CRM | 390 | Independent Projects |
| CRM | 395 | Internship |
| Sociology |  |  |
| SOC | 312 | Inequality and Power |
| SOC | 316 | Sociology of Gender |
| SOC | 318 | Childhood and Society |
| SOC | 330 | Sociology of the Family |
| SOC | 331 | School and Society |
| SOC | 336 | Law and Society |
| SOC | 354 | Comparative Political Ideologies |
| SOC | 355 | Politics and Society |
| SOC | 357 | Organization: Individual and Society |
| SOC | 358 | Sociology of Women's Work |
| SOC | 371 | Sociology of Minority Groups |
| SOC | 374 | Mental Health and Illness |
| SOC | 375 | Sociological Perspectives on Deviance |
| SOC | 389 | Law and Society in England |
| SOC | 400 | Punishment and Social Control |
| Philosophy |  |  |
| PHI | 260 | Philosophy |
| PHI | 265 | Feminist Philosophy |
| Women's Studies |  |  |
| WST | 220 | Topics in Women's Studies |
| WST | 260 | Women, Gender and Institutions |
| WST | 280 | Women, Knowledge and Power |
| WST | 320 | Advanced Topics in Women's Studies |
| WSR | 380 | Politics of Difference |

Major Credit, Grade Policy, and Continuing in the Major
All major courses have prerequisites. Courses to be taken for major credit at other colleges and universities must be approved in advance. Grades of C or better must be achieved in all courses for major credit. Courses taken pass/fail are not acceptable in the major. The chair of the Department routinely requests faculty 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 chair.

Before taking CRM 215J or any criminology course above that level, students must have completed SOC 100J with a grade of C or better, as well as the following three areas of the Core curriculum: 1) English Composition; 2) Quantitative Decision Making; and, 3) Skills of Analysis.

To complete the major successfully, students must have a GPA of 2.33 or higher and have demonstrated satisfactory performance in major courses (i.e., a grade of C or better).

## Curriculum Summary and Guide

The criminology curriculum is a series of structured andintegrated courses that must be taken in sequence.

| Year | RequiredCourses | Elective Courses |
| :---: | :--- | :--- |
| 1 | Core requirements |  |
| 2 | Elective prerequisites |  |
|  | Complete Core requirements and elective prerequisites |  |
|  | Introduction to Sociology |  |
|  | Criminology |  |
|  | White-Collar Crime |  |

## Declaration of Major

Students must successfully complete SOC 100J and CRM 215J with grades of C or better in order to continue in the criminology major.

## Transfer Students

Transfer students and students contemplating transfer into the Criminology Department are urged to meet with the Department chair as early as possible for an evaluation of their progress and their requirements in the major.

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

For more information, write to: Office Manager, Criminology Department, University of Southern Maine, 96 Falmouth Street, P.O. Box 9300, Portland, Maine 04104-9300 or telephone (207) 780-4105.

## Minor in Criminology

The number of credit hours required for the minor is 21 . These 21 hours are in addition to those required for a student's major. Courses cannot be used to fulfill both major and minor credit.

Required Courses
SOC 100J Introduction to Sociology
CRM 215J Criminology
CRM 216 White-Collar Crime
CRM 220 Criminological Inquiry or CRM 222 Field Studies in Informal Social Order
Choose ONE of the following:
CRM 310 Classical Theories of Social Order
CRM 317 Gender and Crime
CRM 330 Crime and Social Control
CRM 334 Law and State
CRM 400 Comparative Criminology
Elective Courses
Choose any TWO CRM courses.

## CRM 215J Criminology

This course focuses on the nature of crime and on problems concerning its measurement and distribution. The course examines some of the popular images of crime in the media and elsewhere, the creation and utility of official and unofficial crime statistics, and theories about the causes of crime. Prerequisite: SOC 100 with a grade of C or better.

Cr 3.

## CRM 216 White-Collar Crime

This course provides an analysis of different criminological perspectives on white-collar crime, and focuses on some specific types of white-collar crime: occupational crime, corporate crime, syndicatedcrime, and political crime. Prerequisite: CRM 215J.

Cr 3.

## CRM 217 Crime in Maine

An introduction to crime and penal policies in Maine, including official and unofficial crime statistics; common crimes; white-collar crimes; and selected aspects in crime control. The course presents interstate comparative analysis, and several guest lectures by Maine speakers. Prerequisite: CRM 215 J .

Cr 3.

## CRM 220 Criminological Inquiry

This course is an introduction to methodological issues in criminology. The emphasis is on critical evaluation and application of the basic instruments of inquiry. Students will learn how to "do" criminology, as well as how to assess existing criminological literature. Prerequisite: CRM 215J. Cr 3.

## CRM 222 Field Studies in Informal Social Order

This course will study informal social order as the tacit framework for the formal legal order. This will be an empirical test of criminological theories introduced in CRM 215. Through different methods of field research, students will be asked to observe and analyze the informal order of legal institutions such as courtrooms, prisons, and police stations. Prerequisite: CRM 215J.

Cr 3.

## CRM 230 Introduction to the Criminal Justice System

This course is designed to provide students with an understanding of the criminal justice system in the United States from a sociological perspective. Students will become familiar with criminal justice functions such as policing, trials, defense and proseculion of cases, and corrections. Also, students are required to prepare a mock trial of a criminal case. Prerequisite: CRM 215J.

Cr 3.

## CRM301 Criminological Theory

This course focuses on the development of criminological theory from 1930 to present. The course is historical in nature and addresses such fundamental problems as why certain behavior is defined as criminal, the causes of crime, and the consequences for the individual of being labeled as a criminal. Prerequisite: CRM 215 J .

Cr 3.

## CRM 310 Classical Theories of Social Order

This course will examine how the concept of social order and the invention of criminology arose simultaneously. Classical social theories of the Enlightenment and Modernity will be used to study the origin of the modern state and the criminalization of various social groups. Prerequisite: CRM 215 J .

Cr 3.

## CRM 311 Contemporary Theories of Social Order

This course is a continuation of CRM 310. After reexamining classical theories, the course will introduce students to contemporary theories of social order. The theoretical focus will be on crime and criminalization as forms of social action. Prerequisites: CRM 215J and CRM $310 . \quad$ Cr 3.

## CRM317 Gender and Crime

This course concentrates on gender and its relation to crime. It explores such issues as histories of gender inequality, the gendered character of criminological theory, and how gender is related to a variety of crimes such as rape, violence in the family, crimes by women, property crimes, and corporate crime. Prerequisite: CRM 215J.

Cr 3.

## CRM 320 Film and Social Order

The intent of this course is to engage in a crosscultural study of the relationship of film to social order and crime. Films construct images about social reality. The ways in which these images present
and interpret this relationship will be examined from various analytical standpoints, including ethnomethodology, semiology, and post-modernism. Prerequisite: CRM 215 J .

## CRM 330 Crime and Social Control

This course explores theoretical and practical issues of modern systems of social control, including punishment, policing, prisons, parole, probation, and the role of the state in social control. The history of Western social control systems is stressed, with emphasis on race, gender, and class effects. Students are required to engage in experiential learning. Prerequisites: CRM 215J and CRM 220. Cr 3.

## CRM 334 Law and State

This course will examine classical and contemporary approaches to understanding the role and form of law. This will include an examination of feminist theories of law and state and the place and utility of rights discourse. Prerequisite: CRM 215J.

Cr 3 .

## CRM337 Youth Crime

This course provides an overview of justice issues as they affect juveniles. Theoretical explanations for youth crime as well as the emergence of both "adolescence" and "delinquency" as socially constructed concepts will be examined. In general, the course adopts an historical approach to youth crime. Prerequisite: CRM 215J.

Cr 3.

## CRM340 Criminal Law

This course offers students an intensive study and review of statutory law, case law, and criminal procedure. Substanive topics covered include responsibility; insanity; grand jury; 4th, 5th, 8th and 14th Amendment issues; pre-trial; rial; sentencing and appeals. Materials are drawn from U.S. Supreme Court and Maine Judicial Court opinions. Prerequisites: CRM 215J or permission of instructor.

Cr 3.

## CRM345 Criminology in Sweden

This special summer course in Sweden provides students with the opportunity to live in, study, and experience another culture and to gain an understanding of crime, criminology, and social control in another country. Visits will be made to the police department and court system in Stockholm and to several prisons in other cities. Lectures will be provided by sociologists at the Criminology Insitute at the University of Stockholm, as well as by a variety of lawyers, judges, and political party leaders. Offered Summer Session only. Prerequisite: CRM 215J.

Cr 6.

## CRM 350 Topics in Criminology

Specially developed courses exploring areas of interest and concern in depth. Among these topics currently considered are war crimes, race and crime, ethno-methodology, homicide, visual criminology,
film and crime, self and crime, sexuality and crime, and social theories of non-violence. May be repeated for credit. Prerequisite: CRM 215J. Cr 3.

## CRM 360 The Death Penalty

This course is designed to provide students with historical and current information on the death penalty in the United States. The following topics are covered: historical applications, deterrence, racial and gender bias, execution of innocent people, and the legal, political, economic, and moral perspectives of the death penalty. Prerequisite: CRM 215J. Cr 3.

## CRM 390 Independent Projects

Individually or collectively arranged reading and/ or research for juniors and seniors under the direction of a faculty member. May be repeated for credit. Prerequisites: CRM 215J and CRM 220 or CRM 222.

Cr 3.

## CRM 395 Internship

The course is designed as a field experience/ reflection opportunity for upper-level criminology majors with substantive background or coursework in the area of internship placement. It also provides a work/action experience and insight into professional roles in a variety of community agencies and organizations. The emphasis is on the application of social science perspectives, substantive knowl-
edge, and methodologies to understand a particular organizational situation. In addition to field placement, students are expected to meet for a series of intemship seminars, for which readings and reports will be required. In order to register for Intemship, students must have an overall GPA of 2.5 or better and a GPA of 3.00 or better in the major. Also, students must have completed 53 or more credit hours by the end of the semester in which they register for the course. Contact Department internship coordinator for details. Prerequisites: CRM 215J and CRM 220.

Cr 3-6.

## CRM 401 Comparative Criminology

This course focuses on the application of U.S. criminological theory in cross-cultural contexts. Specific emphasis is given to the problems of cultural relaivism and intellectual imperialism while providing an integrative senior experience for majors. Prerequisites: CRM 215J, CRM 220 or CRM 222, and senior class standing.

Cr 3 .

## CRM 402 Senior Seminar

This course is intended to fumish senior criminology majors with an opportunity to reflect on and integrate the material in their other major courses. Its focus is a major research project. The course combines individualized instruction, small group meetings, and seminars. Prerequisites: CRM 215J, CRM 220 and senior class standing. Cr 3 .

# Economics 

Chair of the Department: Michael Hillard, 11 Chamberlain, Portland Associate Professors: Feiner, Goldstein, Hillard, Medley, Roberts; Assistant Professor: Mamgain

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.

## Programs and Requirements

## Bachelor of Science in Economics

The minimum number of credits (including the University's Core curriculum) required for the degree: 120.

Students entering the four-year economics degree program are classified as economics majors.

Core Curriculum Requirements
Basic Competence

1. English Composition (3 credits)

Students who fulfill the English Composition Competence of the Core curriculum without earning credits must complete 3 credits of electives from ENG electives.
2. Skills of Analysis (3 credits)
3. Quantitative Decision Maling (3 credits)

Methods of Inquiry/Ways of Knowing

1. Fine Arts
a. Performance-centered arts ( 3 credits)
b. History-centered arts ( 3 credits)
2. Humanities
a. Literature (3 credits)
b. Other Times/Other Cultures ( 3 credits)
3. Social Science (not to include ECO courses) (6 credits)
4. Natural Science (4 credits)
5. Interdisciplinary COR course (3 credits)

Basic Requirements ( 21 credits)
Nine credits from: SBU 165J (or BUS 365), BUS 328, BUS 330, BUS 335, BUS 340, BUS 360, BUS 361 or BUS 385

| ACC | 110 | Financial Accounting Information for Decision <br> Making |
| :--- | :--- | :--- |
| BUS | 270 | Quantitative Business Analysis <br> MAT |
| 211 | Probability and MAT 212 Statistics |  |
| or |  |  |
| MAT | 380 | Probability and Statistics |

An optional, more rigorous mathematics sequence is available. Students may take MAT 152D Calculus A and MAT 153 Calculus B instead of MAT 110D. These students may take MAT 380 to substitute for MAT 211 and MAT 212.

Successful completion of these courses may satisfy one Core curriculum requirement.

Economics Requirements (27 credits, not including 100-level courses)
Prerequisites: ECO 101J and ECO 102J or, under some circumstances, any 100-level ECO course.

| ECO | 301 | Intermediate Macroeconomics |
| :--- | :--- | :--- |
| ECO | 302 | Intermediate Microeconomics |
| ECO | 303 | Political Economy |

Electives, 18 credits from ECO 300 and above, which may include up to 6 credits from among GEO 303, ENG 307, MAT 252, MAT 290, MAT 295, WST 365, WST 465, CRM 216, ESP 365/POS 365, POS 340 or SWO 450.

General Elective credits to 120 .

## Bachelor of Arts in Economics

Core curriculum requirements as for bachelor of science, above
Basic Requirements ( 18 credits)
Any 100-level math course (except MAT 120D or MAT 131D)
MAT 120D or MAT 380 (requires completion of MAT 153)
9 credits from: POS 101J, POS 104J, SOC 100J, ANT 101J or GEO 101J
3 credits from: ENG 110E, SOC 210E, PHI 110E orPHI 111E
Courses taken to satisfy the basic requirements may also satisfy Core curriculum requirements.

Economics ( 33 credits, not including 100-level courses)

| ECO | 301 | Intermediate Macroeconomics |
| :--- | :--- | :--- |
| ECO | 302 | Intermediate Microeconomics |
| ECO | 303 | Political Economy |

Electives: 24 credits from ECO 300 or above which may include up to 9 credits from among GEO 303, ENG 307, MAT 252, MAT 290,MAT295, BUS 330, BUS 335, BUS 360, WST 365, WST 465, CRM 216, ESP 365/POS 365, POS 340 and SWO 450.

General Electives to 120 credits

## 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 an Economics Minor Authorization Form, available in the Economics Deparment. The 18 credit hours must include: ECO 101J; ECO 102J; 3 credits from ECO 103E, ECO 105 H , or ECO 106I; and nine additional credits fromECO 300and 400-level courses. These courses must be completed with a grade point average of at least 2.0.

## Minor in Accounting

In cooperation with the Deparment of Accounting, a 15 -credit minor in accounting is available to all economics majors. Economics students pursuing the
optional accounting minor musthave an overall GPA of 2.0 at the time of applicaion and attain at least a $C(2.0)$ or better in each ACC designated course. The minor normally consists of the following coures: ACC 110, ACC 211, ACC 213, and two additional courses from ACC 301, ACC 302, ACC 305, ACC 313. Students who want to pursue the minor must complete an Authorization for Accounting Minor Form (available from the School of Business or the Economics Department), and return it signed by their current economics advisor to a School of Business advisor. A student may transfer to the minor up to six credit hours of comparable accounting courses, with grades of C (2.0) or better, from acceptable instutions.

## 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: 22 credit hours to include MAT 152D, MAT 153, MAT 290, COS 160, COS 170; plus two additional MAT courses with the second digit 5 or higher (we recommend MAT 290 and MAT 295).

## ECO 100J Introduction to Economics: Ideas and Issues

An introduction to basic economic ideas, issues, and theories for non-majors. The course surveys microeconomic and macroeconomic theories and analyzes current topics and problems of the economy.

Cr 3.

## ECO 101J Introduction to Macroeconomics

An analysis of the basic characteristics, institurions, and activities of modern market economies. Topics discussed include inflation, unemployment, govemment monetary and fiscal policy, full employment and economic growth.

Cr 3.

## ECO 102J Introduction to Microeconomics

Inroduction 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 103E Critical Thinking About Economic

 IssuesThis course aims to develop critical thinking skills through the study of competing interpretations and analyses put forward by economists. Students will use a variety of texts, media, and activities to better understand controversial topics in economics. The specific thematic focus of ECO 103E may vary from section to section. Examples of topics which may be examined include the economics of health care, economic inequality, the global economy, and the economics of the environment. Prerequisites: ENG 100C or equivalent.

Cr 3 .

## ECO 104J The U.S. in the World Economy

Students will examine national and global economic issues through consideration and application of economic theories. They will analyze and discuss basic economic principles and viewpoints, tradi-
tional policy approaches, post-World War II transformation in the U.S. economy, the impacts of the changing global economy on various aspects of life in the United States and will develop policy responses to these issues. Prerequisites: none. Cr 3.

## ECO 105H A Novel Approach to Economics

This course will use fiction and non-fiction to explore key issues in economic analysis and policy formation. The impact of institutional change on production, distribution, and consumption will be the principal focus of the course. Students will discuss and write about the texts; some graphical analysis will be employed. Prerequisites: none. Cr 3.

## ECO 1061 Economic, Social, and Cultural Change

Students will explore connections among major socioeconomic transformations (e.g., the spread of market relations, industrialization, and new technologies), massive movements of people (from countryside to city, from one nation to another), the resulting clash of cultures, and the social construction of human worth. Students will analyze debates over human intelligence, social policy, economic performance, and the relative standards of living. Prerequisites: none.

Cr 3.

## ECO 108 Economics in the News

This introduction to economic ideas is based on current economic events as reported in a variety of news media. The principles of economics will be introduced through reading and guided discussion of economic coverage in various broadcast sources. Topics include markets, labor, business, the environment, health care, and poverty.

Cr 3.

## ECO 220 I U.S. Economic and Labor History

This course examines labor issues in the U.S. economy, combining analytical and historical perspectives. The course surveys the evolution of labor in the U.S. economy from the industrial revolution to the present, considers the history of the American worker and of the U.S. labor movement,
and analyzes labor markets and their relationship to the competitiveness of the U.S. economy. Prerequisites: any 100 -level ECO course or instructor permission.

Cr 3.

## ECO301 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 101J and ECO 102J, or ECO 100J and department permission.

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 101J and ECO 102 J , or ECO 100 J and department permission.

## Cr 3.

## ECO303 Political Economy

This course provides an overview of various perspectives on the U.S. economic system, its dynamics, problems, and its relation to the political sphere. Topics may include: inequality and discrimination; growth and the environment; military spending, productivity and growth; and policies for the future. Prerequisites: ECO 100 J or ECO 101J orECO 102J.

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 altemative monetary theories; and discusses major issues in monetary policy. Prerequisites: ECO 101J, ECO 102J.

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. Prerequisite: Any 100 -level ECO course.

Cr 3.
change, and competitiveness problems. Prerequisites: ECO 101J, ECO 102J. Cr 3.

## ECO 330 Urban Economics

This course introduces the study of urban economics through a conceptual and historical background for analyzing the urban economy, and outlines basic theoretical models of urban conditions and applications to several most urgent urban problems. Prerequisites: ECO 101J, ECO 102J or ECO 100J.

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 macroeconomics. Prerequisites: ECO 101J, ECO 102 J .

Cr 3.

## ECO350 Comparative Economic Systems

The structures and operating principles of the major contemporary economic systems are examined and compared. Prerequisites: ECO 101J or ECO 100 J .

Cr 3.

## ECO 360 Economic Development

The theories and practices of interregional and international economic development. Special attention is given to developmental problems of emerging nations. Prerequisite: any 100 -leve1 ECO course.

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: any 100 -level ECO course.

Cr 3.

## ECO 370 International Economics

Analysis of intemational markets and exchange theory, functioning of prices in the international economy, international finance, tariffs, quotas, and other instruments of international economic policy. Prerequisites: ECO 101J, ECO 102J. Cr 3.

## ECO 380 Public Finance and Fiscal Policy

Public expenditure theory; principles of taxation; the federal budget and altemative budget policies; federal tax policy; fiscal policy for stabilization; federal debt. Prerequisites: ECO 101J, ECO 102J.

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 101J, ECO 102J.

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 including: free market, traditional monetary and fiscal, as well as new policy approaches. Prerequisites: any 100 -level ECO course.

ECO 399 Special Topics in Economics

ECO 450 Readings in Economics
A series of readings and discussions of important books and articles of a socio-economic and politicoeconomic nature.

Cr 3.

## ECO 490 Independent Readings and Research in Economics

Independent study and research of various student-
Cr 3 . selected areas of economics. Prerequisites: a completed independent study form and sponsorship by an economics faculty member. May be taken more than once. Cr 1-12.

## English

Chair of the Department: F. C. McGrath, 3 Luther Bonney, Portland Professors: Ashley, Gish, Rosen.Associate Professors: Abrams, Benedict, Carner, Cole, McGrath, Peters, Rusch, Selkin, Swartz. Assistant Professors: Bertram, Carroll, Klvana, Kuenz, Walker

The USM English major is devoted to the study of language, literature, and culture. Focusing upon the British and American literary raditions, the major exposes students to a range of literature in different historical eras. It also offers students the opportunity to explore other raditions such as Irish or Canadian literature, women's writing, and African-American writing. In addition to literatures written in English, course offerings include world literatures in translation from the classical to contemporary eras.

The major encourages both the analysis of literary form and the study of literature in its historical and cultural contexts. Students leam how to read in the light of contemporary critical theories and in relation to the tools, texts, and theories of other academic disciplines. Many classes provide opportunities for the study of non-literary cultural texts and practices such as film, television, fashion, andritual. Approved courses from other deparments and programs-for example, Women's Studies, Foreign Languages and Classics, and Media Studies-may also be counted toward the English major.

The most distinctive skill the major develops is critical expository writing. Virtually every course requires substantial writing from students, ranging from a weekly short paper to longer research papers. Moreover, students have the opportunity to develop their talents in writing through workshops in fiction, poetry, autobiography, and journalism. English majors have traditionally enjoyed participating in the crearive communities of Stonecoast Writers' Conference and Celebrate Writers! The Deparment also offers a minor in writing. An internship in professional writing provides a means for some students to work locally as writers, editors, and reporters, and an internship in the teaching of writing for students who are planning a teaching career is offered.

Because of the Department's desire to explore relationships among language, literature and culture, English majors are encouraged to study a second language. Opportunities for study abroad are offered through the Department's exchange program with several schools, including Nijmegen University in the Netherlands, King Alfred's College and the University of Central Lancashire in England, and University College, Galway, in the Republic of Ireland.

English majors are continually engaged in articulating their ideas and in developing persuasive arguments; therefore, graduates are well-prepared for careers in many areas. Medical, law, andbusiness schools, in particular, regard English majors as desirable applicants. USM graduates are entering professional and graduate schools, including programs in English, writing, and cultural studies.

## Programs and <br> Requirements

## Bachelor of Arts

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

After satisfying the two prerequisites, a course in writing (100C or 101C) and an introduction to the study of literature $(120 \mathrm{H})$, the English major begins with ENG 245. The student then selects more advanced English courses (and up to 6 credits in approved courses from other departments) to savisfy the 48-credit major requirement. No more than 12 credits in 200 -level courses may count toward the major.

While the Department does not require courses in other disciplines, majors are strongly advised to develop a reading proficiency in a foreign language, particularly if they plan to apply to graduate programs

English majors must meet the following English Department requirements. All courses must be passed with a grade of C - or better and six hours with a grade of B or better. Majors should have completed ENG 100C or 101C, ENG 120 H , ENG 245 , and at least one other 200-level English course before concentrating on more advanced work.

## Prerequisites

ENG 100 C or 101 C or waiver (no credit toward major)
ENG 120 H or waiver (no credit toward major)
I. Introduction for Majors (3 credits)

ENG 245 Introduction to Literary Studies. This course is a prerequisite for 300 - and 400 -level literature courses.
II. At least one other 200-level course excluding ENG 201 (3 credits)
III. At least one 300- or 400-level Criticism and Theory course ( 3 credits)
IV. At least one 200-, 300 -, or 400 -level course from each of the following categories ( 12 credits)

Language (In addition to ENG courses in the Language category, the following courses from the Linguistics program satisfy this requirement: LIN 311, LIN 312, LIN 313, LIN 314, LIN 330, LIN 331. Courses in foreign and classical languages beyond third-semester college level also satisfy this requirement.)
Genre and Form
Writing
Interdisciplinary and Cultural Studies
V. At least one 300- or 400-level course from 4 of 6 historical periods of literature ( 12 credits)

Ancient and Biblical (In addition to ENG courses in the Ancient and Biblical category, the following courses from Foreign Languages and Classics satisfy this requirement: CLA 283 H, CLA 284 H .)
Medieval
Renaissance
Eighteenth Century
Nineteenth Century
Literatures Since 1900
VI. Senior Seminar ( 3 credits). A seminar is a small class (limited to approximately 15 students) designed to encourage independent thinking, intensive student participation, and in-depth research on topics of the student's choice related to the seminar topic. Typically seminars allow a professor to teach a focused subject of special interest, one on which the professor has done recent research or scholarly writing. Each semester, detailed descriptions of seminars will be published in the English Department's Course Guide. Seminars may also fulfill requirements under categories III, IV and V (but they still count as only 3 credits toward the major requirements).
VII. Electives (as needed to complete 48 credit hours in the major). All electives must be 200 -level or above. Up to 6 credits of approved courses may be from other departments.

## Prerequisites and Course Waivers

ENG 100C or 101C, an equivalent, or a waiver is prerequisite for any English language or literature course, including ENG 120H. ESL 100C satisfies this requirement for non-native speakers of English. ENG 120H or permission of the insuctor is prerequisite for any other English course. (English majors may not use more than one ENG course to satisfy the Core curriculum requirements.) For English majors, ENG 245 is prerequisite for all 300 - and 400 -level literature courses. Certain advanced courses, as indicated in the course listings, and all independent studies require the permission of the insmuctor.

Non-majors and students with special interests are encouraged to seek the inswuctor'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 exam administered by the English Deparment and for ransfer students with certain literature course credits.

## 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 obtain a copy of the guide in the English Office.

## The Honors Degree in English

For a B.A. degree in English with honors, a student must achieve a B+ or better average in courses taken for the major.

## The English Minor

The minimum number of credits (exclusive of the University's Core curriculum) required for the English minor: 18. No more than a total of 6 credit hours can be earned at the $200-$ level.

The Department offers a minor in English that requires 18 credits of upperlevel courses in a program planned with an English faculty advisor and approved by the English Department director of Advising. The goal of the minor is to give students not simply a collection of courses, but a coherent experience with English courses chosen to suit their needs and interests.

Each English minor program must meet the following specific requirements beyond ENG 100C/101C and ENG 120 H (or waivers):
I. ENG 245 (3 credits)
II. Three 300 -level literature courses (one must focus on a period before 1800 and one on a period after 1800) (9 credits)

## III. Electives to complete the 18 credits required for the minor

Further information about the English minor is available from the English Department.

## The Writing Minor

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

The English Department offers a minor in writing for both English majors and non-majors. The minor consists of tracks in poetry, fiction, non-fiction, and journalism. The goal of the writing minor is to direct student attention to writing offerings while recommending a productive sequence of writing courses and collateral craft-oriented textual studies courses.

Students must apply for entrance to the minor by fulfilling the following requirements: submit application, a manuscript, and letters of recommendation. Candidates must be eligible for pre-registration and/or admission to upper-level workshops and should have completed six hours of 200 - or $300-$ level writing classes. Approximately 45 students will be writing minors during any given year. Students who are writing minors, English majors, or part of the writing concentration in media studies will have priority for registration in writing classes.

Each writing minor program must meet the following specific requirements beyond ENG $100 \mathrm{C} / 101 \mathrm{C}$ and ENG 120 H or waivers:
I. ENG 201 (3 credits)
II. ENG 245 or one 200-level course from one of the following categories: Genre and Form or Interdisciplinary and Cultural Studies (3 credits)
III. One of the following courses ( 3 credits)
(Note: These courses are required for admission to writing workshops.)
Fiction Writing (ENG 300F)
Poetry Writing (ENG 301F)
Advanced Essay Writing (ENG 305)
Newswriting (ENG 309)
IV. Workshops (6 hours)

Fiction Workshop (ENG 302F)
Poetry Workshop (ENG 303F)
V. Elective courses (3 hours)

Selected from English Department offerings (or from offerings in other departments, such as Women's Studies) with emphasis on literary texts in the genre those students are practicing. Courses elected should be 300 - or 400 -level.
VI. Thesis

The minor requires a thesis comparable to an M.F.A. application portfolio: 10 to 15 poems or 25 to 50 pages of fiction or non-fiction, which normally would be completed in the second upper-level workshop.
VII. Optional Internship (3 credits)

Internships provide students the opportunity to earn course credit through professional experience in writing or editing for an organization, primarily in journalism or the arts. The English Department currently offers the Internship in Professional Writing (ENG 409).

Further information about the writing minor is available from the English Department.

## ENG 100C College Writing

With emphasis on reading and writing and the connections between them, English 100C introduces students to practices and conventions of expository academic writing. Through discussions and workshops focused both on assigned reading and on essays written in the course, paricipants will learn how thinking and the language that conveys it develop and change through a reader's process of intellectual revision and through a writer's process of drafting, revising, editing and proofreading. Prerequisite: writing proficiency. Every semester.

Cr 3.

## ESL 100C College Writing

This section of College Writing (ENG 100C) is intended fornon-native speakers of English only. This course focuses on the analysis of professional and student writing in terms of how to use the English language effectively in the academic classroom. The writing assignments encourage students to apply the principles discussed in class to their own work. This course cannot be used to satisfy a Humanities requirement. Prerequisite: ESL 402A, ESL 403A, or writing proficiency.

Cr 3.

## ENG 101C Independent Writing

English 101C is offered as an alternative to English 100C for students who prefer to define their own writing goals and work toward them with the instructor's guidance. Classes meet regularly for the first few weeks of the semester and occasionally thereafter, but the course is conducted primarily in weekly individual conferences. Independent Writing is not a remedial course; it addresses writing mechanics to some extent, but emphasizes style, organization, and development. The major challenge of the course is the self-discipline the students will need to work independently. Prerequisite: writing proficiency. Students who have taken ENG 100C or an equivalent course must have the instructor's permission to take ENG 101C. Every year.

Cr 3.

## ENG 103A Modular Approach to the Writing Process

This course for college writers in various disciplines is divided into three units or modules, each of which earns one credit hour. Each unit runs for approximately one-third of a semester. Students may enroll in one, two, or all three modules and receive
separate grades for eachmodule they complete. The second and third units do not require the earlier unit(s) as prerequisites. Any or all of the units may be taken in conjunction with ENG 100C College Writing.
The first unit, "Practical and Descriptive Grammar for College Writers," gives students a thorough knowledge of traditional "prescriptive" grammar and introduces them to modern "descriptive" grammar. The second unit, "Editing, Revising, and Rewriting," focuses on skills in proofreading, editing, revising, and rewriting, and also covers the use of computer programs for writing assistance. The third unit, "Research Skills Across the Disciplines," studies the use of library resources (especially on-line and other computer databases), documentation and bibliography formats from a range of disciplines, and other techniques crucial to writing analytic research papers. Every year. Cr var.

## 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 $100 \mathrm{C} / 101 \mathrm{C}$ or permission of the instructor. Every semester.

Cr 3 .

## ENG 150 Topics in Literature

A selection of courses varying in content from term to term. May be repeated for credit when topics vary. Consult the Deparment's Course Guide for detailed descriptions.

Cr 3.

## ENG 245 Introduction to Literary Studies

This is a required course for all English majors. It may be taken concurrently with other 200-level courses in the Department, but is a prerequisite for all 300- and 400-level courses except those in creative writing. The course will have a double focus. Students will be introduced to a variety of methodologies important to an insightful analysis of literature and other cultural texts. They will also learn research procedures and techniques of effective critical writing. Every semester.

Сг 3.
phonology, morphology, and varieties of English usage. The course includes a survey of language families of the world, with special focus on the IndoEuropean group of languages. Such sociolinguistic topics as the status of marginalized languages are also discussed in depth. 3-year cycle.

Cr 3.

## ENG 336 Old English Language and

## Literature

An introduction to the grammar of English in the earliest period, 700-1050. The first several weeks concentrate on grammar and enable students to translate elementary prose (e.g., prefaces by King Alfred, Apollonius, the Anglo-Saxon Chronicle). Later weeks introduce students to Anglo-Saxon culture and literature, particularly to alliterative poetry. Major prose and poetic works are studied through looking jointly at Modern English translations and the original works. Beowulf; "The Wanderer, Elene, and "The Phoenix" are works typically studied. 3-year cycle.

Cr 3.

## ENG 337 Studies in Rhetoric

The course will introduce students to the many ways of thinking about rhetoric throughout history and stress the value of rhetorical criticism in analyzing texts, discourse, and language. Topics will vary, but may survey theories of rhetoric from Plato and Aristotle to Campbell and Nietzsche or examine contemporary theoretical approaches to rhetoric, ranging from the neo-Aristotelian, dramaturgical, experiential and sociolinguistic to the postmodern. Students should consult the Department's Course Guide for detailed descriptions.

Cr 3 .

## ENG 338 Studies in Language

Under this itle is offered a variety of topics on language which include the following: linguistic ap-
proaches to literary analysis; language and culture; grammatical structure in English and related languages; and the history of linguisic thought. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions.

Cr 3.

## ENG 430 Independent Study in Linguistics

By instructor's permission. See Department for application form.

Cr var.

## ENG 431 Seminar on Literacy Studies and the Teaching of Writing

The seminar will consider topics in composition theory and practice within the broad context of histories and theories of literacy. Participants will be asked to make connections between curricular design or pedagogical practices and such issues as the history of public education and English stud-

## Criticism and Theory Courses <br> ENG 340 History of Literary Criticism and Theory

An historical study of the key critics and theorists from Plato and Aristotle to the present day. Every year. Cr 3.

## ENG 341 Contemporary Critical Theories

An introduction to major schools of literary criticism developed in the twentieth century. Emphasis is placed on identifying points of agreement and divergence between various theories and methods for interpreting literature. Specific theories to be studied may include (but are not limited to) structuralism, psychoanalytic theory, Marxist criticism, deconstruction, feminist theory, and the new historicism. Every semester.

Cr 3.
ENG 342 Topics in Contemporary Theory
This course studies in-depth selected theoretical ap-

## Genre and Form

## ENG 262 Poetry

An intensive course in the close reading of poetry in English. Attention will be given to important elements of poems, including versification and the use of metaphor; characteristics and conventions of poetry written in different periods, early and contemporary, will also be explored. Every year.

Cr 3.

## ENG 263 Fiction

A survey of various forms and techniques of fiction, typically beginning with oral story-telling 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.
ies, theories of discourse, writing and language use, and definitions of literary language and textuality. There will be consideration of contemporary research debates on the teaching of writing. This seminar is required for students enrolled in the Internship on the Teaching of Writing. It is open to all English majors; others must have instructor permission.

Cr 3.

## ENG 432 Internship in the Teaching of Writing

The Internship will provide qualified upper-class English majors with supervised experience in the teaching of writing. There is also the possibility of placement in tutoring and in community literacy programs. Students registering for the internship must also register for the Seminar on Literacy Studies and the Teaching of Writing. Application and screening for the internship take place through the College Writing Committee. Cr var.
proaches to literature and culture. It will focus either on a single current theory or, through a comparaive method, two to three different theories (e.g., structuralism and formalism, Marxism and cultural criticism, or deconstruction and feminism). May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Every semester.

Cr 3.

## ENG 440 Independent Study in Literary Criticism and Theory

By instructor's permission. See Department for application form. Cr var.

## ENG 441 Seminar in Literary Criticism and Theory <br> Students should consult the Department's Course Guide for detailed descriprions. <br> Cr 3.

## ENG 264 Performance Genres

This course will study dramatic performance from its roots in cultural ritual to its historical development in drama as well as its more contemporary manifestations in television and film. Students will investigate the social functions of performance in several cultures and epochs, focusing on convenions of language and stagecraft, dramatic experimentation, and technical innovation. Every year.

Cr 3 .

## ENG 318 Autobiography

This course will focus on autobiographical forms with emphasis on the emergence and development of the genre. Possible topics include American Autobiography, Medieval Lives, and the Confession. The course may be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. 2-year cycle.

Cr 3.

## ENG 319 Studies in Genre and Form

The content of this course is flexible, but will focus upon some aspect or dimension of genre studies not treated through other course rubrics. Possible topics include women and the romance, the vampire novel and popular culture, or the novel of sensation. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

## ENG 325 Epic and Romance

This course will focus on the emergence and development of Epic and Romance. Possible topics include the Epic, Arthurian Romance, and Medieval Epic and Romance. The course may be repeated forcredit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. 3-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. This course investigates the changes the idea of Bildung underwent at the hands of various authors in the nineteenth and early twentieth centuries in their adaptation of the original form, including the revision of selfhood to address the Bildung as a female as well as a male province. Works to be considered may include Goethe's Wilhelm Meister's Apprenticeship, Bronte's Jane Eyre, Dickens' David Copperfield, Joyce's Portrait of the Artist as a Young Man. 3-year cycle. Cr 3.

## ENG 418 Independent Study in Genre and

## Form

By instructor's permission. See Department for application form. Cr var.

## ENG 419 Seminar in Genre and Form

Students should consult the Department's Course Guide for detailed descriptions.

Cr 3.
tion. 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 reading and revising poetry, and who are interested in developing a sense of how poetry has been written in the past by major poets and how it is being created in the present. Emphasis will be on imitation of past and present writers, exercises that stress the elements of poetry, and the development of personal approaches. Suggested preparation: ENG 201F. Every year.

Cr 3.

## ENG 302F Fiction Workshop

An advanced course requiring the completion of at least two short stories or a substantial part of a novel. Prerequisites: ENG 300 or instructor's permission. May be repeated for three additional credits with instructor's permission. Every semester. 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. Prerequisite: ENG 301F or instructor's permission. May be repeated for three additional credits with instructor's permission. Every year.

Cr 3.

## ENG 305 Advanced Essay Writing

An intensive course for the advanced writer. The essay will be approached in one of two ways, either through conventions of academic and expository writing or with a focus on the history of the
genre in relation to understandings of the human subject and knowledge. There will be shared reading on historical and epistemological issues. The course will also function as a workshop for students' independent writing projects. Every year.

Cr 3.

## ENG 309 Newswriting

This course covers the basics of news-story writing for the print media with intensive practice in news gathering, background research, interviewing, covering a beat, covering social and political issues, and consideration of ethical and legal issues related to American joumalism. Every year. Cr 3.

## Interdisciplinary and Cultural Studies <br> ENG 244 Introduction to Cultural Studies

This course introduces students to the history, concepts, and methods of cultural studies. Students will read a variety of critical texts from a number of different theoretical perspectives, including semiotics, Marxian theory, psychoanalytic theory, gender studies, and cultural anthropology, and will also read selected texts from specific areas of cultural analysis, such as television studies or film theory. The course examines specific aspects of past or present popular cultures. Every semester. Cr 3.

## ENG 310 Topics in Journalism

Under this rubric the English Department will offer a variety of advanced courses which have journalistic writing as a major component of the course work. Topics include American Culture and World Communication, and The Right to Privacy. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Prerequisite: ENG 309.

Cr 3.

## ENG344 Sex/Gender and Sexuality

This course will investigate sex/gender and sexuality as analytic categories for understanding culture. Through a consideration of both history and theory, the course will explore different models for understanding sex/gender and sexuality, including their interaction with other categories of difference such as race and class. It will also explore the effect of these models on our understanding of literature, mass culture, theories of identity, and contemporary social life. Every year.

Cr 3 .

## ENG 345 Racial Formations

Guided by the concept of "racial formations," this course will foreground the definition of "race": it will ask questions about whether race is a biological or discursive category, about the relationship between race and identity, and about how racial identity is informed by class, gender, sexuality, and other socio-historical "formations." Course mate-

ENG 400 Independent Study in Creative or Expository Writing
By instructor's permission. See Department for application form.

Cr var.

## ENG 409 Internship in Professional Writing

 By application to the department and arrangement with campus or local newspaper or joumal. Prerequisite: ENG 309 or 310 , or permission of the Department.Cr var.

## ENG 410 Independent Study in Journalism

By instructor's permission. See Department for application form.

Cr var.

## ENG 411 Seminar in Journalism <br> Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

rials may include literature, film, criticism and theory, scientific and historical readings, and popular culture texts such as television, video, and music. 2-year cycle.

Cr 3.

## ENG 346 Language, Literature and the Politics of Identity in Contemporary Ireland

 An examination of the relations among literature, language and the politics of identity in Ireland today. Readings will include political, historical, and cultural materials from various communities of discourse competing to shape Irish identity for the twenty-first century, including traditional republicanism and unionism, new nationalism, historical revisionism, feminism, and consumer capitalism. 2-year cycle.Cr 3.

## ENG 347 Topics in Cultural Studies

This course explores specific cultural practices of the past and present. The goal of the course is to introduce students to the different ways in which popular culture has been analyzed and the ways in which different popular cultures have sustained themselves. Although topics courses will vary in subject matter, they will all share the common objective of examining the ways in which a given culture makes sense of itself. May be repeated forcredit when topics vary. Students should consult the Deparment's Course Guide for detailed descriptions.

Cr 3.

## ENG 348 Topics in Interdisciplinary Studies

This course investigates literature in relation to other disciplines, with an emphasis on how various fields of knowledge contextualize and elucidate our understanding of literary production. Topics may vary and include, for example, anthropology and drama, Freud and literature, literature and technology, and parallel movements in art and/or music and literature. Because of the diverse range of interdisciplinary studies, material is drawn from film, video, music, and art, as well as from printed texts. May be repeated for credit when topics vary. Students
should consult the Department's Course Guide for detailed descripions.

## ENG 444 Independent Study in Interdisciplinary and Cultural Studies <br> By instructor's permission. See Department for application form. <br> Cr var.

## Historical—Ancient and Biblical

## ENG 315 Ancient Literature

The course will vary between being focused on Greek and Roman literature and on literatures outside the Mediterranean/Aegean ancient world. Every year.

Cr 3.

## ENG 316 The Bible

The Bible, arguably the single most influential work (or group of works) in Western culture, will be studied as a literary text, with emphasis on selected books that have had the greatest literary influence, including Genesis, Exodus, Psalms, Job, and the Gospels. The course may also discuss the history of the texts, problems of translation, and/or influence. Every year.

Cr 3.

## ENG 317 Studies in Ancient and Biblical Literature and Culture

Some topics studied in this course take a compara-

## Historical-Medieval <br> ENG 320 Continental Literature

Readings in major works from the Middle Ages through the sixteenth century. Texts typically include some or all of the following: Augustine's Confessions, Boccaccio's Decameron, Petrarch's Sonnets, Dante's Divine Comedy, Machiavelli's The Prince, Marguerite de Navarre's Heptameron, Montaigne's Essays. All texts are read in modern translations. 3-year cycle.

Cr 3.

## ENG 350 Medieval English Literature

A survey of genres popular from the twelfth to the fifteenth centuries (including debates, lyrics, romances, allegories, drama), with emphasis on literature of fourteenth-century England. Major readings will typically include Chaucer's Troilus, the Pearl, and Sir Gawain and the Green Knight. 3year 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. 2-year cycle. Cr 3.

## ENG 352 Medieval Drama

This course will introduce the theater of the medieval world, which ranges from the liturgical, ritual drama of the church, to the morality plays-performed by traveling companies-and the mystery cycles, produced by civic and guild pride in the fifteenth century. Tudor plays of the early sixteenth century may also be read. Attention will be paid to the aestheric and theological principles underlying the conjunction of farce and high seriousness in the

ENG 445 Seminar in Interdisciplinary and
Cultural Studies
Students should consult the Department's Course Guide for detailed descriptions. Cr 3.
tive approach to ancient and biblical literatures, including that of the Graeco-Roman civilization, but are not limited to classical texts. Other topics take a more narrow approach and may involve combined studies of ancient and/or biblical literature and the culture of a later period. Possible topics include The Late Classical Era through Christian Antiquity, The Bible and Early Westem Literatures and Cultures, and Women Writers of Ansiquity and Images of Women in Ancient Literature. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions.

Cr 3.

## ENG 415 Independent Study in Ancient and Biblical Literature and Culture

By instructor's permission. See Departmentfor application form. Cr var.
plays, as well as to distinctly medieval techniques of staging and production. 3-year cycle. Cr 3.

## ENG 353 Medieval Women Writers

The course focuses on women writing in various discursive milieux during the long period between the third and the sixteenth centuries. Writers include literate nuns, female courtly love lyricists, laywomen mystics, the first professional woman writer Christine de Pizan, and women dramatists. NonEnglish texts will be read in modern translation. 2year cycle.

Cr 3.

## ENG 354 Studies in Medieval Literature and

## Culture

This course explores literature and culture ranging from the fifth and sixth centuries through the late fifteenth century. Some topics that may recur include Anglo-Latin and Anglo-French literature and scholarship; feminist studies of medieval culture; and allegory, symbol, and sign. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions.

Cr 3.

## ENG 450 Independent Study in Medieval Studies

By instructor's permission. See Department for application form.

Cr var.

## ENG 451 Seminar in Medieval Studies

Students should consult the Department's Course Guide for detailed descriptions.

Cr 3.

## Historical-Renaissance

## ENG 355 English Renaissance Literature and Culture

A survey of major genres and writers of the English Renaissance. The course is concerned with the historical context of the production and reception of Renaissance texts. Emphasis is on how sixteenth and seventeenth century innovations in formal techniques are related to cultural and institutional change. Typical writers will include More, Spenser, Marlowe, Wroth, Sidney, Shakespeare, Lanier, Donne, and Milton. Topics and issues covered include gender and the erotic, humanism and power, religion, imperialism, social hierarchy, and notions of selfhood. Every year.

Cr 3 .

## ENG 357 Elizabethan and Jacobean Drama

A study of selected plays from the English Renaissance. The course may focus on a particular theme, genre, sociopolitical issue, or author. Typical topics include theater and the state, unruly women, magic and witchcraft, the construction of the "other," and rebellion. Playwrights typically included are Kyd, Marlowe, Dekker, Webster, Middleton, and Jonson. 3-year cycle. Cr 3.

## ENG 360, 361 Shakespeare

ENG 360 and 361 each feature close reading of five to seven Shakespearean plays, and focus attention both on theatrical and philosophical meanings. Both courses include tragedies and comedies; neither is introductory nor prerequisite to the other. ENG 360 often includes a section on Shakespeare's history plays, while ENG 361 includes a section on Shakespeare's "romances." Every semester.

## Historical-Eighteenth Century ENG 370 Literature of Discovery, Exploration, and Colonialism

Focusing upon literatures of the Atlantic, this course examines literary, historical, and discursive connections between European, creole, and indigenous cultures in the early period of European expansion. Topics to be explored include the commercial, religious, and scientific origins of European exploration, "New World" representations, and the social organization of colonialism. Because area of inquiry will be determined by the instructor, this course may also satisfy the Renaissance requirement. Students should consult the Department's Course Guide for specific descriptions. 2-year cycle.

Cr 3.
American Literature
ENG 367 Literature and Culture of the Early

## Republic

Focusing upon representative early American texts, this course considers questions of revolution, the transitionfrom colonialism, emergent nationalisms, and constructions of citizenship within the context of the American War for Independence and the en-

## ENG 362 Studies in Shakespeare

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 include allegorical elements in Shakespeare's plays; Shakespeare and the daemonic; Shakespeare and computers; Shakespeare and popular culture; Shakespeare, theater, and the state; Shakespeare's sources; Shakespeare, gender, and sexuality. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions.

Cr 3.

## ENG 363 Studies in the Renaissance

Selected topics and writers from the sixteenth and seventeenth centuries. The course may focus on an author, genre, historical moment, socio-historical problem, or discursive practice. Typical topics include popular culture, the "New Science," pastoral and politics, literature of "New World" exploration and colonization, the market, the English Civil War. Courses will typically study the relation of diverse practices of writing or generic conventions to the social and political order of Renaissance England. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

## ENG 455 Independent Study in the

Renaissance
By instructor's permission. See Department for application form.

Cr var.
ENG 456 Seminar in the Renaissance
Students should consult the Department's Course Guide for detailed descriptions.

Cr 3.

## ENG 379 Earlier Women Writers

This course focuses upon the efforts of women writers in the early modern period to create, negotiate, and contest the terms of a developing literary culture. Depending on content, which varies, ENG 379 may also satisfy the Renaissance or NineteenthCentury category requirement. In all cases, instructors will attend to the successes and limitations of gender as a category of analysis. Students should consult the Department's Course Guide for detailed descriptions. 2-year cycle.

Cr 3.
suing years of the Early Republic. 3-year cycle.
Cr 3.

## ENG 368 Studies in Eighteenth-Century

 American Literature and CultureMore specialized than ENG 367, this course offers the opportunity for intensive focus upon a single
genre, author, issue, or historical moment, to be determined by the instructor. Typical topics include science in/and the New World, American nationalisms, the rise of slavery in the colonies, witchcraft and public order, theFrench Revolution in America,

## British Literature

## ENG 365 Restoration and Eighteenth-Century Literature and Culture

Focusing mostly upon representaive or canonical texts, this is a multi-generic course intended to provide an overview of British literature and culture in the "long" eighteenth century, 1660-1800. Readings will be organized around several of the following cultural and historical issues: political and religious controversies; the role of science and experimentation; the creation of the literary professional; women and the domestic sphere; the growth of the British Empire. Critical and theoretical texts may accompany literary readings. 2-year cycle.

Cr 3.

## ENG 366 Studies in the Restoration and Eighteenth Century

More specialized than ENG 365, this course offers the opportunity for intensive focus upon a single genre, author, issue, or historical moment to be determined by the instructor. Typical topics include satire and the politics of "wit," the cult of sensibil-

The GreatAwakening and women's public life, and colonial autobiography before Franklin. May berepeatedforcredit when topics vary. Students should consult the Department's Course Guide for detailed descriptions.

Cr 3.
ity, theater and andi-theatricality, the eighteenth-century long poem, and seduction and the scandalous memoir. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

## ENG 369 Emergence of the Novel

The course explores the emergence of the novel as a new literary mode, one both dependent upon and distinguishable from the kinds of prose narrative which are usually described as its origins: journalism, scandalous memoirs, Puritan autobiographies, conduct books, etc. 2-year cycle.

Cr 3.

## ENG 465 Independent Study in the Eighteenth

 CenturyBy instructor's permission. See Department for application form. Cr var.

## ENG 466 Seminar in the Eighteenth Century

Students should consult the Department's Course Guide for detailed descriptions.

Cr 3.

## Historical-Nineteenth Century

## American Literature

## ENG 380 Early Nineteenth-Century American Literature and Culture

The literature and culture of the United States to the Civil War. While particular writers, works, and theoretical emphases may vary with the instructor, the course will consider historical context and may include canonical and non-canonical texts in a variety of literary and cultural forms: long and short fiction, poetry and song, non-fiction essays, slave narratives, political pamphlets and joumalism, and paintings. Possible topics include the growth of female authorship; social reform movements; and the formation and interpretation of the American literary canon. Every year.

Cr 3.

## ENG 381 Earlier American Poetry

American poetry to 1900 . While the particular poets and theoretical emphases will vary from semester to semester, the course will consider poetic forms, themes, and strategies in relation to literary and cultural traditions. The course may concentrate on several major poets, examining them against a broader literary and historical context, or survey a range of poetic modes, including oral and popular forms. 3-year cycle.

Cr 3.

## ENG 382 The Earlier American Novel

The American novel to 1900 with attention to historical context, generic development, and thematic connections between texts. The course may include
various types of novels, such as epistolary, gothic, romance, domesic, and realist, as well as canonical and non-canonical writers. Critical and theoretical texts may accompany literary readings. Every year.

Cr 3.

## ENG 383 Studies in African-American Literature and Culture

This course will explore various topics in AfricanAmerican literature and culture. Specific courses may focus on literary traditions, genres, and themes; literary and cultural periods or movements; theoretical issues in the development or study of Afri-can-American literature; or the work of a single author. Possible topics include the slave narrative, African-American non-fiction prose, the Harlem Renaissance, the Black Arts Movement, AfricanAmerican women's writing, African-American literary and cultural theory, Black popular culture. Because reading materials and areas of inquiry will be determined by the instructor, this course may also satisfy the Literatures Since 1900 requirement. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for specific descriptions. Every year. Cr 3.

## ENG 384 Late Nineteenth-Century American Literature and Culture

This course covers the historical period associated with the rise of realism and naturalism in Ameri-
can literature that is traditionally marked by the end of the Civil War and the beginning of World War I. While the course's focus may vary, it will explore the definitions of realism and naturalism with regard to both historical context and aesthetic agendas. In testing definitions of American realism and naturalism, the course may ask questions about whose reality, whose America, and whose intellectual and cultural tradimons have shaped our understanding of the literary movements that arose in response to major changes in American society during the late nineteenth and early twentieth centuries. 2-year cycle.

Cr 3.

## British Literature

## ENG 371 Romantic Writing

A study of major British poets of the Romantic period (1790-1832). Readings will be selected from among the works of William Blake, Helen Maria Williams, Ann Yearsley, Hannah More, William Wordsworth, S.T. Coleridge, John Clare, John Keats, Byron, and Percy Shelley. Every year.

## ENG 373 Studies in Romantic Literature and Culture

The course will explore themes and issues unique to the Romantic Period, a time of unprecedented change in literature, the arts, and society. Although the content of the course will vary, it will generally include a mixture of literary and cultural forms, including poetry, fiction, nonfictional prose, painting, and drama. Possible themes will include women and Romanticism; Romantic writing and the French Revolution; Romanticism and popular culture; forms of Romantic autobiography; Romantic fiction. May be repeated for credit when topics vary. Students should consult the Deparment's Course Guide for detailed descriptions. Cr 3.

## ENG 375 Nineteenth-Century British Novel

A study of the canonical novels produced during the nineteenth century, including texts by the Brontes, Dickens, Thackeray, George Eliot, and Hardy. The course will examine narrative forms, narrators and narratees, plots and stories; cultural forms such as the literary pen name; the material production of books, serials, and newspaper stories; the cultural predominance of fiction during the period; the cultural production of subjectivity and readership; and the uses and readings of history in fiction. 2-year cycle.

Сг 3.

## Literatures Since 1900

ENG 387 Women Writers Since 1900
This course introdices students to the diverse concerns of modern and contemporary women writers. It could be organized around a thematic, theoretical, or historical question or could be devoted

ENG 385 Studies in Nineteenth-Century American Literature and Culture
Specific themes, works, or writers prominent in nineteenth-century American literature and culture. The course may focus on a particular literary tradition, genre, or theme; a literary and cultural movement; a theoretical issue in the development or study of nineteenth-century American literature; or the work of a single author. Possible topics include slavery and abolition in American literature, nine-teenth-century popular culture, the domestic novel, American Renaissance, and Whitman and Dickinson. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

## ENG 376 Victorian Literature and Culture

Victorian writing, including poetry, novels, plays, autobiography, and non-fiction by writers such as the Brontes, the Brownings, Carlyle, Dickens, George Eliot, Elizabeth Gaskell, George Gissing, Thomas Hardy, Hopkins, John Stuart Mill, the Rossettis and the pre-Raphaelites, Ruskin, Pater, Tennyson, Wilde. Readings will be organized around several of the following Victorian intellectual, ideological, and cultural issues: the relation of Victorianism to neo-classicism, Romanticism, and modernism; the situation of women; theories of gender and sexuality; industrialism; materialism; aestheticism; decadence; scientific and religious controversies, the emergence of psychoanalysis. 2year cycle.

Cr 3.

## ENG 377 Studies in Nineteenth-Century British Literature and Culture

Topics will vary from semester to semester. Sample topics include: Fin de Siecle Literature and Culture; Nineteenth Century Intellectual History and Culture (e.g., Wollstonecraft, JohnStuart Mill, Darwin, Marx, Nietzsche, Freud); Victorian Poetry and the Visual Arts; 19th-Century Psychology and Culture; Contemporary Film Appropriations of Victorian Fiction. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

## ENG 475 Independent Study in the Nineteenth Century

By instructor's permission. See Department for application form.

Cr var.

## ENG 476 Seminar in Nineteenth-Century

Studies
Students should consult the Department's Course
Guide for detailed descriptions.
Cr 3.
to two or three figures. It may include writers from First and Third world countries, immigrant writers, and writers of the African Diaspora. Every year.

Cr 3.

## American Literature Since 1900

## ENG 391 American Poetry Since 1900

This course will focus on American poetry written since 1900 . While primary texts and historical or theoretical emphases will vary with the semester, the course will consider poetic forms and strategies, and relations to literary modernism and to Americanthematics and traditions. In most semesters, the course will focus on three or four major poets, examining their poetry against a broader poetic and historical context. 3-year cycle. Cr 3.

## ENG 393 The American Novel Since 1900

This course will study various types of novels (such as the realist novel, the social protest novel, the modernist novel, the Gothic novel, and the autobiographical novel) with attention to social and historical contexts and to thematic connections between texts. It is not purely a survey of "Great

British Literature Since 1900

## ENG 390 British Poetry Since 1900

This course will focus on poetry written in Britain since 1900, with emphases on such questions as the development of modernism, poetic forms and strategies, links to political and cultural developments, and new forms and strategies after modernism. The course will usually focus on three or four specific poets read against a broader poetic and historical context. Poetsmay include T. S. Eliot, Hugh MacDiarmid, D. H. Lawrence, Stevie Smith, Liz Lochhead, Maeve McGuchian, or writers associated with the"New British Poetries." 3-year cycle. Cr 3.

## ENG 392 British Novel Since 1900

This course will focus primarily on novels written with reference to the British literary tradition of the twentieth century, exhibiting the stylistic and thematic concems associated with literary impression-

American Novels," but may include both canonical and non-canonical writers. Critical and theoretical texts may accompany literary readings. 3year cycle.

Cr 3.

## ENG 394 Studies in American Literature and Culture Since 1900

This course will be organized around different literary periods, geographical regions, fields of study, and intellectual and cultural movements. Possible topics include the Harlem Renaissance, literature and the left, literature of new social movements (Black power, feminism, lesbian and gay rights), youth cultures, the Vietnam era, immigrant writers, American Indian writers, southern writers, Caribbean writers in the USA, and Maine writers. Students should consult the Department's Course Guide for detailed descriptions. Cr 3.
ism, and early and late modernism, by such writers as Joseph Conrad, Ford Madox Ford, Jean Rhys, Virginia Woolf, James Joyce, Samuel Beckett, Christina Stead, William Trevor, Jessie Kesson, and Lewis Grassic-Bibbon. 3-year cycle. Cr 3.

## ENG 398 Studies in British Literature and Culture Since 1900

This course will focus on the interrelated literatures of Britain's distinctive cultures in England, Scotland, Wales and Northem Ireland. It will be organized around different literary periods, cultures, theoretical and historical emphases and social movements. Possible topics include British modemism, the Scottish Renaissance, race and writing in Britain, writing and nationalism. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions.

Cr 3.

Other National Literatures Since 1900
ENG 323 Canadian Literature
This course introduces students to the diversity of Canadian literature since 1900. Students will investigate the notion of Canadian identity as represented in literature and as it is determined by the welter of conflicting ethnic, historical, and political forces that have shaped the country. By viewing Canadian cultural history and political developments in relation to those of the United States, the course will offer students a more comprehensive understanding of how Canadians perceive themselves in relation to each other and their American neighbors. 3-year cycle. Cr 3.

## ENG 324 Studies in Canadian Literature and Culture

This course offers students an in-depth study of specific regional, cultural, or political developments
in Canadian literature and film. Students may investigate the works of ethnic minorities, women, or particular authors. They may also focus on formative historical periods in the social development of Canada and the literature these periods have inspired (e.g. Quebec literature, literature of the Great Depression). May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions.

Cr 3.

## ENG 395 Irish Literature and Culture

Irish literature in English and Irish culture will be studied in relation to three phases in the political and cultural development of Ireland as a nation: 1) the period of Irish nationalism prior to independence in 1922; 2) the formative years of nation building and its myth-making from independence to 1960 ; 3) 1960 to the present. 2-year cycle. $\operatorname{Cr} 3$

ENG 396 James Joyce
An examination of Joyce's major texts, including Dubliners, A Portrait of the Artist as a Young Man, Ulysses, and selections from Finnegans Wake. Emphasis will be on Ulysses. The course also will include relevant biographical, critical and contextual material. 2-year cycle.

Cr 3.

## Intermational Literature Since 1900

## ENG 322 Modern Autobiography

The concept of the self has undergone critical changes in the history of autobiography. Many modern autobiographical writers have completely dispensed with traditional notions of the self, expanding the genre and giving it a strong literary focus. By comparing a selection of autobiographical texts by modern authors such as Rilke, Stein, Barthes, and H. D. with more traditional forms of autobiography, the course investigates the historical vicissitudes in the conceptualization of a "self." 3 -year cycle.

## ENG 326 Studies in International Literature

 Since 1900Literature since 1900 has become increasingly intermational especially because of expanded availability of translated texts. This course explores topics in literature that are international in scope whether tbrough specific influences or in response to historical, philosophical, political, and aesthetic developments. Although the range and focus of the course will vary, topics will include studies in Commonwealth and European literatures as well as literatures of specific regions such as Africa, the Caribbean, South America. May be repeated for credit when topics vary. Students should consult the Deparment's Course Guide for detailed descriptions.

Cr 3.

## ENG 327 Modern Short Story: Themes and Methods

Detailed consideration of from six to ten short story collections reflecting contemporary themes and narrative methods. Although selections will vary, the recent reading list has included Jorge Luis Borges, Franz Kafka, Anton Chekhov, James Joyce, Thomas Mann, Virginia Woolf, Isaac Babel, Grace Paley, Flannery O'Connor, Katherine Anne Porter, and Zora Neale Hurston. A necessarily wide range of themes is confronted: the corruption of reality by dream; personal inadequacy, alienation, and paranoia; self-deceit; varieties of ignorance and cowardice; the moral insight afforded the artist; violence as a mode of self-discovery. Prerequisite: junior class standing or permission of the instructor. 3-year cycle.

Cr 3.

## ENG 397 Studies in Irish Literature and Culture

Topics in Irish literature and culture, often set in the context of Irish history and politics. Sample topics include: Irish drama, Irish film; Yeats and Joyce; Joyce and Beckett; Women and Irish Culture. May be repeated for credit when topics vary. Students should consult the Department's Course Guide for detailed descriptions.

Cr 3.

## ENG 328 Modern Novel: Themes and

 MethodsWorks 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-asser ion; among narrative techniques, ellipsis and adaptations of stream-of-consciousness. The list of novelists will vary, but recent assignments include Knut Hamsun, Franz Kafka, Thomas Mann, Herman Hesse, Andre Malraux, D. H. Lawrence, James Joyce, Christina Stead, Virginia Woolf, Rebecca West, and Djuna Barnes. Prerequisite: junior class standing or permission of the insuctor. 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, Pinter, Formes, Churchill, and Norman. The course will emphasize the experience of drama as much as possible by viewing video productions of several plays. 3-year cycle.

Cr 3.

## ENG 385 Modernisms

This course will focus on some aspect or aspects of American, British, Continental and intermational literary modernisms. Students should expect to explore writing from the first half of the twentieth century and to investigate issues of literary innovation, modemity and historical change, self-understandings as "modem," competing literary versions of modemism, and theoretical/historical versions of modemism. 3-year cycle.

Cr 3.

## ENG 490 Independent Study in Literature

Since 1900
By instuctor's permission. See Department forapplication form. Cr var.

ENG 491 Seminar in Literature Since 1900
Students should consult the Department's Course Guide for detailed descriptions. Cr 3.

Up to six hours of specific courses offered by other CAS departments such as History, Theatre, and Philosophy may be elected for English major credit.

Certain Honors Program courses also may be counted as English major electives.

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.

# Environmental Science and Policy 

Program Director: Jack D. Kartez, 106 Bailey Hall, Gorham<br>ProgramAdvisory Committee: Fitts (Geosciences), Gordon (Chemistry), Hamilton (Political Science), Savage (Geography-Anthropology), Theodose (Biology); Assistant Professors: Langley-Tumbaugh, Pennuto, Sanford

The Environmental Science and Policy program at USM combines a broad and rigorous natural science education with a foundation in the legal, political, and administrative/policy aspects of environmental issues and slills of oral and written communication. Particular attention is given to the interaction of natural and social systems. Students learn to analyze problems using the insights of several fields of knowledge rather than from a single disciplinary perspecive. A practical, real-world orientation supplements theoretical knowledge. The greater Portland and the southem Maine region provide a diverse laboratory for student exposure to environmental science and policy issues and for internships with public agencies, private enterprises, and non-govemmental citizen-interest organizations. In addition to this foundation, majors are required to select one of four upper division concentrations to add depth to their knowledge and understanding of one area of the environmental professions. Currently the degree concentrations include the oprions in community planning, environmental policy, water resources, and applied ecology. The study of environmental science and policy provides substantive and analytic background that can lead to a variety of professions. The degree offers a foundation for employment opportunities and for graduate or professional studies in related areas such as environmental science, public policy, law, land use planning, public administration, business, pollution control and remediation, laboratory analysis, and natural resource management.

The Environmental Science and Policy program is govemed by a multi-departmental and interdisciplinary program advisory committee of USM faculty, in addition to the faculty in environmental science and policy. This committee and the degree itself grew out of prior faculty and student involvement in a self-designed major in the environmental-related sciences. The committee is responsible for general policy on curriculum, admissions, and other academic matters.

## Programs and Requirements

## Bachelor of Arts

The minimum number of credits (exclusive of the University's Core curriculum) required for the major is 66-68, depending on which of the four options within the major is selected.

A student majoring in environmental science and policy must achieve at least a 2.0 grade point average in the major and must earn at least a $C$ - grade in each course in the major.

| Required Courses |  |  |
| :---: | :---: | :--- |
| ESP | 101 |  |
|  |  | Fundamentals of Environmental Science, |
| ESP | 203 | with Lab |
| POS/ESP | 202 | Environmental Communications |
| ESP | 301 | Legal Process and Environment |
| POS/ESP | 365 | Environmental Impact Assessment |


| MAT | 120D or |  |
| :---: | :---: | :---: |
| PSY | 201D | Statistics |
| GEO | 102 K or |  |
| GEY | 100/101K | Physical Geography or Physical Geology* |
| GEO/ESP | 209 | Introduction to Land Use Planning |
| BIO | 105, 106, 107, 108 | Biological Principles I \& II and Labs |
| CHY | 113, 114, 115, 116 | Principles of Chemistry I \& II and Labs |
| BIO | 331 | Ecological Principles |
| POS | 101J | Introduction to American Government |
| ECO | 101J | Introduction to Macroeconomics or |
| ECO | 102J | Introduction to Microeconomics |
| ESP | 495 | Intemship |
| *GEY courses recommended for Water Resources and Applied Ecology ptions |  |  |
| Majors must also complete one of the following four options: |  |  |
| Option 1: Community Planning |  |  |
| Required |  |  |
| ESP | 305 | Community Planning Workshop |
| ESP | 307 | Land Use and Environmental Law |
| ESP | 417 | Site Planning and Assessment |
| Choose 5 from the following list ( 2 must be ESP or POS courses) |  |  |
| ESP | 250 | Soils and Land Use |
| GEO | 203J | Urban and Regional Development |
| GEO | 205 | Remote Sensing |
| GEO | 208 | Cartography I |
| GEO | 210 | Planning Maine Communities |
| GEO | 308 | GIS I |
| POS | 361 | Public Administration |
| GEO | 402 | Urban Geography |
| ESP | 419 | Natural Resource Economics |
| ITP | 320 | Occupational Safety and HealthOSHA 40-hour course |
| Option 2: Environmental Policy |  |  |
| Required |  |  |
| POS | 361 | Public Administration |
| ESP | 419 | Natural Resource Economics |
| ESP | 421 | Natural Resource Policy |
| Choose Three |  |  |
| ESP | 250 | Soils and Land Use |
| ESP | 307 | Land Use Legislation and Environmental Law |
| ESP | 360 | Water Quality Assessment Control |
| ESP | 411 | Methods of Field Analysis |
| ESP | 417 | Site Planning and Assessment |
| Choose One |  |  |
| POS | 362 | Politics and Budgeting |
| POS | 453 | Politics of American Policy Maling |
| POS | 486 | Administrative Law |
| Choose One |  |  |
| GEO | 308 | GIS I |
| GEY | 207 | Atmospheric Science and Pollution |
| PHI | 212 | Environmental Ethics |
| PHI | 260 | Philosophy of Law |
| ITP | 320 | Occupational Safety and Health |
| ITS | 331 | Basic Toxicology |
| ITS | 332 | Industrial Hygiene |
| ITS | 334 | Environmental Air Quality |
| ITS | 346 | Hazardous Waste System/Management |
| SOC | 355 | Politics and Society |


| ENV | 202 | Air Pollutions Control and Solid Waste Management (SMTC Course) |
| :---: | :---: | :---: |
| SBS | 436 | Risk, Public Policy, and Society |
| Option 3: Water Resources |  |  |
| Required |  |  |
| MAT | 152D | Calculus A |
| PHY | 111 K | Elements of Physics |
| CHY | 231, 232 | Analytical Chemistry and Lab |
| GEY | 420 | Hydrogeology |
| Choose three from the following (two must be ESP) |  |  |
| ESP | 250 | Soils and Land Use |
| ESP | 309 | Hydrology |
| ESP | 360 | Water Quality Assessment and Control |
| ESP | 403 | Subsurface Environmental Pollution Control and Management |
| ESP | 423 | Water Chemistry |
| GEY | 427 | Groundwater Modeling |
| ITP | 320 | Occupational Safety and Health |
| BIO | 341 | Limnology |
| Option 4: Applied Ecology |  |  |
| Required |  |  |
| CHY | 231, 232 | Analytical Chemistry and Lab |
| ESP | 411 | Methods of Field Analysis |
| Choose six from the following (four must be ESP) |  |  |
| ESP | 250 | Soils and Land Use |
| ESP | 303 | Wetlands Ecology |
| ESP | 360 | Water Quality Assesssment and Control |
| ESP | 403 | Subsurface Environmental Pollution Control and Management |
| ESP | 413 | Forest Ecology |
| BIO | 337, 338 | Marine Ecology and Lab |
| BIO | 341 | Limnology |
| BIO | 383 | Plant Ecology |
| BIO | 411 | Coastal Marine Ecology |
| GEO | 208, 308 | Cartography-to-GIS I sequence |
| GEY | 207 | Atmospheric Science and Pollution |
| ITP | 320 | Occupational Safety and Health |

Admission to the major is competitive, usually requiring grades equivalent to a B average or higher and completion of three high school laboratory science courses. Transfer students and USM students wishing to change majors must meet the admission and coursework requirements for the major. The program committee may admit, on a conditional basis, students who do not meet the general admission requirements, subject to specific agreement with the student to complete a series of prerequisite science and math courses with a grade of $C$ (75) or better within a specified time period.

## ESP 101 Fundamentals of Environmental Science

A lecture/laboratory course which surveys the impact of human activity on ecosystems, with specific consideration of land, water, and air pollution, resource utilization and degradation, and waste disposal. Majors only or by permission of the instructor.

Cr 4.

## ESP 202/POS 202 Legal Process and the Environment

An introduction to current legal techniques and institutions for environmental protection, with emphasis on statutory interpretation, rule making, li-
censing procedure, and the roles of expert testimony and citizen participation in administrative, legislative, and judicial processes. Major in ESP or by permission of the instructor. Cr 3.

## ESP203 Environmental Conumunications

A multidisciplinary approach to managing communications and relationships in environmental policy and management. Components include technical writing and public speaking, use of scientific and statistical information, public and risk communication, and conflict resolution. Prerequisite: successful completion of the University's writing proficiency requirement.

Cr 3.

## ESP 250 Soils and Land Use

Study and description of soils as natural materials in the landscape. The course includes an examination of physical, chemical, and biological properties of soils as they affect soil-plant-water relations. Other topics include soil classification and suitability for agriculture, urban development, and contaminant remediation. Prerequisites: ESP 101 and CHY 113-114 or permission.

Cr 3.

## ESP 301 Environmental Impact Assessment and Lab

An overview of methods used to analyze the environmental impact of human decisions. The course will emphasize U.S. requirements for impact assessment as outlined in NEPA. Federal documents (DEIS, EIA, EIS, FONSI, and ROD) of past and on-going projects are reviewed. A laboratory session is taken concurrently and is writing-intensive. Prerequisites: ESP 101, ESP 203 \& ESP 202/POS 202 or permission.

Cr 4.

## ESP 303 Wetlands Ecology

This lecture course examines wetlands from the perspectives of science and policy. Topics will include wetland definitions, classification, and regional and national trends in habitat destruction and management. Prerequisites: BIO 105K, BIO 107K, CHY 113 and CHY 114.

Cr 3.

## ESP 305 Community Planning Workshop

This course provides a practical approach to local community planning problems. Students will conduct field work to explore community decisionmaking processes regarding the use of natural, social and economic resources. Basic planning concepts are refined and applied to real-world problems in a collaborative manner. Prerequisites: ESP 101 and GEO 209 or permission.

Cr 4.

## ESP 307 Land Use and Environmental Law

Introduction to land use and environmental law at the local, state, and federal levels of government. This course examines zoning and comprehensive planning, pollution control and prevention, and health regulation. The focus will be on understanding how common law and constitutional provisions shape the development of regulations. Prerequisites: ESP 101 and GEO 209 or permission. Cr 3.

## ESP 309 Hydrology

An introduction to the physical basis of major hydrologic processes. The major processes covered include earth surface energy balance, precipitation, evapotranspiration, unsaturated zone hydrology, and runoff generation. Selected applied topics will also be introduced. Prerequisites: MAT 152D and PHY 111 K or permission of instructor. Cr 3.

## ESP 360 Water Quality Assessment and Control

A study of water-related legislation, methods for determining compliance with statutes, and control
methods used for water quality attainment. Regional topics addressed include: waste-water treatment, drinking water standards, storm water runoff, lake eutrophication, best management practices, and biomonitoring for water quality assessment. Three hours of lecture and three hours of lab per week. Prerequisites: BIO 107 and 108 and CHY 113 and 114 and ESP/POS 202 or ESP/POS 365 and a statistics course.

Cr 4.

## ESP 365/POS 365 Environmental Politics and Policy

This course provides an introduction to policy making and implementation processes through a survey of current waste disposal issues, air and water pollution control policies, and management issues in environmental protection. Prerequisite: POS 101J orby permission of the instructor.

Cr 3.

## ESP 403 Surface Pollution Control and <br> Management

A study of the interaction of soils and groundwater with organic and synthetic contaminants, and the role of soils in pollution control. Students investigate the physical, chemical, and microbiological properties of soil and water and compare conventional remediation with bioremediation techniques. Special emphasis is placed on regional pollution problems including agricultural runoff, landfill leachates, and leaking underground storage tanks. Prerequisites: ESP 101 and CHY 113 and 114 and ESP 250 or permission.

Cr 3.

## ESP 411 Methods of Field Analysis

This lab/field course investigates ecological and environmental issues using descriptive field techniques, hypothesis testing, computer analysis, and journal article interpretation. Prerequisites: BIO 331 and MAT 120.

Cr 2.

## ESP 413 Forest Ecology

This course provides students with an understanding of what constitutes a healthy forest ecosystem and a sustainable forest environment. Special emphasis is placed on the function, spatial variability, evolution of forest ecosystems, and the need for forest ecology as the foundation of forest management. The laboratory session is field intensive. Prerequisite: BIO 107/108.

Cr 4.

## ESP 421 Natural Resource Policy

Examination of natural resource policies and evaluation procedures used by natural resource decision makers. Case studies focus on topics such as forest health protection, the EndangeredSpecies Act, the Maine Environmental Priorities Project, transboundary ecosystems, and estuarine areas. Emphasis on natural resource policy processes, conflict resolution through consensus-building, comparative risk assessment as it pertains to policy. Prerequisite: ESP 101 or permission of instructor.

Cr 3.

## ESP 450 Research Practicum

Organized research experiences in ongoing faculty research projects or a mutually arranged special topic involving substantial field and laboratory skills development. Research will be conducted underthe direct supervision of the faculty member. Permission of instructor required in semester prior to registration. May be repeated for a maximum of 6 credits.

Cr 1-3.

## ESP 495 Internship

The internship provides professional experience related to a student's chosen option within the major. The emphasis is on understanding the host organization's structure and function within the environmental arena. In addition to satisfactory work experience, an oral presentation and written report are required. Offered as pass/fail only. Prerequisites: completion of all courses listed as "required" for the major, simultaneous enrollment in or completion of at least 9 credit hours of "option" courses, and faculty approval of host organization and work plan.

Cr 1-3.

# Foreign Languages and Classics 

## Chair of the Department: Charlene Suscavage, 55 Exeter Street, Portland

 Associate Professors: Aicher, diBenedetto, Fouchereaux, Hinckley, Kinsella, Rosenthal, Suscavage, Ubans; Assistant Professor: Bouzrara; Professor Emerita: CrochetA foreign language major offers a uniquely rich and diverse humanities background. The study of languages sensitizes us to othercultures 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, joumalism, travel, social services, the arts, and teaching.

The Deparment offers a major in French and broader, interdepartmental majors in foreign languages, classical studies, French studies, German studies, Hispanic studies, and Russian studies. Also classics, French, German, Russian, and Spanish minors are available which augment other majors in the College of Arts and Sciences.

The Department also offers a number of courses in English translation requiring no knowledge of a foreign language and open to any student interested in foreign or classical literature and civilization. These courses are numbered 281299. Literature 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.

## English as a Second Language

Also offered through the Department arehigher level English as a Second Language (ESL) courses for students whose first language is not English. These courses focus on the linguistic skills necessary for academic work at a university as well as adjustment to and knowledge of American culture. There is no major or minor in this program.

For more information on these ESL courses contact Bart Weyand, program coordinator, 101 Payson Smith Hall, Portland.

## Policies

Beginning courses (101-102) are for students who have never studied the language. Courses numbered 103 are a review of this beginner's level. Intermediate level courses (201-202 for modern languages, 251-252 for the ancient languages) are for students with two successful years of high school language study. Those whose background does not fit any of these categories, especially Franco-Ameri-
cans 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. Courses numbered 107 and 207 are intensive, 6-credit language courses offered during the summer only; when taken in conjunction with the required 2-credit language laboratory, 107 and 207 cover the same material as 101-102 and 201-202, respectively. Students who have received credit for 102 or 202 cannot also receive credit for 107 and 207, respectively. Partial credit may be awarded if the student has received credit for 101 or 201 only.

The Department grants credit in French, German, Greek, Latin, and Spanish to 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.

All majors, including Foreign Language group conlracts, must achieve grades of B orbetterfor at least 12 credits in their major courses. No grade of D will count toward fulfillment of major.

## Study Abroad

All students, regardless of major, are eligible to study in a foreign country, normally after studying the language of that country for two years on the college level and usually in their junior year. For the study of German, USM has a study abroad program at the University of Salzburg in Austria. For French, the University of Maine System has a formal program associated with the University of Le Mans in France. USM has an exchange program with l'Université Laval in Quebec and a summer program in Angers, France. For Russian, students have the possibility of going to St. Petersburg, Moscow, or Kharkov. For Spanish, there are a number of options available in South America and in Spain. Students interested in study abroad should consult with the chair of the Department or with the Office of International Programs to explore these and other possibilities.

## 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 audio-visual materials as an integral part of their 4credit 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.

State of Maine certification for foreign language teachers requires 30 credits at the level 300 and above for the first language and 18 credits at the level 300 and above for the second language.

All major programs in the Department of 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: 39.

Literary Studies (39 credits)
Core Classes ( 35 credits)
Language Courses (14 credits)

| FRE | 301 | Practical French (4) |
| :--- | :--- | :--- |
| FRE | 302 | Advanced Practical French (4) |
| FRE | 303 | Thème et Version (3) |

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    FRE 305 French Phonetics (3)
    Civilization (6 credits)
    FRE 291I French Civilization: An Historical Approach (3)
    FRE 292I Topics in Contemporary Francophone Civilization (3)
    Literature (15 credits)
    FRE 331 Workshop in French Literary Analysis (3)
    FRE 332 Introduction to French Literature (3)
    FRE 367 Genres and Periods in French Literature (3)
    FRE 369 Topics and Themes in French Literature (3)
    FRE 467 Seminar in Genres and Periods in French Literature (3)
                                    or
    FRE 469 Seminar in Topics and Themes in French Literature (3)
Electives (4 credits)
    FRE 300 French/Francophone Practicum
    (for a maximum of 2 credits)
FRE 367,369,467,469 (when repeated for credit under different topic)
FRE 399 courses when offered
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Summer and junior year studies in France or French Canada are encouraged and acknowledged by ransfer 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

Because the knowledge of a foreign language, or languages, is valuable to all majors in other CAS disciplines, the Deparment offers minor programs in Classics (Latin or Greek), French, German, Russian, and Spanish. Requirements for the respective minors are as follows:

Classics Minor (Greek)
Nine credit hours selected from GRE 251, 252, 310; CLA 291I
Classics Minor (Latin)
Nine credit hours selected from LAT 251, 252, 310; CLA 292I
French Minor
Seventeen credit hours of FRE 301, 302, 331, 332, and 367 or 369
German Minor
Nine credit hours selected from GER 321, 322, 351H, 352H, 281H
Russian Minor
Nine credit hours selected from RUS 281H or 291I, 301, 302, 470
Spanish Minor
SPA 301, 302, 303, 331, 332, and 351 H or 352 H or 450

## 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.

Сr 3.

## CLA 283H The Epic Hero in Ancient

## Literature

Intensive readings in English translations of Gilgamesh, Iliad, Odyssey, Argonautica, Aeneid; discussion, papers.

Cr 3.

## CLA 284H The Tragic Hero in Ancient

Literature
Intensive reading of selected plays in English ranslation by Aeschylus, Sophocles, Euripides, Seneca; discussion, papers.

Cr 3.

## CLA 285I Classical Mythology

Examination of the myths of Greece and Rome from a variety of perspectives: anthropological, eviological, historical, psychoanalytical, structural. Cr 3.

## CLA 291I The Golden Age of Greece

The literature, history, politics, philosophy, art, and architecture of the fifth century B.C. with particular attention to the achievements of Athens. Lectures, discussion, papers, slides, films. Cr 3.

## CLA 292 I Rome, from Republic to Empire

The literature, history, politics, philosophy, art, and architecture of Rome in the first century B.C. Lectures, discussion, papers, slides, films.

## 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.

Сг 3.

## FRE 291I 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 292I Topics in Contemporary Francophone Civilization

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 19 th 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.

Сг 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 291I 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 2701 The Culture and Civilization of Spain

This course examines aspects of the society, institutions, art, literature, and religion of Spain from its origins to the present. No knowledge of Spanish is necessary.

Cr 3.

## SPA 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.

GRE 252 Introduction to Greek Literature II
A study of selected books from Homer's Iliad or Odyssey. Prerequisite: GRE 251.

## GRE 310 Seminar in Greek Literature

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.

Сг 3.
,
GRE 101 Beginning Greek I
Fundamentals of classical Greek. Emphasis upon acquisition of reading knowledge.

Cr 4.
GRE 102 Beginning Greek II
Prerequisite: GRE 101 or equivalent.
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

## LAT 101 Beginning Latin I

Fundamentals of classical Latin. Emphasis upon acquisition of reading knowledge. Cr 4.

LAT 102 Beginning Latin II
Prerequisite: LAT 101 or equivalent.

## LAT 251 Introduction to Latin Literature I

Selected readings from masters of Latin prose and poetry. Prerequisite: LAT 102 or equivalent. Cr 3.

## FRE 101 Beginning French I

This beginner's course in French stresses the acquisition of cultural information and introduces the student to the four skills of language learning: listening comprehension, speaking, reading, and writing. The course meets four times per week and requires additional work with coordinated language tapes. Opportunity for practice with videotapes and computer exercises is available.

Cr 4 .

## FRE 102 I Beginning French II

Continuation of FRE 101. Prerequisite: FRE 101 or equivalent.

Cr 4.

## FRE 103 Review of Elementary French

Elementary French for students with some previous study of the language who feel the need for a refresher course before entering FRE 201I. Cr 3.

## FRE 105 Reading French I

Beginner's course in French aiming exclusively at a reading knowledge of the language. No French spoken. Recommended also as preparation for language tests required by graduate schools. Cr 3.

## FRE 107I 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 fourskills 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 201I Intermediate French I

Review of granumatical 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 102I, FRE 103, two years of high school French or the equivalent.

Cr 3. (With lab, Cr 4.)
FRE 202I Intermediate French II
Continuation ofFRE 201I. Prerequisite: FRE 201I or the equivalent. Cr 3 . (With lab, Cr 4.)

## LAT 252 Introduction to Latin Literature II <br> Continuation of LAT 251.

## LAT 310 Seminar in Latin Literature

Readings in Latin prose and poetry; a different author will be read each semester. Translation, supplementary reading paper. Prerequisite: LAT 252.

Cr 3 .

## LAT 470 Independent Study

## 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 207I Intensive Intermediate French

This is an intensive course for the intermediate student covering a full year's work at the college level. Emphasis is placed on the development of listening, comprehension, speaking, reading, and writing skills. Daily lab work is mandatory.

Cr 6. (With Lab, Cr 8.)

## FRE 300 French/Francophone Practicum

In this course students paricipate in a number of activities in the French language, enabling them to develop and strengthen their ability in speaking and comprehending. They also gain an awareness and appreciation of various cultures of the Frenchspeaking world. Since immersion content will vary, this course may be repeated, to a total of 3 credits. Prerequisites: FRE 221, 223 or equivalent, or permission of instructor.

Cr 1 or 0 .

## FRE 301 Practical French I

Comprehensive review of French granunar, enrichment of vocabulary, and practice in conversation and composition, using a variety of materials including films, videos, songs, interviews, newspapers, and periodicals. Emphasis will be on achieving proficiency in all four areas. Prerequisite: FRE 202I or equivalent.

Cr 4 .

## FRE 302 Practical French II

Continuation of FRE 301. Prerequisite: FRE 301 or equivalent.

Cr 4.

## FRE 303 Thème et Version

In this course, students will learn techniques and the art of ranslation through an analysis of the major linguistic and cultural differences between French and English. Translations will be done from French into English and from English into French. Prerequisite: FRE 302 or equivalent.

Cr 3.

## FRE 305 French Phonetics

A formal study of the French sound system and an initiation into phonetic ranscription with practical and remedial work in pronunciation. Prerequisite: FRE 202I or equivalent.

Cr 3.

## FRE 331 Workshop in French Literary Analysis

Fundamental techniques of French literary analysis, close reading, and critical interpretation. All readings, discussions and papers will be conducted in French. This course is a prerequisite for all other 300-level French literature courses. Cr 3.

## FRE 332 Introduction to French Literature

An historical survey of the major writers and literary periods from the beginning of French literature to the twentieth century. Prerequisite: FRE 331 or equivalent.

Cr 3.

## FRE 367 Genres and Periods in French Literature

Each course in this group "Genres and Periods" deals with a specific literary genre (novel, poetry, theatre) and/or time period (Medieval, Renaissance, 17th, 18th, 19th, or 20th century). Sample topics: 19th century French novel, 17th century French theatre, 20th century French fiction. This course may be repeated for credit provided that the topic is different. Prerequisite: FRE 331 or equivalent.

Cr 3.

German

## GER 101 Beginning German I

This beginner's course in German stresses the acquisition of culturalinformation and introduces the student to the four skills of language learning: listening comprehension, speaking, reading, and writing. The course meets four times per week and requires additional work with coordinated language tapes. Opportunity for practice with videotapes and computer exercises is available.

Cr 5 .

## GER 102I Beginning German II

Continuation of GER 101. Prerequisite: GER 101 or equivalent. Cr 5.

## GER 105 Reading German I

Elementary course in German aiming exclusively at a reading knowledge of the language. No German spoken. Offered every other year. Cr 3.

## GER 107I Intensive Beginning German and GER 107 Lab

An intensive course for the beginning student, covering a full year's work at the college level to prepare the student for the intermediate level of college German. Emphasis is placed upon the four skills of language learning: speaking, understanding, reading, and writing, along with an introduction to contemporary culture and civilization. Daily practice in the language lab is required (for two additional credits). Offered during the summer only. Cr 6. (With lab, Cr 8.)

## FRE 369 Topics and Themes in French <br> Literature

Each course in this group "Topics and Themes" deals with a subject and/or a theme in French or Francophone literature. This course may be repeated for credit provided the topic is different. Prerequisite: FRE 331 or equivalent.

Cr 3.

## FRE 467 Genres and Periods in French Literature

An advanced course in the group "Genres and Periods" which deals with a specific literary genre (novel, poetry, theatre) and/or time period (Medieval, Renaissance, 17th, 18th, 19th, or 20th century). Sample topics: 19th century French novel, 17th century French theatre, 20th century French fiction. This course may be repeated for credit provided the topic is different. Prerequisite: FRE 340 or 350 or equivalent.

Cr 3.

## FRE 469 Topics and Themes in French Literature

An advanced course in the group "Topics and Themes" which deals with a major subject and/or theme in French or Francophone literature. Prerequisite: FRE 340 or 350 or equivalent.

Cr 3.
FRE 470 Independent Study

## GER 2011 Intermediate German I

Review of grammar. Further development of listening comprehension, speaking and reading skills. Emphasis on understanding German culture and contemporary life through reading and discussion of short stories, articles and essays. Students are encouraged to also register for laboratory practice (one more credit). Prerequisite: GER 102I, two years of high school German or the equivalent.

Cr 3. (With lab, Cr 4.)

## GER 202I Intermediate German II

Continuation of GER 201L. Prerequisite: GER 201I or the equivalent. Cr 3 . (With lab, Cr 4 .)

## GER206Reading German II

Further practice of the reading skill acquired in GER 105. Recommended also as preparation for language tests required by graduate schools. Prerequisites: GER 105, 102I or instructor's permission. Offered every other year.

Cr 3.

## GER 321 Composition and Conversation in German I

Systematic training in correct pronunciation and usage, and in vocabulary building, with written and oral practice. Prerequisite: GER 202I or equivalent.

Cr 3.

## GER 322 Composition and Conversation in German II

Continuation of GER 321. Reading and discussion of historical, joumalistic, and literary material covering life in Germany from World War I to the present. Prerequisite: GER 321 or equivalent.

## GER 351H Introduction to German <br> Literature I

Reading and discussion of selected works representing the major literary movements from Enlightenment to Realism. Readings are in German; class

## 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.

## POR 201 Intermediate Portuguese I

Review of grammatical structures. Further devel-

## Russian

## RUS 101 Beginning Russian I

A course for beginners which includes the four skills of listening comprehension, speaking, writing, and reading. Students are also provided with cultural information needed to use the language correctly. The course emphasizes the acquisition of real Russian by using authentic materials. Cr 5 .

## RUS 102I Beginning Russian II

Continuation of RUS 101. 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 201I Intermediate Russian I

This course further develops the four skills of listening comprehension, speaking, writing, and reading. The course provides students with the cultural information they need to use the language correctly. The aim of the course is for students to acquire "real" Russian and be able to deal with authentic materials. Prerequisite: RUS 102I or equivalent.

Cr 3. (With lab, Cr 4.)
discussions and exams are in English. Prerequisite: GER 202I or GER 206 or an equivalent reading ability of German.

Cr 3 .

## GER 352H Introduction to German Literature II

Reading and discussion of selected works representing the major literary movements from Naturalism to the present. Readings are in German; class discussions and exams are in English. Prerequisite: GER 202I or GER 206 or an equivalent reading ability of German.

Cr 3 .

## GER 470 Independent Study

opment 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: POR 201 or the equivalent.

Cr 3.

## RUS 202I Intermediate Russian II

Continuation of RUS 201. Prerequisite: RUS 201 or the equivalent.

Cr 3. (With lab, Cr 4.)

## RUS 301 Advanced Intermediate Russian I

This course involves intermediate-level work in the four skills of listening comprehension, speaking, writing, and reading that promotes the student toward an advanced level. The course emphasizes the development of the student's active and passive vocabularies and deeper knowledge of Russian culture. The course is taught primarily in Russian. Prerequisite: RUS 202I or equivalent. $\operatorname{Cr} 3$.

## RUS 302 Advanced Intermediate Russian II

This is the transitional course in the language acquisition sequence. Students who complete the course satisfactorily are ready to begin advancedlevel work in all four skill areas. The class is conducted entirely in Russian.

Cr 3.

## RUS 321 Advanced Russian

Students will read a variety of authentic texts ranging from newspapers to encyclopedias to literary works and will write extended essays, discuss ideas and argue points of view on a variety of subjects. They are also required to listen to or watch real Russian media. Students may also work on the art of translation. Prerequisite: RUS 302 or equivalent. Cr 3 .

## RUS 351 Seminar in Russian Literature

Topics for this seminar will be chosen from the following: historical surveys, genre surveys in the novel, short story, drama, and Russian women writers. All coursework is in Russian. The emphasis is

## Spanish

## SPA 101 Beginning Spanish I

A beginning course in Spanish in the four skills of language leaming: listening comprehension, speaking, reading, and writing. The class meets three times a week. In addition, audio-visual work is required.

Cr 4.

## SPA 102I Beginning Spanish II

Continuation of SPA 101. Prerequisite: SPA 101 or equivalent. Cr 4.

## SPA 107I 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 introducion 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 201I Intermediate Spanish I

Review of grammatical structures. Further development of listening comprehension, speaking, reading and writing skills. Continued emphasis on understanding of Hispanic culture and civilization through reading and discussion of literary and historical texts as well as frequent reference to contemporary customs and events. Students are encouraged to also register for laboratory practice. Prerequisite: SPA 102, two years of high school Spanish or the equivalent.

Cr 3.

## SPA 202I Intermediate Spanish II

Continuation of SPA 201I. Prerequisite: SPA 201I or the equivalent.

## SPA 207I Intensive Intermediate Spanish

SPA207 is an intensive coursefor the intermediate 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 102I or equivalent. Offered during the summer only.

Cr 6. (With lab, Cr 8.)
on language and style. Prerequisites: RUS 281 H and RUS 321.

Cr 3.

## RUS 470 Independent Study

## 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 303 Speaking through Reading

Varied literary and cultural readings providing a bridge from the intermediate level to literature and other advanced content courses in Spanish. Discussions, written exercises, and examinations will be in Spanish. Prerequisite: SPA 301 or permission of instructor.

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 Readings in Contemporary Spanish Literature

An introduction to the literature of contemporary Spain. All discussions and readings will be in Spanish. Prerequisite: SPA 303 or permission of instructor.

Cr 3.

## SPA 352H Readings in Modern Latin American Literature

An introduction to the literature of modern Latin America. All discussions and readings will be in Spanish. Prerequisite: SPA 303.

Cr 3.

## SPA 450 Topics in Hispanic Language and Literature

An advanced seminar in Hispanic language, culture, and literature. Prerequisite: SPA331 and SPA 332 , or SPA 351 H and SPA 352 H , or permission of the instructor.

Cr 3.

## ESL 007 Listening and Oral Communication

This intermediate to high-intermediate course is part of the curriculum of the Intensive English Language program. The course focuses on the improvement of the listening and oral skills that are necessary for the university classroom. Much of the material is derived from authentic sources, such as radio and television broadcasts, as well as lectures on a variety of topics that might be encountered in a university setling. The primary goal of the course is to assist students in recognizing a variety of spoken English and to discuss and respond to the issues. Students will also be exposed to a wide variety of vocabulary and grammatical structure as it arises in context. (The credit for this course does not apply toward a baccalaureate or an associate degree.) Prerequisite: instructor's permission. Cr 3.

## ESL 008 Reading and Writing

This intermediate/higher intermediate course is a part of the curriculum of the Intensive English Language program. The course focuses on the improvement of the reading and writing skills that are necessary for the university classroom. All of the reading is from authentic sources emphasizing academic writing strategies for writing short reaction papers, summaries, and essays based on the readings. Informal joumal writing is an integral part of the course. Students will also be exposed to a wide vocabulary and systematic overview of grammatical structure. (The credit for this course does not apply toward a baccalaureate or an associate degree.) Prerequisite: instructor's permission. Cr 3.

## ESL 100C College Writing

This section of College Writing (ENG 100C) is intended for non-native speakers of English only. The course focuses on the analysis of professional and student writing as a way of sharpening awareness of how to use the English language effectively for use in the academic classroom. The writing assignments encourage students to apply the principles discussed in class to their own work. This course cannot be used to satisfy a humanities requirement. Prerequisite: ESL 402A, ESL 403A, or writing proficiency.

Сг 3.

## ESL 102 English as a Second Language: Advanced Grammar and Writing

An advanced level English language course for nonnative speakers of English focusing on building a stronger foundation of grammatical skills which
will aid students in pproducing more natural and accurate writing skills in the English language. Through a series of grammatical exercises, meaningful drilling, both written and oral, and analysis of the structure of English, students will become better used to producing more complex sentences and short essays. Prerequisite: instructor's permission.

Сг 3.

## ESL 103A English as a Second Language: Advanced Reading, Writing, and Vocabulary I

An advanced level English language course for those whose first language is not English. The course is designed to help students produce grammatically accurate, well-constructed, coherent English, both in the written and spoken form. Based on the writing process, students will write and rewrite paragraphs and essays drawn from topical and academic readings, works of fiction, and class discussion. This course is a substitute for ENG 009 and a prerequisite for ENG 100C or ESL 100C. Prerequisite: instructor's permission. Cr 3.

## ESL 104A English as a Second Language: Advanced Reading, Writing, and Vocabulary II

This advanced level English language course is designed for non-native speakers who have either taken ESL 402A and need further work in language skills upon recommendation of the instructor, or who need academic English language skills in preparation for ESL 100C or ENG 100C. Much of the work will be on the development of paragraphs into short essays which are grammatical and coherent. Additional focus will be on vocabulary extension and use of idiom. This course is a substitute for ENG 009 and a prerequisite for ENG/ESL 100C. Prerequisite: instructor's permission. Cr 3.

## ESL 198 English as a Second Language: Higher Intermediate

A higher-intermediate to advanced-level English language course fornon-native speakers of English which focuses on the reading, writing, speaking, and listening shills necessary for college survival and includes the appropriate grammarand vocabulary. Offered on a semi-intensive basis during the summer, this course will benefit students who need higher level academic English skills or who wish to polish their language in general. Prerequisite: instructor's permission.

Cr 3.

# Geography-Anthropology 

Chair of the Department: Nathan D. Hamilton, 300C Bailey Hall, Gorham Professor: Davis; Associate Professors: Bampton, Crader, Edney, Hamilton, Hodges, Tizon; Assistant Professor: Savage

The program leading to a major in geography-anthropology emphasizes the integration of the two disciplines. Among the elements that are integrated in the major are common interests in the relationship between human populations and their natural environment, decision-making strategies of human groups, and the health and nutritional status of human societies. The major is an interdisciplinary program wherein students are expected to take courses from both geography and anthropology. The program of study beyond the basic requirements should be planned carefully, in close consultation with the student's deparmental advisor, and should be approved by the latter. Such an arrangement allows for flexibility according to the student's interests while also providing close guidance and a control of educational quality by the Deparment.

The Department offers the following programs: bachelor of arts in geographyanthropology; minor in anthropology; minor in geography; applied geography minor in planning; and a concentration in the social sciences area major of the College of Arts and Sciences.

All students with majors or specific discipline minors in the social sciences must achieve at least six credits with grades of B or better in the requirements of those majors or minors. No grades of $D$ will be counted toward fulfillment of the major or minor requirements. Except for Independent Studies, no required course may be repeated more than one time.

All students are reminded that, in addition to meeting departmental requirements for the major, they must also meet the University's minimum proficiency requirements and the Core curriculum requirements.

## Bachelor of Arts in Geography-Anthropology

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 45-53.

| All students must take: |  |  |
| :--- | :--- | :--- |
| ANT | 101 J | Anthropology: The Cultural View |
| ANT | 102 K | Biological Anthropology |
| ANT | 103 | Introduction to Archaeology |
| GEO | 101 J | Introduction to Human Geography |
| GEO | 102 K | Physical Geography |
| GYA | 202D | Research Methods |
| One ethnography course selected from the following: |  |  |
| ANT | 220I | North American Indians |
| ANT | 222I | Peoples of the North |
| ANT | 230 I | Hunters and Gatherers |
| ANT | 301 I | Victims of Progress |
| ANT | 350 | Amazon Peoples and Development |

All students must complete at least three credit lours in a geography or anthropology field course. A supervised internship in geography or anthropology may be substituted for the field course.

All students then elect to concentrate in either anthropology or geography.
Students who elect to concentrate in anthropology must also take:
ANT 310 History of Anthropological Thought
ANT 305 History of Archaeological Thought
or
ANT 340 Primate Behavior One of the following topical or regional courses
ANT 201J Human Origins
ANT 202J Origins of Civilization

| ANT | 213 | Human Ecology |
| :--- | :--- | :--- |
| ANT | 224I | Ancient Mesoamerica |
| ANT | 232I | The Anthropology of Sex and Gender |
| ANT | 233I | Food and Culture |
| ANT | 250I | Archaeology of South America |
| ANT | 302I | Medical Anthropology |
| ANT | 305 | History of Archaeological Thought* |
| ANT | 340 | Primate Behavior* |
| ANT | 450 | Topics in Anthropology |
| *No course may be used to fulfill more than one category. |  |  |
| One of the following techniques or applied courses: |  |  |
| ANT | 306 | Analysis of Archaeological Materials |
| ANT | 308 | Environmental Archaeology |
| ANT | 315 | Ethnography: Methods, Ethics, and Practice |
| ANT | 320 | Human Osteology |
| ANT | 410 | Zooarchaeology |
| GEO | 205 | Remote Sensing |
| GEO | 208 | Cartography I |
| GEO | 308 | GIS I |

9 additional credit hours, 3 of which must be ANT courses at or above the 300 level, and 3 of which must be GEO courses at or above the 200 level.

Students who elect to concentrate in geography must also take:
GEO 310 History of Geographical Thought
Two of the following topical or regional courses:

| GEO | 120 J | Geography of Maine |
| :--- | :--- | :--- |
| GEO | 203 J | Urban and Regional Development |

GEO 207J Maps: Knowledge, Technology, Society, Culture
GEO 212 Regional Geography of Western Europe
GEO $301 \quad$ Political Geography
GEO 302 Gender, Work, and Space
GEO 303J Economic Geography
GEO 304 Social Transformation of Nature
GEO 307 History of Anglo-American Cartography
GEO 402 Urban Geography
GEO 403 Urban Physical Geography
GEO 450 Topics in Geography
One of the following techniques or applied courses:

| GEO | 205 | Remote Sensing |
| :--- | :--- | :--- |
| GEO | 208 | Cartography I |
| GEO | 209 | Introduction to Land Use Planning |
| GEO | 210 | Planning Maine Communities |
| GEO | 308 | GIS I |
| GEO | 408 | GIS II |
| ANT | 315 | Ethnography: Methods, Ethics, and Practice |

9 additional credit hours, 6 of which must be in GEO courses at or above the 300 level, and 3 of which may be ANT or GEO.

Additionally, all geography-anthropology majors are required to demonstrate writing competence by completing two research papers in the major with grades of $C$ or better, from two different professors, circulated and reviewed by the Department at least one semester prior to graduation.

The maximum number of hours of internships, field experience, and/or independent studies that can be applied toward the major is 9 hours. All students must meet with their advisors before registering for courses each semester.

## Minor in Anthropology

The minor in anthropology shall consist of the following 19 credits:

| ANT | 101 J | Anthropology: The Cultural View (3 credits) |
| :--- | :--- | :--- |
| ANT | 102 K | Biological Anthropology and Lab (4 credits) |
| ANT | 103 | Introduction to Archaeology (3 credits) |

ANT $310 \mathrm{~J} \quad$ History of Anthropological Thought (3 credits) and any two courses ( 6 credits total) from two different subfields of anthropology (cultural, archaeology, biological)

## Minor in Geography

The minor in geography shall consist of the following 19 credits:

| GEO | 101 J | Principles of Geography (3 credits) |
| :---: | :--- | :--- |
| GEO | 102 K | Physical Geography and Lab ( 4 credits) |
| GEO | 120 J | Geography of Maine ( 3 credits) |
| GEO | 208 | Cartography I ( 3 credits) |
|  |  | or |
| GEO | 205 | Remote Sensing ( 3 credits) |
| and 6 additional hours of geography courses |  |  |

## 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 101J, GEO 208
Choice of one from: GYA 350-351, GYA 400
Choice of one from: GEO 205, GEO 308
Choice of one from: GEO 209, GEO 210
Choice of one from: GEO 303J, GEO 402, GEO 403

## Archaeology Laboratory

The Archaeology Laboratory located in 317 Bailey Hall provides facilities for research in archaeology and related areas. Various research collections are available, primarily from Maine, Alaska, and the Caribbean. The Archaeology Laboratory also houses a small library including books, joumals, slides, and maps. Opportunities are available for independent student research projects, and work-study positions are available in the laboratory each semester.

## Zooarchaeology Laboratory

The Zooarchaeology Laboratory located in 316 Bailey Hall provides facilities for research and teaching in zooarchaeology, human osteology, and human evolution. Current collections include casts of nonhuman primates and fossil hominids, and a comparative faunal collection specializing in mammals, birds, and fish of the Northeast.

## Cartography Laboratory and Map Collections

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. An extensive map collection is housed in 318 Bailey Hall. Holdings include national Defense Department maps, Maine maps, topographic maps, and various world regional maps. Student proctors are available to offer assistance.

## GIS Laboratory

The Geographic Information Systems (GIS) Laboratory provides facilities for computerized automated research of geographical data. The GIS Laboratory includes tools for running vector-based geographic information systems, and has the capacity for hand-digitizing images and producing multi-color output.

Geography-Anthropology

## GYA 202D Research Methods

Students will focus on the ways in which geographers and antbropologists conduct research. We will address the issues of research question formulation, methodological strategies, and analytic techniques. Topics include defining research problems, measurement, sampling, research design, and analysis. Examples, case studies, and data will be drawn from the disciplines of geography and anthropology. Pre-
requisite: one of the following: ANT 101J, ANT 102 K, ANT 103, GEO 101J, or GEO 102K. Cr 3.

## GYA 215 Culture and Place

This course provides an introduction to the ways in which basic principles of ethnography, ethnohistory, and material culture studies can be used to understand the cultural landscape of cities. Normally offered during either the Winter Session or the Sum-
mer Session, the course will usually be conducted in a setting outside Maine. The emphasis will be on collaborative research skills, understanding of other cultures, and appreciation of the interrelationship of anthropology and geography. Cr. 4-6.

## GYA 300 Archaeology Field School

The summer field school is designed to combine raining in research methods of archaeology and geography. Students will receive intensive training in methods of site survey excavation and materials analysis. Several weeks will be spent at selected areas of coastal Maine involved in survey and excavation of sites, mapping sites and landscape features, and investigating potential food resources in site areas. This will be followed by some laboratory analysis of recovered materials. This course may be repeated twice with the permission of the instructor.

Cr 4-6.

## GEO/GEY 360 Field Mapping in the Island

 Environment: Data Collection to GISThe coast of Maine provides a unique laboratory for teaching environmental mapping, data compilation, and data management. In this course students are trained and equipped to use kayaks as the platform from which to conduct survey work for the preparation of small-scale high-resolution analytical maps of natural, historical, and archaeological phenomena. Field techniques used include topographic surveying, global positioning system (GPS) operation, and field mapping of geological and geographical features. Minimumimpact methods are used throughout. Laboratory techniques used include air-photo interpretation, traditional cartography, and geographic information system (GIS) operation. The course culminates in the compleion of a portfolio of maps and a GIS database cov-
ering the area surveyed. This course may be repeated once for credit. Offered Summer Session only. Prerequisite: permission of instructor. Cr 6.

## GYA 350-351 Internship in Applied Geography-Anthropology

Internships offer the student practical experience in working with public agencies, private firms, and municipalities engaged in applied geographical-anthropological activities including, but not limited to, planning, ransportation, 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. Offered pass/fail only. Cr 1-6.

## GYA 400 Independent Study in Anthropology or Geography

The Department faculty offers independent study in a topic in anthropology or geography for upperlevel students (junior and senior status). Students must have had at least one course from the faculty member supervising the independent study; the proposal is subject to departmental approval. Variable credits will be offered.

## Anthropology

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 foraging, farming, and contemporary industrial societies through readings and films.

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 evoluion to understanding contemporary human society; humanbiological adaptations, including a discussion of population and nurition; and contemporary human variation with an evaluation of the
concept of race. The course includes a required 2hour lab each week that provides practical experience with materials and research methods used by biological anthropologists.

Cr 4.

## ANT 103 Introduction to Archaeology

This course describes the methods and theories used by modern archaeologists to uncover information about past human life ways. Attention is given to techniques of survey and excavation of archaeological materials; concepts of space and time in archaeology; and detailed analysis of artifacts and organic residues. Some attention will be given to specific topics such as the archaeology of 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 Origins of Civilization

This course traces the evolution of human culture from the origins of farming and domestication, to the development of complex societies. General processes of urbanization and social straification will be investigated, and examples will be drawn from throughout the Old and New Worlds, including the classical civilizations of the Near East, Southeast Asia, Mexico, and Peru.

Cr 3.

## ANT 213 Human Ecology

This course examines interactions between human societies and their natural environments. Human adaptation is viewed as a problem-solving process, involving the development of strategies for maximizing energy efficiency and reproductive success, for warding off environmental stress, and for reducing conflicts. These management strategies are examined for a number of human societies, and are used to gain insight into modern decision-making processes. Prerequisite: ANT 101 J or 102 K . 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 socieries that followed the European invasion of North America.

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 Worldsfrom 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 instructor.

Cr 3.

## ANT 224I Ancient Mesoamerica

An introduction to the archaeology and ethnohistory of the indigenous peoples of Mexico and adjacent parts of Central America, from the beginning until the sixteenth century. Primary attention will be to the Olmec, Maya, and Aztec civilizations. Cr 3.

## ANT 230I 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 Ju'/hoansi, the Mbuti, the Australian aborigines, and the Inuit. Special attention will be given to understanding the traditional life and world view of hunter-gatherers, but we will also focus on how recent political and economic events are changing their lives.

Cr 3.

## ANT 232I The Anthropology of Sex and

## Gender

Sex and gender are, respectively, biological realities and cultural constructs. This course will examine the anthropology of sex and gender in an evo-lutionary-biological and cross-cultural perspective. The course is organized to explore the issues of sex and gender in three of the major subfields of anthropology: archaeology and biological and cultural anthropology. Topics will include bias in science, the biology and evolution of sex differences, sexlinked behaviors, nonhuman primates, human evolution and the division of labor, and sex roles in different kinds of human societies. Cr 3.

## ANT 233I Food and Culture

This course focuses on food as an essential and central part of human experience. We will examine the anthropology of food and food habits, including an evolutionary-ecological perspective, the reconstruction of past human diets from archaeological evidence, and a cross-cultural examination of the diversity of human food preferences and avoidances. An important goal of the course will be to try to understand and appreciate cultural differences in food habits from both an ecological and a societal point of view.

Cr 3.

## ANT 2501 Archaeology of South America

This course is designed as a comprehensive summary of prehistoric cultures and paleoenvironmental conditions of South America. Emphasis is placed on the evolution of complex societies in the Andean and Pacific coast regions. Also included is a discussion of European contact and interaction with the Inka State.

Cr 3.

## ANT 260 Public Interpretation in Anthropology

This course introduces the student to the interpretation of anthropological information for the public benefit. Topics to be covered include museum exhibits, video, computer-based presentations, and writing for a non-specialist audience. Students will work in teams to produce a finished product for presentations in museums, parks, schools, or other public venues. Credit varies with specific substantive topics and project breadth. Prerequisites: one of the following: ANT 101J, ANT 102K, or ANT 103.

Cr 2-6.

## ANT 300 Action Anthropology

In this course students will engage in the pursuit of both knowledge and social action. Much of the information base for the activist project will come from concurrent enrollment in ANT 350 or ANT 301I, both of which address the environmental/cultural issues of indigenous peoples. The link between lnowledge and informal action will be explicit: students will be asked to prepare and carry out a social action plan grounded in solid research within the anthropological perspective. This course will be particularly useful for students interested in a career in social or environmental service in a muliethnic setting. Prerequisite: offered concurrently with ANT 350 and ANT 301I

Сг 1-2.

## ANT 301I Victims of Progress: Indigenous Peoples in the Modern World

This course examines the disappearance of indigenous 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 scienlific 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 101J.

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 $101 \mathrm{~J}, 102 \mathrm{~K}$ or permission of instructor.

Cr 3.

## ANT 305 History of Archaeological Thought

This course is an historical survey of theory in archaeology fromthe early Classical archaeology and antiquarianism to contemporary processual, postprocessual, and contextual approaches. It will examine the social history of archaeology in the United States. A special focus may include Scandinavian, Russian, Australian, or Japanese prehistory. Prerequisite: ANT 103.

Cr 3.

## ANT 306 Analysis of Archaeological Materials

This course provides an opportunity for in-depth study of methods used in the analysis of archaeological materials after they are recovered from excavations. Students will work in teams to apply analytical techniques to archaeological site collec-
tions including ceramics; stone, bone, and shell artifacts; and archaeological soils and faunal remains. Credit will vary with the range of techniques covered in a particular semester. Prerequisite: ANT 103. Cr 3-6.

## ANT 307 Special Topics in Archaeology

This course provides experience in the application of specific techniques from allied science disciplines to research problems in archaeology. Specific topics and course titles may vary. May be repeated for credit under different itles. Prerequisite: GYA 300 or ANT 306 or permission of the instructor.

Cr 1-2.

## ANT 308 Environmental Archaeology

Students in this course will be introduced to the analytical techniques that are commonly used in the archaeological study of past environments and environmental change. Topics to be covered include archaeological soils, preservation conditions, the reconsruction of past climates and landforms, and the analysis of plant and animal communities from archaeological evidence. Although each of these topics will be covered, level of coverage of each will vary. In semesters when this course carries six credits, requirements will include a substantial research project. Prerequisite: junior status, and ANT 103 or GYA 300.

Сг 3-6.

## ANT 310 History of Anthropological Thought

This course is a historical survey of theory in anthropology from the early classical evolutionists to contemporary materialist and idealist approaches. It will examine the various theories in terms of their level of analysis, explanatory value, and relationship to the western society from which they emerged. This course is a requirement for those concentraing in anthropology. Prerequisites: ANT 101 and either ANT 102K or ANT 103. Cr 3.

## ANT 315 Ethnography: Methods, Ethics, and Practice

This course offers students an overview of the methods of ethnographic observation and analysis and the ethical considerations of conducting such research. Students will be required to carry out ethnographic fieldwork, employing appropriately selected methods of data collection and analysis. Prerequisites: ANT 101J and one ethnography course or ANT 310.

Сг 3-6.

## 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 analysis of prehistoric human populations.

Prerequisite: ANT 102K or ANT 103 or permission of instructor.

Cr 3.

## ANT 340 Primate Behavior

This is an intermediate course in primatology and theories of social behavior. 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. Prerequisite: ANT 102 K or permission of instructor.

Cr 3.

## ANT 350 Amazon Peoples and Development

In recent years the alarm has been sounded about the rapid destruction of the Amazon rain forest and the unknown consequences of the loss of perhaps one-third of the world's species; less attention has been paid to the extinction of systems of knowledge and survival developed over the millenia by the indigenous forest people, not the least of which is how to live sustainably in the complex ecosystem in a rich diversity of cultures. In this course, students will examine these cultures for what they can teach us, as well as the effects of colonization and "development" on the forest and its inhabitants. Prerequisite: ANT 101J.

Cr 3.

## ANT 410 Zooarchaeology

Zooarchaeology, the study of animal remains from archaeological sites, provides information for ar-
chaeologists about human diet and subsistence praclices through time. The course will offer the basic theoretical and methodological foundations of zooarchaeological analysis, focusing on the study of mammalian bones recovered from archaeological sites. The approach will be lab-oriented, with emphasis on learning techniques of analysis and on interpreting archaeological faunal assemblages, in order to understand the relationship between animals and the human activity patterns involved in securing and processing animals for food and other useful materials. Prerequisite: ANT 102K, ANT 103, or a course in archaeology.

Cr 3-6.

## ANT 450 Topics in Anthropology

This course is designed to undertake detailed, indepth analysis of important topics and issues in such subfields of antbropology as sociocultural anthropology, biological antbropology and archaeology. Topics vary from semester to semester. Research papers are required. Prerequisite: junior standing or permission of instructor.

Cr 3.

## ANT 455 New England Historic Archaeology

A study of the theories and methods used by archaeologists with an emphasis on how archaeological data and arifacts help us understand the social, cultural, and material life of New England's past. Some attention will be paid to comparative regional archaeology. This is the same course as American and New England Studies (ANES) 655. This course is open to geography-anthropology majors with at least one course in archaeology, or by permission of instuctor.

Cr 3.

## Geography

## GEO 101J Introduction to Human 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 in geography-anthropology. It also provides models and conceptsusefulin many other disciplines.

Cr 3.

## GEO 102K Physical Geography

This course examines the physical processes of the environment as they relate to human endeavors. Climate, soil, vegetation, land form, water, and mineral resources are among the topics covered. Laboratory exercises acquaint the student with the materials and methods of physical geography. Climate data, topographic maps and field observations are employed to solve practical problems of human interaction with the environment.

Cr 4.

## GEO 120J Geography of Maine

This course will examine Maine as a geographic region. Physical and cultural attributes of the state
will be analyzed. Political, economic and demographic factors will be emphasized in viewing the assets and problems of the Maine environment and in planning Maine's future.

Cr 3.

## GEO 203J Urban and Regional Development

Students will survey contemporary patterns of urban and regional developinent through comparative analysis. Students will examine links between urbanization, employment, and social welfare in different political and economic contexts as the course moves from the global scale to the local. Students will be introduced to a series of research skills including the use of computer databases and spreadsheet programs, many of which will be of use in other courses.

Cr 3.

## GEO 205 Remote Sensing

An introduction to the use of remotely sensed data for the study of human and environmental phenomena. Image-processing software is used to analyze satellite images; raster GIS is used to explore a variety of geographical modeling, spatial, and data presentation techniques. Prerequisite: recommended as a companion course to GEO 208 and GEO 308.

Cr 3.

GEO 207J Maps: Knowledge, Technology, Society, Culture
This course introduces the interdisciplinary nature of maps and geographic knowledge. Its core theme is the manner in which our complex knowledges of the world are constructed cartographically through technologies, social institutions and cultural expectations. Using examples from prehistoric rock-carvings to modern computer graphics, maps are interpreted as products of human ingenuity, rather than statements of geographic fact; they do not just show the world, they show our conception of what the world ought to be.

Cr 3.

## GEO 208 Cartography I

This is an introductory course in cartography focused on developing basic mapping and graphic communication shills 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. Thiscourse is required for all majors concentrating in geography.

Cr 3 .

## GEO 209 Introduction to Land Use Planning

This course offers an overview of human/land relationships as theyinfluence 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 altemative courses of action; standards and requirements for specific planning objectives (such as land use, energy, recreation, ransportation); and the place of the planning function in government and the role of citizens and private groups. Introduction to basic planning tools and techniques including PERT, aerial photography, and methods of land inventory and classification will be presented.

Cr 3.

## GEO 210 Planning Maine Conununities: Current Issues and Directions

This course will examine the issues facing Maine communities such as providing affordable housing, maintaining andimproving 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 212 Regional Geography of Western Europe

There is a triad of capitalist powers dominating world geography: western Europe, Japan and the United States. This course develops a geographical analysis focusing on the western European element within this triad. The analysis is developed in three parts: a discussion of physical, historical, social, cultural, and political-economic forces deter-
mining the regional character of western Europe; a discussion of the relationship between western Europe and the other elements of the triad; and a discussion of the relationship between global and local geographies, as exemplified in the European case. The interaction between space, time and location, and the influence of these factors in determining regional characteristics is stressed throughout. Prerequisite: one of the following: GEO 101J, ANT 101J, POS 104J, HTY 102 I.

Cr 3.

## GEO 301 Political Geography

This course 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 104J.

Cr 3.

## GEO 302 Gender, Work, and Space

Students will examine the ways in which the workforce is divided by gender, race, class, and ethnicity and how location and space shape and sustain such divisions. Competing explanations for why women and minorities hold jobs that differ distinctly from jobs held by other workers will be examined. Students will leam how a geographic understanding of gender, race, ethnicity, and class can help explain more fully the current position of women in the economy.

Сг 3.

## GEO 303J Economic Geography

This course 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 the factors and trends that anticipate the future. Prerequisite: GEO 101J or ANT 101J or permission of instructor.

## GEO 304 Social Transformation of Nature

The premise of this course is that "nature" per se does not exist, but rather that human social action and "natural" environmental processes are inextricably intertwined. In the context of a history of human-environment interaction in the Holocene ( 10,000 B.P.-present) the historically and socially contingent character of human social ransformation of the environment is analyzed. Three "epochs" of human environment interaction are defined: primitive communism, tributary society, and capitalism. Each is characterized by a distinctive set of human-environment transactions, the creation of a distinctive environmental dynamic and the emergence of a distinctive social construct of "nature." In conclusion, the "nature" thus created is considered as a determining factor in the creation of society. Prerequisite: one of the following: GEO 102K, ANT 102K, GEO 101J, GEY 111K, or BIO 331.

Cr 3.

## GEO 307 History of Anglo-American Cartography

A comparative history of the creation, dissemination, and control of spatial lnowledge in Britain and NorthAmerica, from 1500 to 1917. This course examines which social institutions have promoted the creation and use of maps, what cultural expectations have defined the character of geographic knowledge, and how those social institutions and cultural expectations have been shaped by the practices of map making. Particular attention will be paid to the territorial aspects of the modem state, to the economic foundations of map making, and to the cultural ideologies of geographic knowledge. Prerequisite: any 200/300-level GEO or HTY course, or instructor's permission. Cr 3.

## GEO 308 GIS I

Students are introduced to the skills necessary to run a vector-based geographical information system (GIS). Topics covered are the characteristics of line, point, area, and boundary data, numerical data entry, digitizing, data manipulation, and output generation. Possible sources of confusion and error, both of system operation and of output interpretation, are reviewed. The course comprises a weekly lecture and a weekly laboratory. Prerequisite: GEO 208 and one of the following: GEO 102K, GEY 202.

GEO 310 History of Geographical Thought
An historical survey of the theory and discipline of geography from its classical origins to the modem proliferation of idealist and posivivist approaches. Most of the course will cover the development of the modem, secular discipline in the nineteenth and twentieth centuries. Of central concern are the relationships between imperialism (including racism), the study of other peoples by the West, and the configuration of geographical thought and institutions. Prerequisite: GEO 101J or 102K, or instructor's permission.

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 relarions with the countryside are explored, and as complex nodal regions in which the intemal variations of the city are examined. Prerequisite: GEO 101J or permission of instructor. Cr 3.

## GEO 403 Urban Physical Geography

Cities have a landscape dynamic as complex and mutable as any environmental system. Yet they differ from other systems in two respects: they display an unprecedented concentration and diversity of planned and unplanned human impacts on environmental processes; they display process regimes articulated by social, political, cultural, and economic forces. This course explores the consequences of these differences in the context of a discussion of flows of energy, matter, and informaion through the urban environmental system. Combining critical reading, discussion, and field work, the course explores exising environmental processresponse models and adapts them to the urban case, concluding with an attempt to synthesize the human and the physical dynamics of the urban environment within a single explanatory framework. Prerequisite: GEO 102 K and one of the following: GEO 402, GEY 202, BIO 331. Cr 3.

## GEO 408 GIS II

This weekly seminar emphasizes the use of geographic information systems (GIS) in research environments. It has two components: project planning and project execution. Project planning focuses on hypothesis generation, definition of legitimate areal units for data collection, data collection techniques, and database construction. Project execution is undertaken using PCARC/INFO and focuses on the GIS as a spatial analytical tool. Prerequisite: GEO 308.

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: Mark Swanson, 112C Bailey Hall, Gorham
Professors: Pollock, Swanson; Associate Professors: Fitts, Hayes, Novak; Assistant Professor: Sandberg; Laboratory Associate: Vose

Geosciences is a broad interdisciplinary group of sciences focused on the dynamic processes that continually shape the earth. The geosciences major provides a solid science background and good preparation for careers involving environmental problems, science education, geologic hazards, geo-engineering, mapping, fossil fuels, and minerals. Specific areas of study include earth structure, earth history, history of life on earth, rocks, minerals, tectonic processes, earthquakes, groundwater flow and contamination, erosion and landforms, atmospheric processes, and exploration/mapping methods. Many of the courses have laboratory components; some are outdoor and field-oriented, some are indoor with microscopes and other lab equipment, and some involve computer simulation of earth systems.

Recent graduates of this program have been awarded scholarships for graduate study and have entered environmental consulting firms, state regulatory agencies, and science teaching. Geosciences majors intending to pursue graduate work should determine graduate school requirements; some additional coursework in allied areas may be required. Students are encouraged to take additional courses or minor in fields such as chemistry, environmental science and policy, physics, biology, computer science, mathematics, and geography. Students are also encouraged to take a summer geoscience field course, if possible.

Twodegree programs are offered for geosciences majors: a bachelor of arts and a bachelor of science. The B.S. degree has more emphasis on mathematics and computer science than does the B.A. degree; the B.S. may be better preparation for graduate studies and more quantitative careers. Majors must achieve a 2.0 grade point average and grades of C - or better in all geoscience courses.

## Bachelor of Arts in Geosciences

The minimum number of credits (excluding the University's Core curriculum) required for the major: 65 .

| Chemistry |  |
| :---: | :---: |
| CHY 113, 114, 115, 116 | Principles of Chemistry |
| Physics |  |
| PHY 121, 122, 123, 124 <br> or | General Physics |
| PHY 111, 112 | Elements of Physics |
| Mathematics |  |
| MAT 120 | Introduction to Statistics |
| MAT 152 | Calculus A |
| Geosciences |  |
| GEY 100K | Physical Geology Lecture |
| GEY 101 K or 102 K | Physical Geology Laboratory (or Field Laboratory in Physical Geology) |
| GEY 113 | Paleogeography and History of Life |
| GEY 202 | Geomorphology |
| GEY 203 | Mineralogy |
| GEY 301 | Crustal Structure and Tectonics |
| GEY 302 | Sedimentation and Stratigraphy |
| GEY 303 | Igneous and Metamorphic Rock Origins |
| GEY 410 | Introduction to Geophysics |
| GEY 420 | Hydrogeology |

In addition to the above, 6 credits of upper-level elective courses are required. At least 3 of these electives must be for geosciences courses at the $200+$ level. Up to 3 of the elective credits may be courses at the 200+ level in these related departments: chemistry, environmental science and policy, physics, biology, computer science, mathematics, and geography.

Bachelor of Science in Geosciences
The minimum number of credits (excluding the University's Core curriculum) required for the major: 72.

| Chemistry <br> CHY 113, 114, 115, 116 | Principles of Chemistry |
| :--- | :--- |
| Physics |  |
| PHY 121, 122, 123, 124 | General Physics |
| Mathematics |  |
| MAT 152 | Calculus A |
| MAT 153 | Calculus B |
| MAT 252 | Calculus C |
| Computer Sciences |  |
| COS 101 | Quantitative Decision Making Using |
| or | Computers |
| COS 160, 170 | Structured Problem Solving C++ (with lab) |
| Geosciences |  |
| GEY 100K |  |
| GEY 101K or 102K | Physical Geology Lecture |
|  | Physical Geology Laboratory (or Field |
| GEY 113 | Laboratory in Physical Geology) |
| GEY 202 | Paleogeography and History of Life |
| GEY 203 | Geomorphology |
| GEY 301 | Mineralogy |
| GEY 302 | Crustal Sructure and Tectonics |
| GEY 303 | Sedimentaion and Stratigraphy |
| GEY 410 | Igneous and Metamorphic Rock Origins |
| GEY 420 | Introduction to Geophysics |

In addition to the above, 3 credits of elective geosciences courses at the 200+ level are required.

## Minor in Geosciences

A minor in geosciences consists of a minimum of 17 credits including GEY 100 K , GEY 101 K or GEY 102 K , and at least 13 additional credits of GEY courses numbered 113 or higher.

## GEY 100K Physical Geology

An introduction to minerals and rocks and the processes that have continually shaped the earth over hundreds of millions of years. Intemal processes include the movement of crustal plates, earthquakes, volcanism, rifting, sea floor spreading, crustal deformation, and mountain building. Extemal processes such as stream erosion, groundwater flow, glaciation, and landslides are also examined. Concurrentregistration in GEY 101 K is recommended.

Cr 3.

## GEY 101K Physical Geology Laboratory

Lab sessions will focus on mineral identification, rock classification, and the interpretation of topo-
graphic and geologic maps. Field trips to local sites will help illusurate rock types, glacial deposits, and geologic processes discussed in lecture. Concurrent registration in GEY 100 K is recommended. Two hours.

Cr 1 .

## GEY 102K Field Laboratory in Physical Geology

This laboratory will stress mineral/rock identification and topographical map interpretation in the study of a series of local field sites. Geologic mapping techniques will be used to constuct detailed maps and cross-sections of many spectacular outcrops in the southern Maine area. These mapping exercises will help illustrate the process of rock
deformation and magma intrusion. Concurrent registration in GEY 100 K is recommended. Fall semester only. Three hours.

Cr 1.5.

## GEY 105K Introduction to Oceanography

The world's ocean covers 70 percent of the earth's surface and makes life possible. Among those who live on land, the impact of ocean systems is often overlooked. This course offers an interdisciplinary look at the science of the ocean. Basic concepts in chemistry, geology, physics, and biology are taught as they apply to marine phenomena such as salinity, ocean floor formation, currents, waves, and the astounding variety of life in the sea. The interrelationships of land, air, and sea are stressed in an effort to develop an appreciation for the importance of oceans. Concurrent registration in GEY 106 K is strongly recommended.

Сг 3.

## GEY 106K Oceanography Laboratory

Major concepts from GEY 105K are illusirated using hands-on activities. Students perform a variety of tasks designed to promote understanding of scientific methods and data analysis. Classes held in the lab include a range of chemical and physical experiments. Field trips involve wave observations at nearby beaches and examination of tide pool plants and animals. Concurrent registration in GEY 105 K is strongly recommended.

Cr 1 .

## GEY 109K Field Geology of Coastal Maine

This introductory course uses a field-based approach to understanding earth materials and the processes of crustal deformation, igneous intrusion, and surface erosion. Lectures and preliminary indoor labs are combined with outdoor field exercises at the spectacular coastal rock exposures of Casco Bay and southern Maine. Students learn mineral and rock identification by examining laboratory samples and outdoor outcrops. The interpretation of complex geologic relations involving folding, faulting, and igneous intrusion will be highlighted through detailed field mapping exercises during numerous field trips to local outcrops. Summer Session only.

## GEY 110K Field Studies in Environmental

 Geology on the Island of Lesbos, Greece This course will consider the basic and applied geology of the eastem Aegean Sea with particular emphasis on the island of Lesbos, Greece. The course is a cooperative effort with the Deparment of Environmental Studies of the University of the Aegean. Rocks, minerals, and topographic maps will be studied for the purpose of interpreting the bedrock geology, geomorphology, and hydrogeology of the region. Other topics will include remote sensing, aerial geology, tectonics, use of the Brunton compass, waste disposal, coastal processes, and the impact of development. The course will consist of lectures, laboratory experiences, and field trips to many parts of the island. Offered Summer Session only.Cr 4.

GEY 113 Paleogeography and History of Life
A study of the history of the earth in terms of biological, chemical, and physical changes since its origin. The course will emphasize interpretation of the fossil record for chronology, biostratigraphy, and paleoecology. Three hours of lecture and six hours of lab with some field trips. Prerequisites: GEY 100 K and either GEY 101 K or GEY 102K. Cr 5.

## GEY 202 Geomorphology

Students will consider landscapes and the processes that are responsible for their formation. Emphasis will be on the constructive processes of mountainbuilding and volcanism and the erosional processes of rivers, glaciers, the sea, and wind. There will be one or two weekend field trips. Two hours lecture, two hours lab. Prerequisite: GEY 113 or permission of instructor.

Cr 4.

## GEY 203 Mineralogy

The course concentrates on the silicate family of minerals, but also examines nonsilicate mineral famjlies. Subject areas covered include crystallography, crystal chemisiry, and environments of mineral formation. In one lab each week, students will examine crystals and minerals in hand specimens. In a second lab each week, the rudiments of optical crystallography are introduced and students will examine minerals microscopically. Three hours lecture, two labs each two hours in length. Prerequisite: GEY $100 \mathrm{~K}, 101 \mathrm{~K}$ (CHY 113,114 is recommended).

Cr 4.

## GEY 207 Atmospheric Science and Pollution

Students will be introduced to the physical and chemical processes active in the earth's atmosphere. Specific topics include atmospheric circulation, atmospheric chemistry, climate patterns, storms, natural atmospheric change in recent geologic time, human-induced atmospheric change, and atmospheric pollution. Prerequisite: CHY 113, 114.

Cr 3.

## GEY 208 Environmental Geology

Geology and its effect on the human condition. Topics include geological hazards (earthquakes, volcanic eruptions, landslides, floods, and sink holes), human impact upon the coast, shoreline losses, hazardous and non-hazardous waste disposal, economic geology (exploitation of petroleum, natural gas, metallic ores, coal, and sand and gravel), and groundwater use and contamination. Three hour lecture plus several day field trips and/ or attendance at public meetings. Prerequisites: GEY 100K and GEY 101K.

Cr 3.

## GEY 301 Crustal Structure and Tectonics

Structures in the earth's crust are examined in their relation to the history of deformation and plate tectonic interaction. Students learn to recognize, describe, and interpret the wide variety of outcropscale structures found in Casco Bay and southwestern Maine. In the field-based lab, students will use

Brunton compasses, stereonets, and outcrop mapping techniques to analyze the local structural development, and relate this to the interpreted tectonic history of continental collision, strike-slip shearing, and subsequent rifting. Three hours lecture, fourhours lab. Prerequisites: GEY 100K, GEY 101 K or 102 K , and GEY 113.

Cr 4.

## GEY 302 Sedimentation and Stratigraphy

Students focus on the processes that produce sediments and the mechanisms by which they are eroded, ransported, and deposited. By carefully examining the motifs, models and characteristics found in the sediment composition, texture, and features in modern-day sedimentary environments, clues can be found to understanding the historical sedimentary record. Two hours lecture, three hours lab. Cr 4.

## GEY 303 Igneous and Metamorphic Rock Origins

An introduction to the diversity and global distribution of igneous and metamorphic rocks. Students will examine the physical conditions and environments where igneous and metamorphic rocks form. Such environments include mid-ocean ridges, island arcs, convergent margins, and intraplate settings. Topics include: styles of volcanic eruptions, intrusive igneous rocks, regional metamorphism, and metamorphic belts. Labs will cover rock identification, computer exercises, and petrographic microscopy. Three hours lecture, two laboratories each two hours in length. The laboratories and lecture will occasionally be combined into half- or fullday field trips. Additionally, one weekend field trip will be offered. Prerequisite: GEY 203. 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 rips. Prerequisite: GEY 202. Two hours lecture, two hours lab.

Cr 3.

## GEY 360 Field Mapping in the Island <br> Environment: Data Collection to GIS

The coast of Maine provides a unique laboratory for teaching geologic and environmental mapping, data compilation and data management. In this course students are trained and equipped to use kayaks as the platform from which to conduct survey work for the preparation of small-scale highresolution analyicalmaps of natural, historical, and archaeological phenomena. Field techniques used include topographic surveying, global positioning system (GPS) operation, and field mapping of geological and geographical features. Minimum impact methods are used throughout. Labora-tory techniques used include air-photo interpretation, raditional cartography and geographic information system (GIS) operation. The course culminates in
the completion of a portfolio of maps and a GIS data-base covering the area surveyed. Offered Summer Session only. Prerequisites: junior/senior standing or permission of instructor. May be repeated for credit.

Cr 6.

## GEY 400 Cooperative Education in Geosciences

Students have opportunities to relate academic knowledge and practical job experience. Arrangements can be made with various agencies, businesses, and industries to employ qualified students. The student's work should be in a field related to geoscience. Approval is on an individual basis, depending on the nature of the job and specific work assignments. Evaluation is typically done through a written report that summarizes the work experience, with input from the employer and a faculty advisor. Prerequisite: junior/senior standing or permission of instructor. May be repeated for a maximum of 6 credits.

Cr 1-6.

## GEY 410 Introduction to Geophysics

Students investigate the mechanics of earth's structure and dynamics, as well as applications of geophysics to resource exploration and environmental investigation. In the context of both plate tectonics and applied geophysics, specific topics include magnetics, seismology (earthquake seismology, seismic refraction, seismic reflection), gravity, and heat flow. Prerequisites: MAT 152D and PHY 122 or permission of instructor.

Cr 3.

## GEY 411 Environmental Geophysics

Students will become familiar with the most common geophysical field methods used in all phases of environmental investigations, including data collection, data processing, report preparation, and public presentation. Field and lab exercises are incorporated to provide hands-on experience in the methods, and to introduce students to common geophysical instrumentation. Prerequisites: GEY 100K and GEY 410.

Cr 4.

## GEY 420 Hydrogeology

This is an introductory groundwater course covering the following topics: water balance, basic fluid mechanics, groundwater flow equations, flow to wells, flow in various geologic environments, groundwater quality, and groundwater pollution. Some case studies will be included. Prerequisites: GEY 100K, CHY 113 (may be taken concurrently), MAT 152D, and PHY 111 K or 121 K , or permission of instructor. Three hours lecture, two hours lab/recitation.

Cr 4.

## GEY 427 Advanced Hydrogeology

This is a sequel to GEY 420, covering subsurface contaminant migration, remediation of subsurface contamination, and computer simulation of groundwater flow and transport processes. Laboratory sessions will include computer exercises and trans-
port experiments. Prerequisite: GEY 420 or permission of instructor. Two hours lecture and two hours lab/recitation.

## GEY 428 Groundwater Contamination

## Seminar

One subject pertinent to groundwater contamination will be examined in detail, using recent journal articles and case studies for reference. The subject will vary from year to year. Students will learn about physical and chemical processes and develop skills applicable to problems involving groundwater contaminant migration and remediation. Prerequisite: GEY 420 or permission of instructor. Cr 1 .

## GEY 490 Senior Thesis

The student develops an in-depth research paper about an original research theme. A thesis topic is chosen in consultation with a faculty advisor in the semester prior to registration. May be repeated for a maximum total of 6 credits. Prerequisite: senior standing and permission of the instructor. Cr 3-6.

## GEY 498 Independent Study in Geoscience

The student may explore particular fields of specialization through library research, laboratory study, or a field-oriented project. The topic is chosen in consultation with a faculty advisor in the semester prior to registration. May be repeated for a total of 6 credits. Prerequisites: junior or senior standing and permission of the instructor. Cr 1-3.

## History

Chair of the Department: Gary J. Johnson, 200 Bailey Hall, Gorham Professors: Albee, Bibber, Cole, Eastman, Long, Padula; Associate Professors: Eagan, Holden, Johnson, Whitmore; Assistant Professors: Bonner, Elgersman, Klooster, Zhao

History, as a domain of knowledge, embraces all past human activity. There is no phenomenon without history. Historians endeavor to discover and organize facts about people and events and to create from them meaningful explanations and narratives.

Through a series of introductory and advanced courses, history majors become familiar with past knowledge, the forces of change, and the varieties of historical scholarship dealing with societies throughout the world. They also learn to collect, evaluate, organize, and interpret evidence, and to present it in oral and written forms.

Students with grounding in historical knowledge possess the central core of an excellent liberal arts education which may be used in numerous ways, including active citizenship, graduate school, and various occupations.

## Programs and <br> Requirements

The Department of History offers a major that leads to a bachelor of arts degree and a minor for students majoring in other disciplines. The major consists of 39 credit hours in history plus a foreign language requirement. The minor consists of 18 credit hours in history. In addition, the Department offers an internship program in cooperation with area historical societies, museums, libraries, and other institutions.

Majors should, after consultation with an advisor, focus at least three of their history electives (300-level courses) upon a particular country, continent, era, or theme of their choosing and select courses from other departments that complement this concentration. It is strongly recommended that majors, especially those expecting to undertake graduate study, acquire proficiency in a foreign language.

College Level Equivalency Program (CLEP) examinations are available in Westem Civilization and United States History. Unusually well-prepared entering students who pass one or more of these examinations may substitute 300 -level course(s) for the HTY 101/102 and/or HTY 131/132 introductory surveys.

A history major or minor must achieve at least six credits of B or better grades in history courses. No grade of D will count toward fulfillment of a history major or minor. No required course may be repeated more than once. Majors and minors are reminded that, in addition to Department requirements, they must also meet those of the University Core curriculum.

Bachelor of Arts in History
History Requirements
To graduate with a bachelor of arts in history, a student must successfully complete a minimum of 39 credits in history courses as follows:

Field I

| HTY | 101I | Western Civilization I |
| :--- | :--- | :--- |
| HTY | 102I | Western Civilization II |
| HTY | 131I | United States History to 1877 |
| HTY | 132I | United States History Since 1877 |

Field II (select two)
HTY 152I The Islamic Near East
HTY 161I African History to Partition (not offered 1998-1999)
HTY 162I African History Since Partition (not offered 1998-1999)
HTY 171I Traditional East Asia
HTY 172I Modern East Asia
HTY 181I Latin America I
HTY 182I Latin America II
Research methods course
HTY 200 Reference, Research and Report Writing
Elective advanced history courses
Select five 303-399 level courses in consultation with your major advisor. HTY 400 Senior Seminar

## Foreign Language Requirement

Students majoring in history must demonstrate an intermediate competence in one foreign language as part of the Departmental requirements for graduation. This requirement can be fulfilled by achieving a grade of at least $C$ - in the second semester of an intermediate level course (and any necessary prerequisites) or by examination.

## 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 upon a particular country, continent, era, or theme of their choosing. The program must be developed in cooperation with a member of the history faculty and include the two-semester survey sequence appropriate to the focus.

Requirements: appropriate two-semester survey sequence and four elective advanced history courses (approved by advisor and Department chair).

## HTY 101I Western Civilization I

A basic survey and introduction to the heritage of Western society from ancient to early-modem 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 nationstates 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 society from early modern times to the atomic age. Particular attention is given to the Enlightenment, the French Revolution, the rise of the industrial era, the growth of nationalism, and the

World Wars. Personalities such as those of Napoleon, Hitler, and Stalin are studied. The course also introduces students to historical method. Cr 3 .

## 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 Reconsruction.

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.

Сг 3.

## HTY 152I The Islamic Near East

This is a basic, introductory survey of the history of the eastern Mediterranean/Near Eastern region ca. 600 C.E. to the present. The course emphasizes the origin and development of Islamic religion and
the establishment, spread, and evolution of Islamic institutions in Arabia, Egypt, Mesopotamia (Iraq), Palestine-Syria, and Anatolia (Turkey). Attention is given to the historical and continuing interaction between the Islamic people of the Near East and nonIslamic people both within and without the region.

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 counries 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 rade, exploration, and partition. (Not offered 1998-1999).

Cr 3.

## HTY 162I Introduction to African History Since Partition

A survey of the Colonial era, the ransformation of African societies, the rise of nationalist movements, wars of liberation, and early years of the new era of independence. (Not offered 1998-1999). 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 "raditional" societies. Cr 3.

## HTY 172I Modern East Asia

China and Japan since about 1700, emphasizing conrasting moves toward modernization in two raditional 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. History majors are strongly encouraged to take this course in the sophomore year, but no later than the first semester of the junior year. Preference to history majors. Cr 3.

## HTY 300 History Internship

Professional experience in one of a variety of posirions in public and private institutions that uilizes the lnowledge 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 Professor Eastmanfor 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 Anatolia are examined and related to the development of Greek civilization in the Aegean area. Special attention is given throughout to social and religious issues, e.g., the early history of Judaism. Prerequisite: HTY 101I 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 century 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 101I or equivalent.

Cr 3.

## HTY 305 The Historical Jesus

This course is a "workshop" wherein the participants analyze and evaluate a variety of documents (both ancient and modern) which purport to describe the life and career of Jesus of Nazareth. The goal is to develop historiographical shills (including writing) as well as to illuminate the subject's life.

Cr 3.

## HTY 306 Roman Sexuality and Early Christianity

This course will explore ancient Roman relations conceming human biology, sexuality, and morality; the structure and definition of "family;" the gender conscious operation of the extended household (including slaves and free clients); and the relationship of the family to the Roman state. The primary focus is the Roman imperial period, ca. 100 B.C.E. - 300 C.E. Because this same period witnessed the origins of Chrisianity within the Roman Empire, the course also is concerned with Christian variations to these same issues. Cr 3.

## HTY307 Judaism, Christianity, and Islam: Origins and Interactions

This course will survey the origins, nature, and early history of the world's three major monotheistic religions: Judaism, Christianity, and Islam. Necessarily this involves a survey of the history of the Mediterranean/Near Eastern world in which these
religions first appeared and prospered. The chronological focus is ca. 600 B.C.E. -ca. 800 C.E.

## 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 101I 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 midnineteenth century. The course covers geographical factors, the nature of Byzantine influence, the impact of invasions, and Russia's contacts with the West. Contrasts between the experiences of Russia and Western Europe are stressed; contrasts with other civilizations are also noted. Prerequisite: HTY 101 I or HTY 102I, or permission.

Сr 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.

## H'TY 319 The Age of Revolutions and Romanticism (ca. 1815-1852)

A study of Europe from the fall of Napoleon I to the middle of the 19th century. The course will focus on the impact of the French Revolution on Eu-
ropean society and on the lingering revolutionary tradition. Specific revolutions and personalities will be examined within the framework of the Roman-
ic Protest, especially in Germany, Italy, and France. Prerequisite: HTY 102I or permission of instructor.

Cr 3.

## HTY 320 Europe at the Turn of the Century (1871-1913)

This course concentrates on the culture and politics of fin de siécle 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 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 theimpact of war upon European society are among the subjects to be considered. Prerequisite: HTY 102I or HTY 132I or permission.

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.

Cr 3.

## HTY 334 The Holocaust: Policy, Practice,

 ResponseAn examination of the roots of anti-Semitism in Europeanhistory, 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 336 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 HTY 132I or permission.

Cr 3.

## HTY 339 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 351 Colonial America

The first half of the semester is devoted to the discovery, exploration and colonization of the American colonies. The second half concentrates on the social and political development of these colonies, touching upon various aspects of colonial life and emphasizing the growing maturation of society. Prerequisite: HTY 131I or permission. Cr 3.

## HTY 352 The American Revolution

A study of the 1763-1789 period, stressing the breakdown of Anglo-American relations; American independence and its ideological underpinnings; the Revolutionary War; the postwar struggle to strike a balance between too much govemment and too little; and the drafting and ratification of
the U.S. Constitution. Prerequisite: HTY 131I or permission.

Cr 3.

## HTY 354 Hamilton and Jefferson

The 1789-1815 period as viewed through the lives of Alexander Hamilton and Thomas Jefferson. Their ideological struggle leading to the rise of the Federalist and Democratic-Republican parties, and the political, economic and diplomatic challenges facing the infant United States will be considered extensively. Prerequisite: HTY 131I or permission.

Cr 3.

## HTY 355 The Age of Jackson, 1815-1850

A study of the life and times of the "Old Hero" Andrew Jackson, with extensive consideration given to the rise of Jacksonian democracy and the impact on American politics of the controversies surrounding the Bank of the United States, internal improvements, the protective tariff, "Manifest Deswiny," and the sectional-slavery issues. Prerequisite: HTY 131I or permission.

Cr 3.

## HTY 356 Civil War and Reconstruction

An examination of the period 1850-1877, dealing with the background and causation of the war; Lincoln and the secession crisis; the military, political, diplomatic, andeconomic aspects of the Civil War; and the challenges and ultimate failure of reconstruction after 1865. Prerequisite: HTY 131I or permission. Cr 3.

## HTY 357 The Gilded Age in America, 1869-1898

The United States in the age of enterprise with emphasis on the development of political and economic radicalism, the commercialization of agriculture, the rise of the American city, new directions in social thought, concentration of industrial wealth and financial power, and American foreign policy. Prerequisite: HTY 132I or permission.

Cr 3.

## HTY 358 Early 20th-Century United States, 1898-1938

The United States from 1898 to 1938. Analysis and interpretation of cultural, economic, and political developments of the Progressive Era, World War I, the 1920s, and the Depression and New Deal. Prerequisite: HTY 132I or permission. Cr 3.

## HTY 359 America Since 1938

The United States from the Depression and New Deal through World War II, the Cold War, the Civil Rights Movement, and the Vietnam War. Discussion of economic, political, and social developments and interpretation of these developments. Prerequisite: HTY 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 HTY 132I or permission.Cr 3.

## HTY 363 Sickness and Health in America: Historical Perspectives

The growth of the U.S. health care system on the basis of European models and local needs. Infectious diseases from smallpox to AIDS. Social consequences and contexts for various Americans-native Americans, blacks, and women. Alternative views of health and disease.

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 African Americans

Additional courses in African-American history are in the process of development and approval. See course schedules during 1998-1999.

## HTY 366 History of Religion in America

A history of religion in American society from the colonial era to the present, examining theology, organization, leaders, critics, and the religious contribution to the American experience. Prerequisites: HTY 131I and HTY 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, ghettoes, and suburbs; the growth of municipal institutions and services; the relationship of city dwellers and govemment; 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 interpretarions 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 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 191314. Prerequisite: HTY 131I or permission. Cr 3.

## HTY 379 Diplomatic History of the United

## States II

Analysis and discussion of United States foreign policy since 1914. Considers the origins and effects of policy and also differing interpretations of issues such as the nature of "isolationism" and "interventionism," the origins of the world wars and the Cold War, the meaning of "Viemam," and the relative influence of economics and ideology in shaping policy and action. 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.
## Cr 3 .

## HTY 383 The Society and Culture of Latin

## America

This seminar seeks to examine, through the use of popular novels and films, the principal characteristics of Latin American culture. Such elements as the role of dictators and revolutionaries, of machismo and imperialism, and of great haciendas and folkloric religions will be considered. Cr 3 .

## 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 intemational politics. (Not offered in 1998-1999.) Cr 3.

## HTY 385 Africa Through Its Literature

An examination of how African history has been porrayed 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 counries. Combines a series of illustrated lectures on South Africa's historical background with discussions of contemporary political (domestic and international), social and economic issues. (Not offered in 1998-1999.)

## 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. Сг 3.

## 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 nonWestem nations. The problems which this development has created will also be considered. Prerequisite: HTY 172 I recommended. Cr 3.

## 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 insructor. (Offered occasionally.) Cr 3.

## HTY 397 Independent Study Semester

This is the course designator for students who participate in the History Department's semester abroad exchange program with King Alfred's College in England.

Cr 3-15.

## HTY 398 Independent Study in History

A course primarily for juniors and seniors who wish to undertake independent research in a field of history in which they already have some background through coursework or other studies. To enroll for this course, the student must present a proposal to an appropriate professor who will agree to mentor and evaluate the project. Normally the outcome is a research paper. Application forms are available in history offices on both campuses. Prerequisite: permission of instructor.

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 Deparment prior to fall 1988. Prerequisites: HTY 200 and senior status. Preference to history majors. Cr 3 .

Other courses in the College of Arts and Sciences have historicalinterest.Although they do not count for history credit, the major may wish to take some of them as supplementary electives.

# Mathematics and Statistics 

## Programs and Requirements

Chair of the Department: Maurice J. Chabot, 235 Science, Portland<br>Professors: El-Taha, Estes, Guay, Gupta, B., Kratzer, Mainville; Associate Professors: Chabot, Flagg, Foster, Gupta, S., Irish, MacDonald; Assistant Professors: Fishkind, Valdes

The Department of Mathematics and Statistics offers a four-year program leading to a B.A. in mathematics. In addition to mee ing Departmental requirements for a major, all students 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 45 ( 30 in foundations and 15 in one of the three concentrations listed below).

## A. Foundations

As a mathematics major, a student may select one of the three concentrans 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 2.0 in major courses before being considered for a baccalaureate degree in mathematics.

Foundations Sequence (Required of all majors in mathematics) (30 cr hrs)
MAT 152D Calculus A 4 cr
MAT 153 Calculus B 4 cr
MAT 252 Calculus C 4 cr
MAT 281 Inroduction to Probability 3 cr
MAT 282 Statistical Inference 3 cr
MAT 290 Foundations of Mathematics 4 cr
MAT 295 Linear Algebra 4 cr
COS 160 Suructured Problem Solving: C++ 3 cr
COS 170 Sructured Programming Laboratory 1 cr

## B. Concentrations

Each mathematics major should choose one of the following concentrations. ( 15 credit hours)

1. Pure Mathematics Concentration

Mathematics majors intending to pursue graduate work in mathematics should consider this concentration, and they are urged to take Real Analysis 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 three 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 <br> Geometry |

b. Successful completion of at least two addional 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 Sta istical Inference, Numerical Analysis, and the appropriate courses in the School of Business. Majors intending to pursue graduate work in applied mathematics are urged to take Real Analysis and Abstract Algebra.
a. Successful completion of three of the courses listed below:

| MAT | 350 | Differential Equations |
| :--- | :--- | :--- |
| MAT | 354 | Topics in Advanced Calculus |
| MAT | 364 | Numerical Analysis |


| MAT | 366 | Deterninistic Models in Operations <br> Research |
| :--- | :--- | :--- |
| MAT | 460 | Mathematcal Modeling <br> MAT 461 |
| MAT | 492 | Stochastic Models in Operations Research <br> 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 govemment jobs or industrial jobs or to pursue a higher degree in statistics or allied fields. Majors intending to pursue graduate work in statistics are urged to take Real Analysis and Abstract Algebra.
a. Successful completion of three of the courses listed below:

| MAT | 384 | Non-Parametric Methods |
| :--- | :--- | :--- |
| MAT | 386 | Sampling Techniques |
| MAT | 388 | Staisical Quality Control |
| MAT | 481 | Stochastic Processes |
| MAT | 482 | Introduction to TimeSeries Analysis |
| MAT | 484 | Design andAnalysis of Experiments |

b. Successful completion of at least two additional mathematics courses with second digit 5 or greater.

## II. Certificate Program in Applied Statistics

The Deparment of Mathematics and Statics offers a certificate program in applied statistics, designed for people in area businesses, industry, govemment, and education, as well as offering to the Department's own majors an opportunity for further recognition of their skills. It is helpful for students who want to pursue a master's program in statistics but who need first to fill in some advanced undergraduate work.

The requirements for the certificate are successful completion of:
MAT 281 and MAT 282 or the equivalent and five of the following courses:

| MAT | 384 | Non-Parametric Methods |
| :--- | :--- | :--- |
| MAT | 386 | Sampling |
| MAT | 388 | Statistical Quality Control |
| MAT | 461 | Stochastic Models in O.R. |
| MAT | 482 | Introduction to Time Series |
| MAT | 484 | Design and Analysis of Experiments |
| MAT | 498 | Topics |

Students must contact the Deparment chair about application to the program. The courses are offered during the late aftemoon to make them more accessible to working people.

## III. Minor in Mathematics

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 22.

An accumulative grade point average of at least 2.0 in these courses must be maintained, and successful completion of the following courses: MAT 152D; MAT 153; MAT 290; COS 160; COS 170; plus two additional MAT courses with second digit 5 or greater.

## Recommended Courses for Non-majors

Students who desire an introductory course to satisfy the Quantitative Decision Making portion of the Basic Competence requirement of the Core curriculum should consider MAT 105D. For students majoring in other disciplines, but wishing to develop competency in using mathematics, the following courses are recommended. Individual course descriptions should be consulted to determine prerequisites: MAT 109D; MAT 110D (or MAT 152D and MAT 153 for greater depth in calculus); or MAT 120D (or MAT 211 and MAT 212 for greater depth in probability and statistics).

It is expected that students will possess and be able to operate a basic scientific calculator if they enroll in mathematics courses.

## 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 educaion major to programming techniques and applications using the BASIC language. No programming skills will be presumed. Prerequisite: MAT131D. 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: basic operations with integers and rational numbers; equations with variables; algebra word problems; operations with polynomials and algebraic fractions (including factoring), and operations with exponential and radical expressions. Prerequisite: MAT 009 or its equivalent. Associate degree credit only.

Cr 3.

## MAT 011B Intermediate Algebra

A continuation of MAT 010. Topics include: graphing linear equations in two variables; quadratic equations; graphs of functions and relations; conic sections; solutions to systems of equations; solutions for inequalities; and exponential and logarithmic functions. Prerequisite: one year of high school algebra or MAT 010. Associate degree credit only.

Cr 3.

## MAT 015B Mathematics for Proficiency

This is a remedial algebra course that prepares students for courses in the quantitative decision making component of the Core. The course presents the material as four major themes: numerical computation; the use of variables and variable expressions as a transimion from arithmetic to algebra; techniques for solving equations emphasizing graphical, numerical, and algebraic analysis; and the unifying concept of functions. Cr 4 .

## 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 quantitaive decision mak-
ing. 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 deci-sion-making potential. The computer packaged programs may be used as tools to assist the students in performing calculations necessary for the decisionmaking process. Prerequisite: successful completion of the University's mathematics proficiency requirement.

Cr 3.

## MAT 108 College Algebra

Building on the foundation of algebra skills expected of all students meeting admission requirements, this course reviews basic algebraic operations and the general concepts of sets, relations, functions (polynomial, rational, logarithmic, and exponential), and their graphs. Methods of solving equations and inequalities, as well as systems of equations, will be stressed. Additional topics may include matrices, determinants, permutaions, combinations, sequences, and mathematical induction. Prerequisite: successful completion of the mathematics proficiency requirement and a passing grade on an algebra competency test which will be administered at the first class meeting. Cr 3.

## MAT 109D Linear Systems

An introduction to vectors, matrices, and linear systems of algebraic equations and linear programming. Prerequisite: successful completion of the University's mathematics proficiency requirement.

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: successful completion of the University's mathematics proficiency requirement 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 tes ing; regression and correlation. Prerequisite: successful completion of the University's mathematics proficiency requirement.

Cr 3.

## MAT 131 Number Systems for Elementary Teachers

This is the first course in a three-course sequence in mathematics recommended by the Committee on the Undergraduate Mathemarics Program of the Mathematical Association of America for prospective primary and elementary teachers. Major emphasis is placed on an intuivive approach to the real number system and its subsystems. Prerequisite: successful completion of the University's mathematics proficiency requirement. 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. Prerequisites: successful completion of the University's mathematics proficiency requirement 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 211D Probability

This course investigates common probability laws and distributions of discrete and continuous random variables. Business applications in probability are emphasized. Prerequisite: MAT 108 or its equivalent.

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 211D. Cr 3.

## MAT 220 Statistics for the Biological Sciences

This course treats basic statistical methods as applied to the biological sciences. The topics emphasized are descriptive statistics, discrete and continuous distributions, statistical estimation, hypothesis testing procedures, chi-square methods (goodness of fit and two-way tables), analysis of variance, and simple and multiple regression. Students will use at least one computer-based statistical package. Prerequisite: MAT 152D.

Cr 4 .

## MAT 231 Algebra for Elementary Teachers

The second course in a three-course sequence in mathematics recommended by the Committee on the Undergraduate Mathematics Program of the Mathematical Association of America for prospective primary and elementary teachers. Emphasis is upon the properties of operations in several different algebraic systems. Equations are studied in finite systems as well as in conventional algebra. Prerequisite: MAT 131.

Cr3.
MAT 232 Geometry for Elementary Teachers
The third course in a three-course sequence in mathematics recommended by the Committee on the Un-
dergraduate Mathematics Program of the Mathematical Association of America for prospective primary and elementary teachers. Emphasis is upon constructions, congruence, parallelism, and similarity. Direct and indirect methods of proof are studied, but the main approach is intuitive. Prerequisite: MAT 131.

Cr 3.
MAT 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 260 Technological Tools for the Mathematical Sciences

MAT 260 is designed for students in mathematics and disciplines which utilize mathematics. Specific topics will include the computer algebra system Mathematica and the technical word-processing system TEX. Prerequisite: MAT 152.

Cr 2.

## MAT 264 Statistical Software Packages

This course will use statistical packages such as SAS and MINITAB to introduce commonly used statistical methods in a non-theoretical manner. Particular topics might include summary measures, calculation of probabilities associated with various discrete and continuous distributions, confidence intervals and hypothesis testing, analysis of variance, regression, and various non-parametric methods. Some of these methods will be used to analyze real data collected during previous faculty consulting projects. Prerequisite: MAT 212 or consent of Department.

Cr 2.

## MAT 281 Introduction to Probability

This course will cover basic concepts of probability, including discrete and continuous random variables and their distributions, moment generating functions, and bivariate random variables and their distributions. Some basic sampling distributions will also be discussed. Prerequisite: MAT 153.

Cr 3.

## MAT 282 Statistical Inference

This course will examine various statistical methods and applications such as point and interval estimation; methods of estimation including methods of moments, maximum likelihood and least squares method; hypothesis testing; simple and mul-
tiple linear regression; and one-factor and two-factor ANOVA. Some statistical packages such as SAS or MINITAB will be used extensively throughout the course. Prerequisite: MAT 281 or permission of instructor.

Cr 3.

## MAT 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 chair.

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. Particulartopics will include the study of systems of linear equations, matrices, determinants, Euclidean vector spaces, inner product spaces, and theory of diagonalization. Students will use a computer algebra system for projects. Prerequisite: MAT 290 or $\operatorname{COS} 280 . \quad$ Cr 4.

## MAT 350 Differential Equations

A study of various methods for solving ordinary differential equations, including series methods and Laplace transforms. The course also introduces systems of linear differential equations, Fourier series, and boundary value problems. Prerequisite: MAT 252 . Cr 4.

## 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 354 Topics in Advanced Calculus

Selected topics on multivariate functions, vectors transformations, line integrals, and surface integrals. Prerequisites: MAT 252, and COS 280 or MAT 290.

Сr 3.

## MAT 355 Complex Analysis

A study of the complex number system and its applications: differentiation and integration of complex valued functions, the Cauchy integral theorem and formula, Taylor and Laurent series, singularities and residues, conformal mappings. Prerequisite: MAT 252, and COS 280 or MAT 290.

Сr 3.

## MAT 364 Numerical Analysis

A study of the theory and application of computaional 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.

$$
\text { Cr } 3 .
$$

## 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 or MAT 110D.

Cr 3 .

## MAT 383 System Modeling and Simulation

This course is designed to introduce the fundamental elements of successful system modeling using simulation. Applications to computer, communications, and inventory systems, as well as to traditional engineering problems, will be discussed. Topics include model validation and verification, input/output analysis, and the generation of various types of random data. Students are required to conduct a simulation project in their area of interest using a simulation language. Prerequisite: MAT 281 or MAT 380.

Cr 3.

## MAT 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, MannWhitney Test, Wilcoxon Test, Spearman's Rank Correlation Coefficient, order statistics. Prerequisite: MAT 282 or MAT 380.

Cr 3.

## MAT 386 Sampling Techniques

Sample random sampling, stratified random sampling, sampling for proportions, estimation of sample size, systematic sampling, multistage sampling, regression and ratio estimates, non-sampling error. Prerequisite: MAT 282 or MAT 380 . Cr 3.

## MAT 388 Statistical Quality Control

Some aspects of quality specifications and tolerances, control charts for attributes and variables, certain inspection plans, plans by attributes and by variables, simple, double, and sequential sampling plans. Prerequisite: MAT 282 or MAT 380. Cr 3.

## MAT 390 History of Mathematics

The development of mathematics from ancient to modern times. Prerequisites: MAT 152D and COS 280 or MAT 290.

## MAT 395 Abstract Algebra

Algebraic structures, such as groups, rings, integral domains, and fields. Prerequisite: COS 280 or MAT 290.

## MAT431 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 andinterpreting the results and evaluating the solutions. Examples will be chosen from the behavioral, biological, and physical sciences. Prerequisites: junior or senior standing, some elementary calculus including differentiation and integration, elementary probability, and some computer programming experience. Cr 3 .

## MAT 461 Stochastic Models in Operations Research

This course applies probabilistic analysis to such nondeterministic models as queueing models, inventory control models, and reliability models. Additional topics include simulation, elements of dynamic programming, and Markov decision analysis. Prerequisite: MAT 281 or MAT 380, or permission of instructor.

Cr 3.

## MAT 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 281 and MAT 295 or permission of instructor. Cr 3.

MAT 482 Introduction to Time Series Analysis The objectives and simple descriptive techniques of time series analysis are presented using probability models, estimation in the time domain, forecasting, Box-Jenkins methodology, and spectral analysis. Prerequisite: MAT 282 or MAT 380.

Cr 3.

## MAT 484 Design and Analysis of Experiments

This course is intended to acquaint students with such standard designs as one-way, two-way, and higher-way layouts, Latin-square and orthogonal Latinsquare designs, BIB designs, Youdeen square designs, random effects and mixed effect models, nested designs, and split-plot designs. Prerequisites: MAT 295 and either MAT 282 or MAT 380 , or permission of instructor.

Cr 3.

## MAT 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 $290 . \quad$ Cr 3.

## MAT 497 Independent Study in Mathematics

An opportunity for juniors and seniors who have demonstrated critical and analytical capability to pursue a project independently, charting a course and exploring an area of interest within their major field. Prerequisites: junior or senior standing, permission of the instructor, and permission of the Department chair.

Cr 1-3.

## MAT 498 Topics

Selected topics in advanced mathematics. Prerequisite: permission of instructor.

Cr 3.

## Mathematics Education <br> 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 situaion. 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 deparment. 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

Crivical 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: EDU 100, EDU 200, HRD 333J, and 30 credit hours towards a mathematics major, or permission of the instructor.

Cr 3.

## Music

Chair of the Department: Ronald F. Cole, Corthell Hall, Gorham<br>Professors: Cole, Fithian, Martin, Reeves, Russell; Associate Professors: Boden, Golan, Harris, Kargul, Keef, Parchman; Assistant Professor: Kaschub; Professor Emeritus: Bowder<br>Applied Music Faculty Piano: Thomas Bucci, Ronald Cole, Robert Glover, Laura Kargul, Janet Reeves; Organ: Ray Cornils; Voice: Ellen Chickering, Bruce Fithian, Linda Freeman, Rhee Michelle; Violin: Lawrence Golan, Graybert Beacharn; Viola: Laurie Kennedy, Graybert Beacham; Cello: James Kennedy, William Rounds; Bass: Bronislaw Suchanek; Flute: Jean Rosenblum; Oboe: Neil Boyer; Clarinet: Thomas Parchman; Saxophone: Bill Street; Bassoon: Ardith Keef; 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: Jay Carlson; Jazz Bass: Bronislaw Suchanek; Jazz Drums: Les Harris; Jazz Piano: Janet Reeves, Jeff Auger

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), orin music (bachelor of music in performance). In addition, a minor in music is 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 selfdesigned major in music should consult the chair of the Music Department.

## Music Fees

An applied music fee of $\$ 120.00$ per semester for hour lessons, or $\$ 60.00$ 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 student will pay $\$ 120.00$ per semester for hour lessons and $\$ 60.00$ per semester for half-hour lessons in addition to the University tuition fee.

Students other than music majors and minors will be accommodated for applied music lessons if a teacher's ime is available, and 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.

A chamber music fee of $\$ 30.00$ per section of chamber music will be charged to each person participating in coached chamber music.

## Admission Requirements

Admission to degree programs in music 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 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 juried exam at the end of each academic year. Each student enrolled in the performance degree program will play a jury exam 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 Basic Conducting. In this course a grade of D will allow the student to progress to Instrumental or Choral Conducting. 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. Students who fail in the second attempt to pass a course with a grade of C - or better will not be allowed to continue as a music major 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 education majors must have a grade point average (GPA) of at least 2.5 to enroll in student teaching. A student with a GPA lower than 2.5 is on probation, during which time the student may enroll in upper level classes, but not student teaching (EDU 324).

## Programs and Requirements

## Music Core Requirements

Each student enrolled as a major in a music degree program will take the following courses during the first two years:

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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
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## Concert Attendance Policy

All music majors 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. The policy is administered through MUS 442 Recital Class.

## 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, eartraining, musichistory, 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: 96; vocal concentration: 94.5; or general concentration: 97.

All students are reminded that, in addition to meeting Deparmental requirements for a major leading to a baccalaureate degree, they must also meet the University's Core curriculum requirements.

All music education majors are required to take the following 22 hours of professional education courses: MUE 100 Introduction to Music Education; MUE 220 Studies in Historical Foundations and Leaming Theories of Education; EDU 324 Student Teaching; HRD 333J Human Growth and Developınent; and MUE 422Music for Exceptional Children.

Addionally, all music education majors will meet the following requirements:

1. Fulfillment of minimum requirements in both voice and piano, regardless of major instrument. A music education voice major who haspassed MUE 226 (Vocal Pedagogy) and a senior recital will not be required to take MUS 350 and 351 (Voice Class I, II).
2. Successful completion of 3.5 credit hours in Chorale and 3.5 credit hours in the appropriate major instrumental ensemble (Concert Band or University Orchestra). Students who do not meet the audition requirements of either Concert Band or University Orchestra will be assigned to Percussion Ensemble. Pianists will satisfy one credit of this requirement through accompaniment. Guitarists may take up to one credit of this requirement in chamber music. All ransfer students must complete a minimum of one credit of the appropriate major ensemble at USM.
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 seven 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 MUE senior or MUP junior recital. Alonger (full-length) programrequires the special approval of the faculty. A student may not perform the required recital during the semester of student teaching.
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: A seminar which includes three one-hour meetings per semester and six hours of structured observation first semester and six hours of structured participation second semester. Must be completed prior to taking MUE 322, 323, and 324.

Junior year: music courses wherein students observe, plan, and teach in classrooms.

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 rotaing 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 $\Pi$
*MUE 324 Instrumental Methods
*MUE 323 Secondary Choral Methods
Elective Concentration in Jazz Education (MUE) Students seeking an elective concentration in jazz education must fulfill all the requirements for either the instrumental concentration, the vocal concentration, or the general concentration, along with the following additional courses:

| *MUS | 374 | Jazz Pedagogy (2 credits) |
| :--- | :--- | :--- |
| MUS | 407 | Jazz Ensemble (1 credit) |
| *MUS | 380 | Jazz Inprovisation I (3 credits) |
| and 3 credits in any of the following: |  |  |
| *MUS | 206 | Jazz History (3 credits) |
| *MUS | 381 | Jazz Improvisation II (3 credits) |
| *MUS | 337 | Jazz Arranging (3 credits) |
| MUP | 201 | Applied Music: Jazz Bass, Jazz Piano, Jazz Drums, <br> *or Jazz Guitar (3 semesters) |

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:
Music Core Requirements, 28 credits

| MUP | 202 F | Applied Music Major, 14 credits |
| :--- | :--- | :--- |
| MUS | 150 | Piano Class I |
| MUS | 151 | Piano Class II |
| MUS | 244 | Basic Conducting |
| MUS | 250 | Piano Class II |
| MUS | 251 | Piano Class IV |
| MUS | 350 | Voice Class I |
| MUS | 351 | Voice Class II |
| MUS | 420 | Orchestration |
| MUS | 442 | Recital Class (seven semesters) |
| MUS | 401 F | University Chorale (seven semesters) <br> MUS |
|  | 402 F | Concert Band (seven semesters) <br> or |
| MUS | 400 F | Orchestra (seven semesters) |

The following courses apply to each specialized music education curriculum. Instrumental concentration:
*MUS 344 Instrumental Conducting
*MUS 240, 340 Instrumental Conducting Lab
Vocal concentration:
*MUS 255 Guitar
*MUS 345 Choral Conducting
*MUS 241, 341 Choral Conducting Lab
*MUE 226 Vocal Pedagogy
MUS 404 Opera Workshop
THE 290 Oral Interpretation of Literature (not required, but strongly recommended)
General concentration:
*MUS 255 Guitar
*MUS 344, 340 Insrumental Conducting \& Lab
or
*MUS 345, 341 Choral Conducting \& Lab
MUS 404 Opera Workshop
The Teacher Education Council, comprised of deans, department chairs, faculty, and school representatives from all programs offering initial teacher preparation, is the goveming body for program review and evaluation for all initial level teacher education programs at USM.

## 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 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: 96 .

Courses marked with an asterisk $\left(^{*}\right)$ 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) All transfer students must complete a minimum of 1 credit of major ensemble at USM.
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 for those who wish to prepare for a career in music performance and/or applied music teaching, and those who plan to do graduate work in applied music. The program aims to instill a thorough understanding of music and its relationship to contemporary society. Private lessons; solo, chamber and large ensemble performance; and the study of literature and pedagogy of the major instrument are emphasized. Basic understanding of the standards and opportunities for professional performance leads the student to realistic expectations for a career as a performer or teacher.

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 96 .

Courses marked with an asterisk $\left(^{*}\right)$ 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 150, 151, 250, 251 Piano Class I, II, III, IV
MUS 372 Pedagogy of the Major Instrument
Music Electives ( 5 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 musthave a minimum of 4 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. Organ majors must complete 2 credit hours in University Chorale, 1 credit hour in accompanying or playing keyboard in a conducted ensemble, 1 credit hour in chamber music (one-half of which must be fulfilled by playing coninuo), and 2 credit hours in organ improvisation. Guitar majors must complete 6 credit hours in chamber music or playing guitar in a conducted ensemble. Voice performance majors may fulfill one credit of chamber music by taling MUS 405 Chamber Singers. All transfer students must complete a minimum of one credit of the appropriate major ensemble at USM.

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 MUE 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 insill a thorough understanding of this unique American art form and its relationship to contemporary society. Applied music, jazz improvisation, jazz arranging, jazz history, and jazz ensembles are emphasized. A basic understanding of the standards and performance opportunities for professional performance leads the student to realistic expectations for a career as a performer or teacher.

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 95.

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
*MUS 206 Jazz History
*MUS 380, 381 Jazz Improvisation I, II
MUS 330 or 331 Form and Analysis I or Form and Analysis II
*MUS 337 Jazz Arranging
*MUS 374 Jazz Pedagogy
MUP 201, 202, Applied Music, Major Instrument
203 (eight semesters)
MUS 150,151, Piano Class I, II
MUS 252, 253 Jazz Piano Class I, II
MUS 407 Jazz Ensemble (4 credits)
Major Ensemble (2 credits)
Music 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. Students who are not selected for Jazz Ensemble (MUS 407) may substitute MUS 406 Chamber Music - Jazz, with permission of the director of jazz studies. Guitarists and pianists may fulfill the major ensemble requirement by taking Accompanying (MUS 452) or any small ensemble outside the jazz idiom.

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 raditional repertoire. (Exceptions to the raditional portion of the recital requirement for rhythm section instruments may be granted by peritioning 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 require-
ments on the raditional 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, bass, or voice) must take 24 credithours of applied music in the raditional area of study. Jazz students whose major instrument is a rhythm section instrument or voice should divide their applied credits equally between traditional applied studies and applied credits in jazz guitar, jazz piano, jazz drum set, or jazz bass, under the guidance of their advisor.

## Minor in Music (Bachelor of Arts)

This minor program is designed to provide an opportunity for candidates working toward the bachelor of arts degree who demonstrate interest and ability to continue music studies at the undergraduate level.

The minor consists of MUS 130 (Music Theory I), MUS 120 (History of Music I), and 14 credits of music electives, excluding MUS 100 and MUS 110. At least six of these credits must be taken at USM.

Applied music fees, to a maximum of eight credit hours, will be subsidized by the University provided that the student demonstrates adequate proficiency.

## 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.

## 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 insuument 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.

## 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.

## 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.

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\text { Cr } 2 .
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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 104 Masterpieces of Opera

An introduction to the forms and conventions of music drama from early opera to contemporary works presented in historical order. Other aspects of this genre to be explored will include the role of the composer, librettist, conductor, singer/actor, stage director, set designer, costumer, and lighting designer in opera. Open to all students. Cr 3.

## MUS 110F Fundamentals of Music

A background study of concepts and skills essential to an intelligent reading of music. The development of natural music abilities through participating in singing, rhythmic activities, and instrumental work. An appreciation of music through awareness of basic structures. Open to all students.

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\mathrm{Cr} 3 .
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## 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.


## MUS 203G Music in the Twentieth Century

A study of rends in European and American music from the beginning of the century to the present with emphasis on the literature of the major composers. Open to all students.

Cr 3.
Cr 3.

## MUS 205G Chamber Music Literature

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.

## Music Performance Groups <br> Major Ensembles

MUS 400F University Orchestra
A string, wind, and percussion ensemble open to all University students and community members through audition. The ensemble focuses on the fundamentals of ensemble performance, dealing with a variety of literature, and performs at least one major concert per semester.

Cr 0.5

## MUS 401F University Chorale

A choral ensemble for mixed voices open to all University students through audition. The Chorale sings repertoire from all historical periods and performs locally and on a spring tour. The purposes of the ensemble are to develop musical expression and precision of intonation and rhythm and to promote the musical development necessary for excellence in ensemble singing. Prerequisite: audition.Cr0.5.

## 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 perfor-

## MUS 334F Electronic Music I

Lectures, discussions, and exercises in sound generation and processing, with emphasis on voltagecontrolled systems. The student's time will be divided between class sessions and actual work in the electronic studio. Open to all students. Cr 3.
mance 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 405F Chamber Singers

A small ensemble of mixed voices selected by audition from the membership of the University Chorale. The ensemble specializes in a cappella repertoire, notably of the Renaissance era and the 20th century. Prerequisite: audition.

Cr 0.5 .

## MUS 408F Wind Ensemble

The Wind Ensemble offers a unique musical experience to its members. The versalility of the Wind Ensemble, based upon the solo performer premise, has established a tradition of performing chamber and large instrumentations, traditional or experimental combinations, and early through contemporary literature. The memberslip of the Wind Ensemble is selected from Concert Band personnel.

Cr0.5.
quartets, quintets, etc., under faculty supervision.
Cr 0.5.

## MUS 407 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.

## MUS409 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 .
of musical language and style are traced through representaive composers' works. Listening, analysis and independent research are required. Music majors only or permission of the instructor. Cr 3.

## MUS 130F Music Theory I

This course covers scales (major and minor), keys, intervals, and triads; identification of triads and seventh chords in inversion; principles of notation; part-writing with root position and first inversion triads; cadences; harmonization of soprano and bass lines; and phrase forms. Prerequisite: Music ma-
jors and minors only or permission of the Department.

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

A continuation of the study of harmony, including the use of triads in second inversion; modulation; non-harmonic tones; the dominant seventh chord; other diatonic seventh chords; and simple binary and ternary forms. 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, or permission of the Deparment.

Cr 1.

## MUS 133 Sight Singing and Ear Training II

A continuation of MUS 132. Prerequisite: MUS 132.

Cr 1.

## MUS 206 Jazz History

This course provides an in-depth examination of the historical evolution of jazz, as well as a familiarity with the major and secondary figures in the idiom. Emphasis is placed on detailed listening assignments and class discussions. Prerequisite: MUS 103G, music major status, or permission of instructor.

Cr 3.

## 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 twen-lieth-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

A continuation of the study of tonal music, including the further examination of modulation; melodic chromaticism; chromatic chords, including altered chords, chords with secondary functions, and linear chords; and composition in the simple forms of the 18th and 19th centuries. Prerequisite: MUS 131.

Cr 3.

## MUS 231 Music Theory IV

Techniques of 20th-century composition, includ-
ing the study of harmony, melody, and texture. Related studies include music theory in the twentieth century, new sound resources, and new technologies. Prerequisite: MUS 131.

Cr 3 .
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 2.

## 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 230.

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 230. 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, charing a course and exploring an area of interest within their major field. Music majors only. Departmental permission required.

Cr 1-3.

## 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 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 and minors. May be repeated for credit. Special fee assessed. Cr 2.

## MUP 203 Applied Music

May be taken in piano, voice, organ, guitar, or any orchestra or band instrument. One hour lesson per week for twelve weeks in the major performance area in fulfillment of applied music requirements. Restricted to B.M. performance majors. May be repeated for credit. Special fee assessed. Cr 3.

## MUS 150 Piano Class I

This is a piano class for MUE and MUP students not majoring in a keyboard instrument. Topics covered include sight-reading, basic technique, scales, chord progressions, harmonization, transposition and performance of elementary to intermediate piano literature. Prerequisite: music major status or permission of Department chair.

Cr 1 .

## MUS 151 Piano Class II

This is a continuation of MUS 150. Prerequisite: MUS 150 or permission of Department chair.

Cr 1 .

## MUS 240 Instrumental Conducting Lab

Performance techniques on instruments of primary and/or secondary interest to each student. Principles of ensemble training are exemplified. Cr 0.5 .

## MUS 241 Choral Conducting Lab

Performance techniques in a choral ensemble. Principles of ensemble singing and training of choral ensembles are exemplified. Cr 0.5 .

## MUS244 Basic Conducting

Practical conducting experiences; score reading, basic beat patterns, gestures, and interpretation. Prerequisite: MUS 230.

Cr 2.

## MUS250 Piano Class III

This is a continuation of MUS 151. Prerequisite: MUS 151 or permission of Deparment chair.

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\text { Cr } 1 .
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## MUS 251 Piano Class IV

This is a continuation of MUS 250. Prerequisite: MUS 250 or permission of Department chair.

## MUS 252 Jazz Piano Class I

This is a jazz piano class for MUP Jazz Studies Concentration students not majoring in a keyboard instrument, as well as non-jazz keyboard majors and other instrumentalists who meet the prerequisite. Topics covered include chord voicings for the ii-v-i progression, arrangements of standard tunes, jazz scales andmodes and accompanimental styles. Prerequisite: MUS 151 or permission of Department chair.

Cr 1 .

## MUS 253 Jazz Piano Class II

This is a continuation of MUS 252. Prerequisite: MUS 252 or permission of Deparment chair.

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\text { Cr } 1 .
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## MUS 255 Guitar

An introduction to basic guitar skills. Emphasis is placed upon those skills that lead to playing effective accompaniments.

Cr 1.

## MUS 310 Organ Improvisation I

This course will cover the basics of improvisation at the organ. The goal is to equip the student with the skills needed in church situations. Hymns, chorales, and plainsong melodies will form the basis for learning to improvise preludes, postludes, and interludes in a variety of styles. This course will be scheduled as an additional applied music time with an organ specialist. Prerequisite: MUS 131 or permission of instructor. Cr 1

## MUS 311 Organ Improvisation II

This course is the continuation of MUS 310. It will be scheduled as an addirional applied music time with an organ specialist. Prerequisites: MUS 131 and MUS 310, or permission of instructor. Cr 1.

## 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 230 or permission of instructor.

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

Advanced development of non-verbal gestures tbrough the art of choral conducting. The course includes score study analysis, rehearsal techniques, and performance preparation. Prerequisite: MUS 244.

Cr 2.

## MUS 350 Voice Class I

This course covers the fundamentals of vocal production for the beginning singer, including breath management and tone development, studied through the use of vocalises and songs. Prerequisite: music major status or permission of Department chair.

Cr 1 .

## MUS 351 Voice Class II

This is a continuation of MUS 350. Prerequisite: MUS 350.

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 instrumen-

## 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 and minors. Prerequisite: None.

## MUE 220 Historical Foundations and Learning Theories

This course will provide an overview of the historical role of schools in American society and an inroduction to contemporary learning theory upon which music instruction in lindergarten through grade 12 is predicated. Restricted to majors and minors. Prerequisite: None.

Cr 3.
tal 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 2.

## 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 lnowledge 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.

Cr 0 .

## MUS452 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.

## 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 ransposition. 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 ransposition. Prerequisite: MUE 224. Cr 1.

## MUE 226 Vocal Pedagogy

A study of basic principles of vocal productionbreathing, phonation, registration, and resonanceand a discussion of the techniques used to teach voice.

## MUE 320 String Class I: Violin and Viola

Practical experience playing and methods of teaching violin and viola, with additional information on string programs in the public schools. Prerequisites: MUS 131 and 133.

Cr 1.

## MUE 321 String Class II: Cello and Bass

Practical experience playing and methods of teaching cello and bass. Prerequisite: MUE 320. Cr 1.

## MUE 322 Elementary General Music Methods

A study of methods and materials in elementary school music education, including those of Kodaly and Orff. This course is restricted to junior and senior music majors and minors and must be taken the semester prior to student teaching. Prerequisite: MUS 220; GPA 2.5.

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 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

This course is a survey of the contrasts in the learning styles of exceptional children. It provides a practicum in instructional adaptations for mainstreamed children. The content and implications of P.L. 94-142 for music educators are explored in depth. The course should be taken concurrently with EDU 324. Prerequisites: MUE 322 or equivalent andHRD 333J.

Cr 3.

## EDU 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. Normally, two separate half-semester experiences are provided which encompass both elementary and secondary as well as instrumental and vocal areas.

Cr 12.

# Philosophy 

Chair of the Department: Kathleen J. Wininger, 47 Exeter St., Portland; Professors: Gavin, Grange, Louden, Murphy, Schwanauer, Associate Professors: Caffentzis, Conway, Wininger
"Philosophy unties lnots 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 ordinatily 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:

GeneralProblem-Solving Ability The study of philosophy enhances one's prob-lem-solving capacires in a way no other activity does. It helps one to analyze concepts, definitions, arguments, and problems. It contributes to one's capacity to organize ideas and issues, to deal with questions of value, and to extract what is essential from masses of information.

Communication Skills Philosophy provides some of the basic tools of selfexpression, 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, comparalive writing through emphasis on faimess to alternative positions, argumentative writing through developing students' abilities to establish their own views, and descriptive writing through detailed portrayal of concrete examples, the anchors to which generalizations must be tied.

The Understanding of Other Disciplines Many important questions about a discipline, such as the nature of its concepts and its relation to other disciplines, do not belong to that discipline, are not usually pursued within a discipline, and are philosophical in nature. Philosophy of science, for instance, is needed to supplement the understanding of the natural and social sciences which one derives from scienific 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 lnow, 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.

## Student Involvement

Student participation in the philosophical activities of the philosophy program is strongly encouraged. Students have organized a Philosophy Majors and Minors Association which provides a forum for students to discuss their philosophical work. This Philosophy Symposium also facilitates communication between faculty and students and ensures student involvement in Departmental deliberations. In recent years the Philosophy Symposium has invited guest lecturers on a variety of philosophical topics. This has enabled students to meet a broad range of philosophers including international guests.

## Programs and Requirements

## 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 conference with the chair or a member of the department who is assigned as the student's advisor. The program will be designed in terms of the student's interests, needs, vocalional 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. Any introductory philosophy course is a prerequisite to all other courses in philosophy.

All philosophy majors must take four history of philosophy courses. Two of these, which need not be taken in sequence, must be PHI 310I (Ancient Philosophy) and PHI 330 I (Early Modem Philosophy). Thereafter, any two additional courses in the history of philosophy may be taken. These courses are PHI 315I, PHI 320I, PHI 340I, PHI 350I, PHI 360I, PHI 370I, PHI 380 I .

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 Departnent. 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).

Philosophy majors who are enrolled in the Honors Program may allow their 3to 6-hour Honors Independent Tutorial (HON 311-HON 312) to be equivalent to the Senior Tutorial ( PHI 410 ) and count toward the completion of their degree in philosophy, provided that the thesis addresses a philosophical topic and is mentored by a philosophy faculty member. The required thesis defense will involve both Philosophy Department faculty and that of the Honors Program.

Every major intending to pursue graduate study and teach in philosophy will be expected to take German or French through the intermediate level. German is preferred to French, although ideally both sets of courses should be taken. All majors are encouraged to take PHI 205 Symbolic Logic.

The gender-neutal 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 any PHI 100 course. These must include two courses in the history of philosophy: PHI 31 0I, PHI 312I, PHI 315I, PHI 320I, PHI 330I, PHI 340I, PHI 350I, PHI 360I, PHI 370I, PHI 380I.

## PHI 101E Introduction to Philosophy: Free Will 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. Prerequisite: ENG 100C or concurrent.

Cr 3.

## PHI 102E Introduction to Philosophy: The

 Quest for CertaintyPhilosophy 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 altematives, such as existentialism and pragmatism, will be undertaken. Prerequisite: ENG 100 C or concurrent.

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 altematives. Prerequisite: ENG 100C or concurrent.

## PHI 105E Introduction to Philosophy: Philosophy Through Its History

An introduction to philosophy through its history and development, i.e., through an examination of central texts in the history of philosophy, up to and including contemporary works. Specific readings may vary from semester to semester, but will always include some canonical works by classic Western philosophers (e.g., Plato, Aristotle, Descartes, and Kant). Prerequisite: ENG 100C or concurrent.

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. Prerequisite: ENG 100 C or concurrent.

Cr 3 .

## PHI 107E Introduction to Philosophy: World Philosophy

This course presents the world views of philosophers from ancient to contemporary times. The thinkers will be chosen from a broad range of cultural and ethnic backgrounds. Emphasis will be placed on the wide diversity and historical background of philosophical positions. Prerequisite: ENG 100C or concurrent.

Cr 3.

## PHI 109E Introduction to Philosophy: Law, Politics and Society

Cr 3. This course examines the traditional political questions that face every society: Who should rule?

What should the rules be? Why should the rules be obeyed? The approach is largely historical, emphasizing the answers that major philosophical figures have offered to these questions. The relevance of these historical answers to current social issues is addressed using a number of contemporary topical readings. Prerequisite: ENG 100C or concurrent.

Cr 3.

## PHI 110E Introduction to Philosophy: <br> Feminist Perspectives

To what extent do cultural assumptions about gender shape a society's notion of rationality and justice? The course explores this question by examining feminist critiques of Westem philosophy along with a selection of contemporary anti-sexist and anti-racist theories of social life. Prerequisite: ENG 100 C or concurrent.

Cr 3.

## PHI 111E Introduction to Philosophy: <br> Philosophical Reading (and Writing)

This course aims to teach the student a particular skill: philosophical reading (and writing). On the most immediate level this will be a course in reading (and writing about) philosophical texts. The texts will give the student a sense of the immense history, wealth, and suggestibility of philosophical writing, its various genres, and its authors. On another level, the course will teach the skill of reading (and writing) philosophically. Any piece of writing can be read (and written about), with profit, philosophically. The second skill and its profit cannot be acquired without first studying the first, thus the bulk of the course will focus on reading (and writing about) philosophy texts philosophically. About one month will be devoted to the reading of each book. Prerequisite: ENG 100C or concurrent.

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 modem 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 212 Environmental Ethics

This course analyzes the relations between human
beings and the environment in terms of the concepts of justice, the good, and human responsibilities. It attempts to provide a new cosmological model for adjudicating between conflicting rights and duties. Issues to be discussed include animal rights, environmental protection, and ecological harmony. Prerequisite: any PHI 100-level course.

Cr 3.

## PHI 215 Philosophy of Literature

While many cultures accord a vital role to stories, myths, and poetry in the cultivation of wisdom, traditional European philosophy has tended to marginalize them. This course seeks to investigate the historical roots for this separation between philosphy and literature in European thought. It will then consider the perspectives of several contemporary thinkers (e.g., Robert Coles, Michael Ende, MarthaNussbaum, and Martin Heidegger) who are convinced that literature plays an indispensable role in the pursuit of wisdom. Prerequisite: any PHI 100level course.

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 221 Philosophy of Film

This course concentrates on the construction of meaning in the context of cinema. Major emphasis is placed on cinema as a product of social stereotypes. 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 Westem 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 concem in the sciences, humanities, and philosophy. Prerequisite: any PHI 100-level course.

Сr 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 coveredincludedescription 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 280 Hermeneutics

Hermeneurics is a tradition of philosophical inquiry into the dynamics of interpretation and understanding. The course begins with an examination of the historical roots of hermeneutical theory in the works of Friedrich Schleiermacher and Wilhelm Dilthey. It then moves to a close analysis of several 20thcentury philosophers (specifically including Martin Heidegger, whose thinking is central to all hermeneutical investigations). In addition to reading and discussing texts by these individuals, students will be asked to apply the insights of hermeneutical theory to an interpretive problem of their own choosing. Prerequisite: any PHI 100-level course.

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 vitally important topic. Has the term death changed its meaning from time to time and place to place in human history? This course will deal with these and similar epistemological issues. Prerequisite: any PHI 100-level course.

Cr 3.

## PHI 295 Medicine, Madness, and Disease

Recent advances in modern medicine and medical technology challenge traditional notions of health, sanity, and the social order. The course will examine some of the controversial ethical dilemmas that patients, families, and health care providers confront, such as informed consent, truth-telling, prenatal screening, aborion, involuntary commitment for the mentally ill, drug testing, and patient rights. The course will critique the assumptions behind these and other medical practices. Prerequisite: any PHI 100-level course.

Cr 3.

## PHI 310I History of Ancient Philosophy

Philosophic thought from the pre-Socratics to the late Hellenistic period, with major emphasis on Plato and Aristotle. Prerequisite: any PHI 100-level course.

Cr 3.

## PHI 312I Women Philosophers from Africa and the Diaspora

This course concentrates on the work of women of wisdom who are of African origin. Intellectual and literary movements will be examined through generations of thinkers in various national, religious, cultural, and geographical settings. Writings by the following thinkers are often included: Ama Ata Aidoo (Ghana), Nawal el Saadawi (Egypt), Bessie Head (Botswana), Angela Davis, June Jordan, and Alice Walker (U.S.). Prerequisites: English requirement and PHI 100.

Cr 3.

## PHI 315I Eastern Philosophy

This course examines the major texts of the great Asiatic religions: Hinduism, Buddhism, Confucianism, Taoism, and Zen. Special emphasis is placed on the ethical and metaphysical dimensions of these traditions as well as their significance for contemporary theories of the person, social justice, and human fulfillment. Prerequisite: any PHI 100-level course.

Cr 3.

## PHI 320I 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 330I History of Early Modern Philosophy: Descartes to Kant

Main currents of rationalism and empiricism are explored, as developed in major writings from Descartes to Kant. Prerequisite: any PHI 100-level course.

Сг 3.

## PHI 340 I 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 100level course. Cr 3.

## PHI 350I 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.

Сг 3.

## PHI 360I 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.

Сг 3.

## PHI 370 I Analytic Philosophy

An historical approach to twentieth-century linguistic philosophy. This course will begin with logical atomism, continue through the era of logical posilivism, and end with ordinary language analysis. Extensive reading of primary sources and major commentators. Prerequisite: any PHI 100-level course.

## PHI 380I 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, plus PHI 330 or 360.

Сг 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.

Сr 3.

## PHI 400, 401, 402 Seminar in Philosophy

These numbers are used toindicate 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.

Сr 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.

Ст 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.

Сг 3.

## Physics

Chair of the Department: Jerry LaSala, 260 Science Building, Portland Associate Professors: Coakley, LaSala, Walkling

The field of physics is concerned with the study of matter, energy, motion, and the interaction of material particles. It is a comerstone 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 modem and classical physics, and is intended to prepare graduates for careers in physics and related technical areas or for graduate school.

## Programs and Requirements

In addition to the B.A. program, the USM Physics Deparment provides the first two years of the courses required for the engineering physics B.S. major at the University of Maine. Students planning to ransfer 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: 64. A student majoring in physics must take 37 credit hours of physics courses including some requirements and some electives as outlined below. In addition, 16 credits of mathematics courses, 8 credits of chemistry courses, and at least 3 credits of computer science courses must be completed.

1. Required courses

PHY $121 \mathrm{~K}, 122 \mathrm{~K}$, 123, 124 General Physics I \& II with Lab (PHY 111 K may replace PHY 121 K and 122 K with Departmental permission.)

| PHY | 211,212 | Modem Physics with Lab |
| :--- | :--- | :--- |
| PHY | 221 | Mechanics I |
| PHY | 223 | Electricity \& Magnetism I (ELE 351 may be <br> taken as an altemative) |
| PHY | 240 | Intermediate Lab |
| PHY | 291 | Special Relativity |

2. Electives. In addition to the required courses, 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 | 375 | Oprics |
| PHY | 251 | Electronics |

Group 3. Advanced Courses

| PHY | 311 | Quantum Mechanics |
| :--- | :--- | :--- |
| PHY | 440 | Advanced Physics Laboratory I |

Group 4. Other Electives
PHY $390 \quad$ Special Topics in Physics
The physics major must also complete the following courses:

| MAT | 152 D | Calculus A |
| :--- | :--- | :--- |
| MAT | 153 | Calculus B |
| MAT | 252 | Calculus C |
| MAT | 350 | Differential Equaions |
| CHY | $113 \mathrm{~K} \& 114 \mathrm{~K}$ | Principles of Chemistry I with Lab |
| CHY $115 \& 116$ | Principles of Chemistry II with Lab |  |
| COS 160 \& 170 | Sructured Problem Solving: C++ |  |

Tograduate 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 $121 \mathrm{~K}, 122 \mathrm{~K}, 123$, 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, electicity, 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 102K. 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.

## PHY 102K Introduction to Physics Laboratory

Laboratory experiments and additional material designed to supplement the topics considered in PHY 101 K . Prerequisite: concurrent registration in PHY 101 K or pernission of the instructor. Cr 1.

152 D 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 121 K or pennission of the insuctor. Two hours per week.

Cr 1.

## PHY 123 General Physics II

A continuation of PHY 121 K , introducing the concepts of electicity, 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 121 K or equivalent and one semester of calculus. Three hours of lecture and one and one-half hours of recitation per week.

Cr 4.

## PHY 105 Acoustics and Noise

A semi-descriptive course on sound, with emphasis on applications of interest to the scientist and nonscientist 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 acousics, 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 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: successful completion of the University's minimum proficiency requirement in mathematics. 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 111 K in roducing the concepts of electricity, magnetism, optics, and modern physics. Prerequisite: PHY 111 K 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

## PHY 124 General Physics Laboratory II

Experiments designed to illusirate the concepts studied in PHY 123. Prerequisite: concurrent registration in PHY 123 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

An intermediate treatment of classical mechanics and wave motion. Prerequisites: PHY $121 \mathrm{~K}, 122 \mathrm{~K}$, and prior or concurrent registration in MAT 252.

Cr 3 .

## PHY 223 Electricity and Magnetism I

An intermediate trearment of static and current elecricity and magnetism, leading to Maxwell's Equations and their applications. Prerequisites: PHY 123, 124, and MAT 252.

Cr 3.

## PHY 240 Intermediate Laboratory

A sequence of experiments designed to illusirate 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 152D or equivalent, or permission of instructor.

Cr 3.

## PHY 281 Astrophysics

An intermediate-level course in the physics of the astronomical universe. Topics covered include classical astronomy, celestial mechanics, the structure and evolution of stars and galaxies, and cosmology. No previous background in astronomy is required. Prerequisite: PHY 221.

Cr 3.

## PHY 291 Special Relativity

A study of the special theory of relativity at the intermediate level. This course is intended to complement PHY 211, but may be taken independently of that course. The course meets three hours per week for four weeks. Prerequisites: PHY 121, MAT 153.

$$
\text { Cr } 1
$$

## PHY 311 Quantum Mechanics

A study of the quantum physics of atoms, nuclei, and particles. Topics covered include wave particle duality; the Schrordinger Wave Equation and its application to a variety of quantum systems, threedimensional and time-dependent systems, and photons. Prerequisite: PHY 211 and PHY 221. 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 applicaions. Prerequisites: PHY 223 and two semesters of calculus.

Сг 3.

## 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 300level physics course.

Cr 3 .

## 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. 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.

# Political Science 

Chair of the Department: Michael S. Hamilton, 126 Bedford St., Portland Professors: Fisher, Maiman, Pattenaude, Woshinsky; Associate Professors: Coogan, Faksh, Hamilton, Roberts; Assistant Professor: Kuzma

Political science is the systematic study of politics and govemment and is widely recognized as one of the core disciplines within the liberal arts curriculum. The study of political science provides substantive and analytic background that can lead to a variety of professions; it is not intended to prepare students directly for any specific career. Most obviously it serves those with an interest in entering politics and government. Political science majors go on to become civic leaders, town managers, city planners, budget specialists, foreign service officers, policy researchers, and to hold a variety of management positions in local, state, national, and international organizations. Beyond govemment, a political science degree

## Programs and Requirements

leads naturally to graduate training, including law school. Many journalists and broadcasters were political science majors. Business has recognized the analytic and management skills obtained through training in political science. Some studies have estimated that perhaps one-third of undergraduate political science majors undertake careers in business. Political science training is 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 been a traditional career for the political scientist. Demographics now suggest thatentering 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 101J, 102J, 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 an upper-level course without first having completed these three prerequisites. A grade of C -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 202; POS 233; POS 256; POS 258; POS 261; POS 262; POS 483; POS 484; POS 485

Comparative Political Systems: POS 335; POS 336; POS 337; POS 338; POS 342; POS 345; POS 347; POS 350; POS 459

International Politics: POS 104J; POS 339; POS 340; POS 349; POS 374; POS 375; POS 385; POS 389; POS 488

Political Theory: POS 390; POS 391; POS 392
Public Administration and Public Policy: POS 210; POS 361; POS 362; POS 365; POS 453

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 intemship 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: POS 202, 261, 339, 342, 349, 361, 365, 390, 391, 483, 484
Approximately once every two years: POS 120, 201, 210, 233, 256, 258, $262,335,336,337,338,340,345,347,350,362,374,375,385,389,392$, 453, 459, 485, 488

## 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.

## POS 101J Introduction to American Government

This course focuses on the political institutions, processes, behavior, and problems of govemment in the United States. The national govemment 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 lind of political system they adopt and support, who does and who does not participate in politics, how political conflict is expressed and resolved in various societies. The course aims at familiarizing the student with major approaches or methods that political scientists have found helpful for understanding real political behavior. Note: POS 101 J is not a prerequisite for POS 102J. Cr 3.

## POS 103 Political Science Research Methods

An introduction to the way political scien ists 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 Deparment. Cr 3.

## POS 104J Introduction to International <br> 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 concems 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. No prerequisite.

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 parricipation 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 202/ESP 202 Legal Process and the Environment

An introduction to current legal techniques and institutions for environmental protection, with emphasis on statutory interpretation, rule making, licensing procedure, and the roles of expert testimony and civizen participation in administrative, legislative, and judicial processes. 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 govemmental 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-govemmental 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 govemments; developments in inter-govemmental relations; metropolitan area problems; the future of the city. Students will parlicipate 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 256 Media and Politics

The media play an increasingly powerful role in modempolitical 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 poliicians and journalists is given special attention. Pre-
requisites: 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 govemment; 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 opinion poll. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor.

Cr 3.

## POS 261 The American Congress

The role of the national legislature in American politics is considered. The course undertakes a study of the men and women who reach Congress, the internal norms and procedures on national decision making. Among topics covered are the committee system, leadership patterns in the Senate and the House, the public's influence on Congress, Congress and the Presidency, and Congressional policymaking in selected areas. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor.

Cr 3.

## POS 262 The American Presidency

This course examines the development of the modern presidency; the scope and exercise of presidential decision making in domestic and foreign policy; and standards for assessing presidential performance. Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor. Cr 3.

## POS 335 Politics in Western Europe

This course examines political processes and governmental structures in the nations of Westem Europe. Itfocuses especially on Great Britain, France, and Germany. Among the topics covered are: political parties, elections, voting systems, interest groups, legislative-executive relations, constitutional principles, political elites, leadership behavior, and bureaucracies. Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor.

Cr 3.

## POS 336 Government and Politics of Russia

An inroduction to Russia in the Soviet and postSoviet periods. The course proceeds from a description of the classic Leninist model to the emergence of the new political institutions that began to develop in the Gorbachev era, with an analysis of the economic changes, the ethnic revolution, and the social impacts of the post-Leninist era. Prerequisites: POS 101J, POS 102J and POS 103, or permission of the instructor.

Cr 3.

## POS 337 Post-Leninist Polities

A survey and analysis of those polities (principally East European and Eurasian) that have broken with
the classic Leninist model. The course will begin with a description of the former model and will proceed to describe and analyze the political, economic and cultural ransformations that are manifesting themselves in these counries. Some consideration may be given to the ideological impact of these developments on world politics. Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor.

Cr 3.

## POS 338 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 101 J , POS 102J and POS 103 or permission of the instructor.

Cr 3.

## POS 339 Russian Foreign Policy

A survey of Russian foreign policy in the Soviet and post-Soviet periods. 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. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor.

Cr 3.

## POS 340 The Politics of Developing Nations

An examination of the thrust towards modernization in the Third World. Economic development, relationships with the world community, the role of the military, and various theories about the nature of the relationship between the Third World and the Communist and non-Communist industrial worlds are considered. Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor. POS 104J is recommended. Cr 3.

## POS 342 Government and Politics of the Middle East

This course is designed to examine the political dynamics of the Arab countries of the Middle East and Israel. It will examine the social, ecological historical-cultural, and political-ideological forces influencing political institutions and behavior in Egypt, Iraq, Syria, Israel, Jordan, and Lebanon. Prerequisites: POS 101J, POS 102J and POS 103 or permission of the instructor.

Cr 3.

## POS 345 British Politics

A survey of the contemporary Constitution of Great Britain, the workings of Parliament, the government, and the parties. Principal stress is on the main issues current in British politics. Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor.

Cr 3.

## POS 347 The Politics of China

An inroduction to the government of the People's

Republic of China, 1949-present. Principal topics include: historical and cultural antecedents, Maoism, party and state instutions, 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 349 The Middle East in International Politics

The crucial issues of international politics-war, revolution, superpower intervention, economic development and terrorism-converge in the Middle East on a regional basis. This course will examine the nature of Mideast 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 350 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 lnowledge 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 361 Public Administration

An examination of national, state, and local bureaucracies, including their processes of decision making, communications, leadership, internal and external political relauonships. 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 362 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 361 , or permission of the instructor.

Cr 3.

## POS 365/ESP 365 Environmental Politics and

 PolicyThis course provides an introduction to policy making and implementation processes through a survey of current waste disposal issues, air and water pollution control policies, and management issues in environmental protection. Prerequisites: POS $101 \mathrm{~J}, 102 \mathrm{~J}$, and 103 , or permission of the instructor.

Cr 3 .

## POS 374 United States Foreign Policy

A detailed evaluation of U.S. foreign policy focusing on such topics as: idenification of U.S. policy; governmental agencies and personalities in the formulation and implementation of policy; the role of non-govemmental influences. The course is designed to evaluate current policy goals and practices within the context of long-range goals. Prerequisites: POS 101J, POS 102 J and POS 103 or permission of the instructor.

Cr 3.

## POS 375 International Environmental Politics and Policy

This course addresses factors that can be obstacles or incentives in the process of negotiating effective agreements. Such factors include the role of the United Nations, nationalism, sovereignty, the North-South conflict, and the role of non-governmentalorganizations. Prerequisites: POS 101J, POS 102J and POS 103 or instructor's permission.

Cr 3.

## POS 385 Conflict and Security in Contemporary World Politics

Contemporary threats and challenges to human security and survival often go beyond raditional concepts of "national security." This course focuses on the multiple forms and sources of conflict and insecurity in the modern world system. It analyzes traditional approaches to war and peace in the context of debates over their current adequacy and also examines nontraditional challenges such as economic and environmental security. Prerequisites: POS 101J, 102J, 103 or permission of the instructor.

Cr 3.
POS 389 International Law and Organization
Law and order in the international systempresent 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 101J, POS 102J and POS 103 or permission of the instructor.

Cr 3.

## POS 390 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, andPOS 103, or permission of the instructor.

## POS 391 Political and Social Thought II

A study of selected political theories from Machiavelli to modem 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 392 American Political Thought

An examination of American historical and contemporary thinking on a variety of political topics including equality, revolution, liberty, property, war, and individualism. Prerequisites: POS 101J, POS 102 J 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.

## POS 453 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 andPOS 103 or permission of the instructor.

Cr 3.

## POS 459 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 exremism and mass movements? Are there "authoritarian" and "democratic" personalities? What are the needs or drives that lead
people into full-ume 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 470 Electoral Politics Internship

Provision may be made to gain professional experience in a political party organization, electoral or referendum campaign. The course is open only to selected students; see Department chair for details. Students will meet for a series of internship seminars, for which readings and reports will be required. Prerequisite: open only to selected students.

Cr 6.

## POS 471 Internship in Private and SemiPublic Organizations

Provision may be made to gain professional experience in administration and research. The course is open only to selected students; see Department chair for details. Students will meet for a series of internship seminars, for which readings and reports will be required.

Cr 6.

## POS 472 Not-for-Profit Internship

Provision may be made to gain professional experience in a civic, public interest, or other not-forprofit organization. The course is open only to selected students; see Department chair for details. Students will meetfor a series of internship seminars, for which readings and reports will be required. Prerequisite: open only to selected students.

Cr 6.

## POS 473 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 chair for details. Students will meet for a series of internship seminars. Readings and research reports are required, focusing on the management, financial conrol and administration of modem American cities, with emphasis on administration of personnel and finance, the city plan and line functions; public safety, ransportation, health, welfare and housing. Cr 6.
## POS 474 Federal Executive Internship

Provision may be made to gain professional experience in a department or agency of the federal government located outside of Washington, D.C. The course is open only to selected students. Participation in a seminar is required.

Cr 6.

## POS 475 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 chair for details. Students will meetfor a series of internship seminars, for which readings and research reports are required.

Cr 6.

## POS 476 Internship in Washington, D.C.

Provision may be made to gain professional experience in a congressional office, an agency of the national government, or with a private or semi-public organization in Washington, D.C. The course is open only to selected students; see Department chair for details. Readings and research reports are required.

Cr 9.

## POS 477 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 chair 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 478 State Judiciary Internship

Provision may be made to gain professional experience in an administrative unit of the state court system. The course is open only to selected students; see Department chair for details. Students will meet for a series of internship seminars, for which readings and reports will be required. Prerequisite: open only to selected students. Cr 6.

## POS 479 State Legislative Internship

Provision may be made to gain professional experience in an office of the state legislature. The course is open only to selected students; see Department chair for details. Students will meet for a series of internship seminars, for which readings and reports will be required. Prerequisite: open only to selected students.

Cr 6.
POS 480 International Affairs Internship
Provision may be made to gain professional expe-
rience in an organization oriented toward international politics, trade, or other transboundary affairs. The course is open only to selected students; see Department chair for details. Students will meet for a series of internship seminars, for which readings and reports will be required. Prerequisite: open only to selected students.

Сr 6.

## POS 483 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, civilrights, 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 484 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 103 or permission of the instructor. POS 483 is recommended. Cr 3.

## POS 485 Civil Rights and Political Equality

This course is about belonging to the American political community. Fear of the "other" has produced suppression of immigrants, Catholics, Jews, blacks, Native Americans, women, gays and lesbians, laborers, and the poor. Nevertheless, the ideal of equality has produced much public policy and constitutional law directed at building inclusive community of equals. These policies and laws form the subject matter of the course. Prerequisites: POS 101J, POS 102J, and POS 103, or permission of the instructor. POS 483 is recommended. Cr 3.

# Psychology 

Chair of the Department: William F. Gayton, 510 Science Building, Portland Professors: Brown, Gayton, Thomton, Worchel; Associate Professors: Broida, Hearns, Johnson, Sytsma; Assistant Professors: Hutt, Sturman

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 lnowledge is acquired. The emphasis is upon the scientific inquiry into basic phenomena and principles of behavior, not upon the development of professional skills.

## Programs and <br> Requirements

## 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 \& 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 | 206 | Methodology Lab |
| PSY | 220 | Psychology of the Lifespan |
| PSY | 330 | Social Psychology |
| PSY | 333 | Psychopathology |
| PSY | 350 | Psychology of Leaming |
| PSY | 360 | Cognitive Processes |
| PSY | 361 | Sensation and Perception |
| PSY | 365 | Physiological Psychology |
| PSY | 371 | History and Systems |
| Other courses offered by the Deparment 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 required for certification as a psychology major. These courses should be cometed by the end of the sophomore year: |  |  |
| MAT | Any 100-lev | el Math course (Prerequisite for PSY 201D); MAT 105 recommended |
| BIO | 105K | Biological Principles or |
| BIO | 111 | Human Anatomy and Physiology I |
| BIO | 211 | Human Anatomy and Physiology II (Prerequisite for PSY 365) |

PSY 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 PSY205 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.

Transfer students who have taken an introductory psychology course that was completed in one semester have the option of taking PSY 102 or having it waived. If a transfer student waives PSY 102, he or she must take an additional three credits of psychology electives. MAT 120 can be used in place of PSY 201.

All students are reminded that, in addition to meeting Departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the Core curriculum requirements.

The Department recommends that students who wish to take a more extensive program or who plan to enter graduate school elect, in consultation with their major advisor, other courses in psychology and also include study in related fields, such as mathematics, biology, philosophy, sociology, anthropology, computer science, and social work.

Psychology majors who plan to attend graduate school should keep in mind that Graduate Record Examinations must be taken no later than December of their senior year. Students should plan to complete as many psychology courses as possible by the end of the fall semester of their senior year.

## 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 thinling. This course is a prerequisite for all courses in the department. Cr 3.

## PSY 102 General Psychology II

A continuation of Psychology 101J. 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 generalintroduction to the techniques of descriptive, predictive, and inferential statistics. Emphasis is placed on measures of central tendency and variability, correlation, hypothesis testing, and simpleanalysis of variance. Prerequisites: PSY 101J and any 100 -level math course 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; corequisite PSY 206.

Cr 3.

## PSY 206 Methodology Lab

This course applies the scienlific method to selected areas of experimental psychology. Such areas may include animal leaming, physiological, sensationperception, cognition, social-personality, and developmental psychology. Report writing and interpretation of statistical results will be emphasized. Prerequisite: PSY 201; corequisite: PSY 205.

Cr 1.

## PSY 220 Psychology of the Lifespan

This is a broad introductory course focusing on the theories, research methods, and the status of scientific lnowledge about human development across the lifespan. The course focuses on the interplay of psychological and environmental factors in physical, cognivive, social, and personality development from birth through adulthood. Prerequisites: PSY 101 J and 102.

Cr 3.

## PSY 232 Psychology of Ad justment

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 101 J 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 govemment 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 323 Psychology of Infancy and Childhood
This is an advanced course where students with a
solid background in developmental psychology will explore in detail the psychological issues and events that occur during the course of infancy and childhood. Current research focusing on the interplay of psychological and environmental factors in physical, cognitive, social, and personality development of individuals from conception to puberty will be explored. Prerequisites: PSY 101J and PSY 102, and either PSY 220 or HRD 333J.

Сг 3.

## PSY 324 Psychology of Adolescence

This advanced course will provide an overview of theories, issues, and research in the study of human development from early adolescence to early adulthood. The interplay of biological and cognitive factors, interpersonal relationships, social structure, and cultural values in shaping the individual's development will be examined. The role of adolescence in both the individual's life course and evolution of the culture as a whole will be considered. Prerequisites: PSY 101J, PSY 102, and either PSY 220 or HRD 333J. Cr 3.

## PSY 325 Psychology of Adulthood and Aging

This is an advanced course in developmental psychology focusing on the adult portion of the lifespan. The course will provide an overview of the major theories, issues, and research in the scientific study of adulthood. The interplay of biological and cognitive factors, interpersonal relationships, social structure, and cultural values in shaping the individual's development will be examined. Prerequisites: PSY 101J, PSY 102, and either PSY 220 or HRD 333J. 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. Cr 3.

PSY 338 Theories of Personality
A survey of the major contemporary approaches to the study of personality. Different theories are com-
pared, their impactupon 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 condimoning 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, aplitude, 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.

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

Anintroduction 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 355 Research in Personality and Social

## Psychology

Examination of current research in personality and social psychology. Experience in designing, executing, reporting, and evaluating research in personality and social psychology. This will include a research project. Prerequisite: 15 hours in psychology or permission of instructor.

Cr 3.

## PSY 360 Cognitive Processes

A review of contemporary experimental and theoretical work on human information processing. Topics include pattern recognition, memory, attenion, 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.

$$
\mathrm{C}_{\mathrm{r}} 3 .
$$

## PSY 361 Sensation and Perception

An examination of perceptual processes and sensory systems. Emphasis is on experimental methodology, research findings, and theoretical interpretations. Prerequisites: PSY 101 and 102. 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 leaming. Prerequisites: BIO 105K or BIO 111 and BIO 211; PSY 101J, 102.

Cr 3.

## PSY 366 Drugs, Mind, and Behavior

The physiological and behavioral effects of drugs are examined in light of current research. Also considered are theories relating to the use/abuse of drugs, tolerance, addiction, and drug interactions. Prerequisites: PSY 101J and one semester of biology.

Cr 3.

## 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 deliberaion, eyewitness testimony and credibility, and courroom strategy. A term paper is required of all students. Prerequisites: PSY 101J, 102, 333 and/or permission of the instructor. Cr 3.

## PSY 385 Contemporary Psychotherapies

A survey of contemporary psychotherapies including Gestalt therapy, logotherapy, bioenergetics, reality therapy, transactional analysis, and rationalemotive 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.

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.

## PSY 400 Research in Psychology I

This course is open to qualified majors in psychology who wish to conduct research projects. With permission of Department chair.

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, Rich, Siebold, Wagner; Assistant Professors: Earle, Healy; Field Work Coordinator: Richfield

The program in social work prepares the studentfor 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. It is important to consult individual institutions for their acceptance criteria and procedures, which may vary.

Effective June 1996, the Department of Social Work initiated the status of presocial work major (PSW) for all new and transferring students.

All PSW students must maintain a 2.5 GPA and complete the following courses before being admitted to the Department as a social work major:

Proficiency in Writing (Proficiency Category A)
Proficiency in Mathematics (Proficiency Category B)
ENG 100C College Writing
Any Core-designated Philosophy course (Core Category E)
Any Core-designated Literature course (Core Category H)
Any Core-designated Other Times/Other Cultures course
(Core Category I)
SOC 100J Introduction to Sociology
POS 101J Introduction to Govemment
or
ECO 101J Introduction to Macroeconomics
PSY 101J General Psychology I
PSY 102 General Psychology II
SWO 101J Introduction to Social Welfare
SWO 201 Introduction to Social Work
Students transferring to USM from another college or university must have completed these courses, or their equivalent, as recorded on their Transcript Evaluation form.

PSW students are advised by a counselor in the College of Arts and Sciences dean's office. Once the required courses have been completed and the cumulative GPA of 2.5 attained, the PSW student is admitted formally as a social work major.

To assure consistency and avoid confusion, it is important that social work majors meet with their advisors on a regular basis. Advising in the Social Work Department is a mutual process of exploring career objectives, reviewing Departmental requirements, designing the best possible combination of required courses and electives, determining proper course sequencing, and facilitating a productive relationship between the student and the Department.

Admission to the field work component of the curriculum (SWO 411, SWO 412) occurs after a formal application is submitted, reviewed, and accepted. Contact the Department office for further information and application materials for field work.

During the field work year, each student is placed in a community social service agency approved by the Social Work Department. Placements begin only in the fall semester and continue throughout the year. By the end of the spring semester, each student will have completed 480 hours of field work. A large number of social and community agencies in the GreaterPortland 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 and directions.

Because social work is a values-based profession whose principal commitment is to vulnerable clients, a student's suitability for the profession will be continuously assessed during the process of his or her education.

## Programs and Requirements

The students of the Deparment have organized a Social Work Student Organization. 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 representarives attend faculty meetings and may 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: 42.

The major in social work consists of 42 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 | 101 J | Introduction to Social Welfare |
| :--- | :--- | :--- |
| SWO | 201 | Introduction to Social Work |
| SWO | 301 | Methods of Social Work Practice I |
| SWO | 333 | Social Work Research I |
| SWO | 334 | Social Work Research II |
| SWO | 370 | Human Behavior in the Social Environment |
| SWO | 401 | Methods of Social Work Practice II |
| SWO | 402 | Methods of Social Work Practice III |
| SWO | 411 | Field Work I |
| SWO | 412 | Field Work II |
| SWO | 450 | Social Welfare Policy |
| SWO | Elective | Any 300- or 400-Level Social Work Elective |

Note: Any introductory statistics course (MAT 120D, PSY 201D, SOC 307D or SBS 328D) is a prerequisite for SWO 333.

Required Foundation Courses in Other Departments
ENG 100C College Writing
ECO 101J Introduction to Macroeconomics

BIO $\quad 100 \mathrm{~K} \quad$ Biological Basis of Human Activity (or BIO 101 K Biological Foundations, or BIO 105K Biological Principles I)
BIO $\quad 102 \mathrm{~K} \quad$ Biological Experiences (or BIO 106K Laboratory Biology I)
POS 101J Introduction to Govemment
PHI (Any Core-designated philosophy course)
PSY 101J General Psychology I
An introductory statistics course (MAT 120, PSY 201D, or SOC 307D)
PSY 102 General Psychology II
SOC 100J Introduction to Sociology
SOC 371 Sociology of Minorities
Four other advanced level sociology, criminology, and/or psychology courses, selected in consultation with the student's advisor, are required. HRD 333J Human Growth and Development is acceptable for one of these four courses.

Students are required to achieve a grade of C or better in all required social work and required foundarion courses; and attain a cumulative grade point average of 2.50 at the point of application for the social work major.

## 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: Social work major or permission of instructor; SWO 101J. Cr3.

## SWO 266 Perspectives on Disabilities

To enhance effective interaction and communicamon with handicapped persons, issues are exam-
ined 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 301 Methods of Social Work Practice I

This course is an introduction to the basic concepts and skills of interviewing and assessment within the framework of a strengths perspective. Emphasis will be placed on the integration of ethics and the process of reflection within a generalist practice of social work. Prerequisites: SWO 101J, 201.

Cr 3.

## SWO 333 Social Work Research I

A study of the methods of social work research for social policy and socia' 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, SWO 201; any introductory statistics course (MAT 120 or PSY 201D or SOC 307D).

Cr 3.

## SWO 334 Social Work Research II

In this continuation of SWO 333, students complete an empirical research project. Class members serve as a review committee for all research instruments used, learn the practical aspects of writing quantitative and qualitative research reports, and function as a research support group for one another. Prerequisites: SWO 101J, any introductory statistics course (MAT 120D, PSY 201D or SOC 307D); SWO 333.

Cr 3.

## SWO 364 International Social Welfare

A study of social welfare programs in advanced industrial and in developing socielies, in market and non-market economies and in democratic and authoritarian political systems. Prerequisite: SWO 101J.

Cr 3.

## SWO 367 Relating Professionally to Sexual Diversity

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. Prerequisite: junior standing or permission of instructor. Cr 3.

## SWO 370 Human Behavior in the Social <br> 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 378 Professional Practice with Older

 PeopleEnhances skills in human service practice with older people. Analyzes the sources and manifestations of both healthy and problematic aging. Applies concepts drawn from the behavioral and social sciences, and from clinical and community practice. Translates a developmental rather than a custodial view into everyday direct service. Prerequisite: junior standing or permission of instructor. Cr 3.

## SWO 380 Child Welfare

A study of the policy and practice issues affecting children in current society, including implications for social services and institutional change. Prerequisites: SWO 101J and SWO 201 or permission of the instructor.

Cr 3.

## SWO 381 Social Work with Children

This course explores the application of social work skills and knowledge in professional interactions with children and adolescents within the context of social welfare agencies. The focus is on the skills involved in trealment as well as knowledge about family and community systems. Prerequisites: SWO 101J, SWO 201, orpermission 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 388Alcohol and Other Drug Abuse

## Issues

Examines the use and abuse of psychoactive substances: street drugs, prescription drugs, alcohol, caffeine, and nicoline. 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. Prerequisite: junior standing or permission of instructor.

Cr 3 .

## SWO 397 Department Projects

Individual or groupprojects, 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 401 Methods of Social Work Practice II

This course is a continuation of Methods of Social Work Practice I. It explores the contextual nature of generalist social work practice within a slrengths perspective. Emphasis will be placed on the processes of engagement, assessment, and interven-
tion with individuals, families, and groups. Family systems, group, and crisis models of intervention will be presented. This course must be taken concurrently with SWO 411 (Field Work I). Prerequisite: SWO 301. Fall semester only. Cr 3.

## SWO 402 Methods of Social Work

## Practice III

Examines the dilemmas of professional human service workers in bureaucratic systems and the effects of professionalization and the bureaucracy on consumers. Develops a range of methods aimed at better meeting client need with particular reference to strategies of organizational change and community organization. Class discussions and assignments are based on field work experiences. Prerequisites: SWO 301, SWO 401, and SWO 412 (concurrent).

Cr3.

## 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. 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 411 Field Work I

For social work majors: a required intemship of 16 hours per week in approved agency settings, designed to relate social work theory to practice under professional supervision. Fall semester only. Must be taken as the first in a two-course sequence. Prerequisites: SWO 201; SWO 301; 401 (concurrent). Cr 6.

## SWO 412 Field Work II

A continuation of SWO 411. Spring term only. Must be taken as the second in a two-course sequence. Prerequisites: SWO 301, SWO 401, SWO 411, and SWO 402 (concurrent).

Cr 6.

## SWO 450 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: ECO 101J, POS 101J, and SWO 301 or permission of advisor.

$$
\text { Cr } 3 .
$$

## SWO 456 Issues in Social Welfare and Social Work

A seminar for social work majors that addresses significant issues confronting the social welfare system and the profession. Prerequisite: social work major or permission of instructor. Cr 3.

## Sociology

Chair of the Department: Cheryl Laz, 120 Bedford St., Portland Associate Professors: Anspach, Fullam, Laz, Wagner; Assistant Professors: Anderson, Chapkis, McWilliams; Adjunct Instructors: Bird, Diamon

Sociology is the study of social life and the social origins and consequences of human behavior. Sociology's subject matter ranges from the intimate family to the hostile mob, from crime to religion, from the divisions of race and social class to the shared beliefs of a common culture, from the sociology of work to the sociology of sport. Sociology is a liberal arts major with particular emphasis on developing students' abilities to think critically about complex issues, to analyze social phenomena, to design and carry out research, and to write with clarity and economy. An undergraduate major in sociology offers valuable preparation for careers in social work, social research, politics, public administration, law, business, and education.

The major also provides an excellent basis for graduate study in sociology, law, criminology, and social work.

## Alpha Kappa Delta

Juniors and seniors who have demonstrated an interest and involvement in sociology, who have completed at least four sociology courses at USM, 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

## Programs and Requirements

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 Association each April, although vacancies sometimes occur during the year. Students who are interested in this kind of involvement are encouraged to talk to Deparmental faculty.

## Internships

The Department of Sociology offers a strong and on-going internship program. The expanded program ielps 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 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 presentaions 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.

## 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.

## Bachelor of Arts in Sociology

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

| Required |  |  |
| :---: | :--- | :--- |
| Courses | (18 hours) |  |
| SOC | 100 J | Inroduction to Sociology |
| SOC | 210 E | Critical Thinking About Social Issues |
| SOC | 300 | Sociological Theory |
| SOC | 301 | Methods of Social Research |
| SOC | 307 D | Statisical Methods |
| SOC | 312 | Inequality and Power |
| Six courses from among the following (18 hours) |  |  |
| SOC | 289 | Modern British Society |
| SOC | 315 | Self and Society |
| SOC | 316 | Sociology of Gender |
| SOC | 318 | Childhood and Society |
| SOC | 320 | The Sociology of Literature |
| SOC | 330 | Sociology of the Family |
| SOC | 331 | School and Society |
| SOC | 333 | Sociology of Health |
| SOC | 334 | Sociology of Religion |
| SOC | 336 | Law and Society |
| SOC | 340 | Sociology of Crime |
| SOC | 343 | Social Psychology |
| SOC | 352 | Demography |
| SOC | 354 | Comparaive Political Ideologies |
| SOC | 355 | Politics and Society |
| SOC | 357 | Organization: Individual and Society |
| SOC | 358 | Sociology of Women's Work |
| SOC | 360 | Sociology of Aging |
| SOC | 371 | Sociology of Minority Groups |


| SOC | 374 | Mental Health and Illness |
| :--- | :--- | :--- |
| SOC | 375 | Sociological Perspectives on Deviance |
| SOC | 377 | Sociology of Violence |
| SOC | 380 | Topics in Sociology |
| SOC | 389 | Law and Society in England |
| SOC | 390 | Individualized Instruction I |
| SOC | 391 | Individualized Instruction II |
| SOC | 395 | Internship |
| SOC | 400 | Punishment and Social Control |
| SOC | 450 | Undergraduate Teaching Assistantship |

## Minor in Sociology

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

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 College of Nursing, the School of Business, the College of Education and Human Development, and non-social science disciplines in the College of Arts and Sciences.

Twelve credit hours are required courses; the remainder are electives. Required Courses: SOC 100J; SOC 210E; SOC 300; SOC 301; sociology electives**.
**Each student minoring in sociology elects a minimum of two upper-division courses from those offered by the Department. These courses, chosen in consultation with the student's minor advisor, reflect the preprofessional or other interests of the student.

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

To obtain these publications, or for other information, write to: Chair, Sociology Department, University of Southern Maine, P.O. Box 9300, Portland, Maine 04104 or telephone: (207) 780-4100.

## 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, social classes, stratification, and basic institutions on contemporary society. Offered each semester.

Cr 3.

## SOC 210E Critical Thinking About Social <br> \section*{Issues}

Designed to follow Introduction to Sociology, this course further develops students' skills of critical analysis through the application of sociological principles to current social issues. The course uses popularmedia as well as sociological materials. Examples of issues which may be examined are: poverty, health care, homelessness, aging, drugs, violence, bureaucracy, white collar crime, and changing gender roles. Prerequisite: Successful completion of SOC 100J with a grade of C or better or permission of the instructor.

Cr 3.

## SOC 289 Modern British Society

This course forms the cornerstone of USM's summer programat Sheffield, England. The course provides an opportunity to study, experience, and live in British society and culture. The course combines seminars about modern Britain with visits to vari-
ous sites in England and Scotland. Seminar topics include but are not limited to: cultural diversity and pluralism, village life and city life, the Parliament and government, the British class structure, the British welfare state, the industrial revolution, and the problem with ethnocentrism.

Cr 3 .

## SOC300 Sociological Theory

Critical evaluation of selected classical models of the social world. Includes consideration of the foundations of sociological thought, the content of major classical theories and theory groups, and the socio-cultural settings within which they developed. Prerequisites: one 200-level SOC course or permission of instructor. Offered fall semesters. Cr 3.

## SOC301 Methods of Social Research

Conceptualization and research design, data collection and analysis, logic of inquiry and research techniques. Prerequisite: one 200-level SOC course or permission of instructor.

Cr 3.

## SOC 307D 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. Pre-
requisite: one 200 -level SOC course and completion of mathematics proficiency. Offered spring semesters.

Cr 3.

## SOC 312 Inequality and Power

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: one 200 -level SOC course or permission of instructor. Offered spring semesters. Cr 3.

## SOC 315 Self and Society

This course explores the social construction of self as the result of both face-to-face and societal-level social processes such as language acquisition, identity development, and the effects of culture and social structure on individual and collective conceptions of self-hood. Readings and discussions focus on the relative contributions of individual selfdetermination and societal constraints on self-hood. Specific topics include childhood identity development, social stigma and societal definitions of normality, social structure and self-esteem, and cross-cultural differences in the concept of selfhood. Prerequisite: SOC 210E or permission of instructor.

Cr 3.

## SOC 316 Sociology of Gender

This course examines gender as a social, cultural, and historical construction which occurs within and reinforces sex/gender stratification. With particular attention paid to education, the family, and work, we will explore sex/gender stratification-its sources and dynamics; historical and contemporary forms; and implications for human lives, history, and society. Prerequisite: one 200 -level SOC course or permission of instructor. Offered fall semesters.
dress specific questions relating to the production, distribution, consumprion, and preservation of literature such as what is literature, who makes it, who consumes it, and what makes it last. Prerequisite: one 200-level SOC course or permission of instructor.

Cr 3.

## SOC 330 Sociology of the Family

A sociological approach to the study of the family, including the structure of social relationships, the modern American family as a social institution, the cultural background of the family, and the impact of social change. Prerequisite: one 200 -level SOC course 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 altematives 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: one 200 -level SOC course 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: one 200-level SOC course 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: one 200 -level SOC course or permission of instructor.

Cr 3.

## SOC 336Law 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: one 200 -level SOC course or permission of instructor. Offered fall semesters.

Cr 3.
SOC 340 Sociology of Crime
Through an analysis of law creation, policing, and court operation, this course examines how crime is
socially created. This will be accomplished using three sociological approaches: structural analysis, symbolic interaction, and ethno-methodology. Prerequisite: one 200 -level SOC course or permission of instructor.

Сг 3.

## SOC 343 Social Psychology

This course provides an overview of sociological theory and research in social psychology on the central topics of social perception, social communication, and social interaction. The course focuses on the impact of sociological factors such as gender, race, and class onface-to-face behavior and on how face-to-face interaction contributes to the creation and maintenance of social structure. Specific topics include social psychological methods; causes and consequences of stereotyping; gender, power, and conversation; status structures in small groups; distributive justice; and social dilemmas. Prerequisite: SOC 210 E or pernission of instructor.Cr 3 .

## SOC 352 Demography

Fertility, mortality, and migration as they affect 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. Prerequisite: one 200-level SOC course or permission of instructor.

Cr 3 .

## SOC 354 Comparative Political Ideologies

After a presentation and comparison of 20th-century political ideologies and their origins, the influence of these value systems on political action and on current sociological paradigms will be emphasized. Prerequisite: one 200 -level SOC course or permission of instructor.

Сr 3.

## SOC 355 Politics and Society

This course will focus on power relationships in U.S. society, with some cross-national comparisons. Specific topics to be covered include the nature and distribution of power among social groups and organizations, theories of the state, social class and political participation, policy formation, and the interactions between democracy as a political system and capitalism as an economic system. Cr 3.

## 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: one 200 -level SOC course or permission of instructor.

Cr 3.

## SOC 358 Sociology of Women's Work

This course will introduce students to theoretical and empirical literature on women's work in the paid labor force, on their unpaid labor in the home, and on the relationship between these two kinds of "women's work." The course emphasizes the diversity of women's work and the interconnections among race-ethnicity, class, and gender through a detailed examination of professional women, bluecollar women, and "pink-collar" employees. Additional topics include occupational segregation, eamings differentials, poverty, law and public policy, and labor militancy. Prerequisite: one 200-level SOC course or permission of instructor. Cr 3.

## SOC 360 Sociology of Aging

This course will introduce students to the "graying of America" and to the processes and problems associated with growing old in America. Using a dual focus on aging of the individual and on age as a structural feature of any society, the course will provide an analytical framework for understanding the interplay between human lives and social structure. The increased importance of the aged as a social, political, and economic force in society will also be discussed. Prerequisite: one 200 -level SOC course or permission of instructor. Cr 3.

## SOC371 Minority Groups

Considers the factors that produce and maintain structured social inequality based on minority status, and the social consequences of such inequality. Includes analysis of selected minorities both in the U.S. and cross-culturally. Prerequisite: one 200level SOC course or permission of instructor. Offered fall semesters.

Сг 3.

## SOC 374 Mental Health and Mental Illness

An examination of theories of the "causes" of "madness" and the treatment of the mentally ill. Particular attention on the influence of culture on the definition of illnesses, the relationship between social factors and illness, and the social context of treatment. Prerequisite: one 200 -level SOC course or permission of instructor.

Cr 3.

## SOC 375 Sociological Perspectives on

## Deviance

The origin and nature of socially disapproved behavior. Analysis of societal interpretations of and responses to the deviant. Prerequisite: one 200 -level SOC course or permission of instructor. Cr 3.

## SOC 377 Sociology of Violence

Although humans clearly have the capacity for violent action, that capacity has been and is expressed in a variety of ways. This course explores the social and cultural contexts to giving definimion to that
capacity, together with a consideration of the social policy implications involved in contemporary understandings of the origins and nature of human violence. Prerequisite: one 200 -level SOC course or permission of insuctor.

Cr 3.

## SOC 380 Topics in Sociology

Specially developed occasional courses exploring a variety of theoretical and substantive areas within the field. Offered as resources permit. These courses may be counted as electives toward completion of the major. Prerequisite: one 200 -level SOC course or permission of instructor.

Cr 3.

## SOC 389 Law and Society in England

This course is an intensive three-week summer course taught at the University of Sheffield, England. The course permits students to engage in the cross-cultural study of law by examining another country's legal system and how that country handles legal problems. The course consists of seminars on law, the sociology of law, and the British legal system. Tours of British justice institutions including Crown and Magistrates Courts will also be included. Seminars will be taught in England by an interdisciplinary team from the faculty of law at Sheffield University. A member of USM's Sociology Department who participates in the tour will offer seminars before departure and will evaluatestudent performance. Prerequisite: one 200-level SOC course or permission of instructor.

Cr 3.

## SOC 390 Individualized Instruction I

Independent reading and/or research for juniors and seniors. Apply to Department chair. Prerequisite: 15 hours in sociology.

Cr var.

## SOC 391 Individualized Instruction II

Continuation of independent reading and/or research for juniors and seniors. Apply to Department chair. Prerequisite: SOC $390 . \quad$ 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 spring semester. Contact Departmental internship coordinator for details.

Cr 4 to 6.

## SOC 400 Punishment and Social Control

This course distinguishes different forms of punishment and types of social control, including penal punishment and therapeutic control. It races the development of punishment as a definitive style of discipline in modern society. Specific emphasis is given to the development of the modern prison and asylum. These are framed as responses to both the necessity of social control and to crises generated by social disorder and political instability. Illustrations are drawn from cross-national data and the social control of deviants in Maine. Prerequisites: SOC 100J and either SOC 210E or CRM 215 J or permission of instructor. Cr 3.

## SOC 450 Undergraduate Teaching

 AssistantshipIn working closely with faculty, undergraduate teaching assistants will gain insight into course materials and into all aspects of college teaching. This experience will be especially valuable for students who plan to do graduate work in sociology and for students exploring a career in teaching. Teaching assistants also provide an additional resource for assistance, advice, and modeling. Undergraduate teaching assistants generally assist faculty in course preparation and delivery including locating and reviewing materials for course use; assisting with the design of course schedule, exercises, assignments, and class presentations; lecturing and supervision of student groups; and providing feedback to students on their work. In addition, teaching assistants hold regular office hours. Enrollment in SOC 450 will depend on Departmental needs and course offerings. Selection is made by the faculty. Students should contact theDepartment chair for details. Prerequisite: SOC majors by permission only.

Cr 3 .

## Theatre

Chair of the Department: Charles S. Kading, Russell Hall, Gorham
Professors: Kading, Rootes, Stump; Associate Professors: Kilroy, Picinich, Power, Steele; Assistant Professor: Kent; Technical Director: Vail; Costumer: Alden-Kinne

The Theatre Deparment 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: 69

Students with the intent to major must complete the following courses during their first year:

| THE | 101 G | Introduction to Drama |
| :--- | :--- | :--- |
| THE | 120 | Acting I: Stage Movement |
| THE | 121 | Acting II: Stage Voice |
| THE | $130-01$ | Theatre Workshop |
| THE | $130-02$ | Theatre Workshop |
| THE | 134 F | Production Management |
| THE | 135 F | Stagecraft |
| THE | 136 F | Stagecraft Lab |
| THE | 150 H | Play Analysis |

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 may 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.

The above GPA standards are required for graduation and a grade of C - or better is required in all theatre courses.

Students are encouraged to meet with the faculty or staff whenever questions arise or problems occur.

The following courses are required:

| THE | 101 G | Introduction to Drama |
| :--- | :--- | :--- |
| THE | 120 | Acting I: Stage Movement |
| THE | 121 | Acting II: Stage Voice |
| 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 F | Production Management |
| THE | 135 F | Stagecraft |
| THE | 136 F | Stagecraft Lab |
| THE | 139 | Make Up |
| THE | 150 H | Play Analysis |
| THE | 170 F | Public Speaking or THE 270 Oral Interpretation |
| THE | 220 | Acting III: Scene Study |
| THE | 225 | Directing |
| THE | 230 | Designing for the Performer |
| THE | 231 G | Costuming I |
| THE | 232 | Costuming Lab |
| THE | 330 | Lighting Design |
| THE | 331 | Scene Design |
| THE | 351 | Dramatic Literature and Theatre History I: Origins |
|  |  | to 15th Century |

\(\left.$$
\begin{array}{lll}\text { THE } & 352 & \begin{array}{l}\text { Dramatic Literature and Theare History II: } \\
\text { Renaissance to } 1800\end{array} \\
\text { THE } & 353 G & \begin{array}{l}\text { Dramatic Literature and Theatre History III: } \\
\text { THE }\end{array}
$$ <br>

Romantic to World War II\end{array}\right]\)| Dramatic Literature and Theatre History IV: |
| :--- |
| Absurdists to Post-Modernism |

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, Professional Audition and Marketing Techniques, Acting forthe Camera, Topics in Acting and Performance, Creative Dramatics.

Literature track: Playwriting, Journalistic Drama Criticism, Advanced Playwriting, Topics in Dramatic Literature and Theatre History (may be repeated)

Design/Technical track: Lighting and/or Scene Design, Advanced Costuming, Topics in Design, Topics in Dramatic Literature and Theatre History, Theatrical Drafting

Vocal Arts track: Oral Interpretation and/or Public Speaking, Performance Arts, Advanced Oral Interpretation, Forensics, Professional Audition and Marketing Techniques, Creative Radio Performance

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 enroll in $1 / 2$ unit of Theatre Workshop each semester (maximum of 4 units). 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 69 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.

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 student participates, whether as a crew or cast member, is required.

## Student Participation

Theatre succeeds in direct proportion to the quantity and quality of the group effort, and so it is not surprising that the USM Theatre program thrives on the participation of all majors, minors, and other interested students.

Theatre is a strict and demanding discipline; the time dedicated to production and rehearsal is extensive. Therefore, the Theatre Department urges students to select non-Departmental theatre activities prudently and with consideration for their overall academic and production commitments. The Department also strongly reconumends that theatre majors consult their advisors in order to integrate the outside project into their overall program.

## 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 134F, THE 150H, 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.

Fees
Materials and/or admission fees may be required for some Theatre courses. Please contact the Theatre office at $780-5480$ for specific requirements.

## 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 neoclassic, 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. Students will gain a basic understanding of theatre as a performing art through lecture, discussion and performance of scenes. Improvisational exercises, relaxation techniques and character analysis strategies will be included. Students will also attend campus and area theatrical productions and be required to write crivical reviews of the performances.

Сг 3.

## THE 103F Contemporary Dance I

This course is designed to teach basic contemporary dance skills and vocabulary. The class is divided into two areas of study. Physical and technical development are leamed through strengthening and stretching exercises. Proper body alignment is stressed for the most efficient and injury-free movement. Dance phrases are taught to enhance rhythmic and locomotor skills. Equal ime will be devoted to improvisational skills and the study of choreographic techniques. Students will be required to attend contemporary dance performances. Course may be repeated once for credit.

Сг 3.

## THE 120 Acting I: Stage Movement

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, exploraion 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: Stage Voice

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.

Сг 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, lighing, management, and directing. A laboratory course. The course may be repeated for credit.

## THE 131 Theatre Workshop II

A con linuation of THE 130. Prerequisite: THE 130. The course may be repeated for credit. Cr 0.5 .

## THE 132 Theatre Workshop III

A continuation of THE 131. Prerequisite:THE 131. The course may be repeated for credit. Cr 0.5 .

## THE 133 Theatre Workshop IV

A continuation of THE 132. Prerequisite: THE 132. The course may be repeated for credit. Cr 0.5 .

## THE 134F Production Management

A survey/lab course designed to familiarize students with the organizational procedures of the theatre production process. Major areas of study include stage management and theatre production management with some reference to video and film production management. Addirional topics include the running of crews in properties and wardrobe, operation of sound and lighting equipment, and production scheduling. This course includes a crew requirement for a University production. Cr 3.

## THE 135F Stagecraft

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 1.

## 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 providing 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 cricicized using the Aristotelian elements
of plot, character, thought, diction, music, and spectacle as analytical tools. Prerequisite: ENG 009.

Сг 3.

## THE 170F Public Speaking

An introductory course in the art of public discourse. Primarily a lecture-performance course, students will leam 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.

THE 172 Intercollegiate Forensics
A continuation of THE 171.
THE 173 Intercollegiate Forensics
A continuation of THE 172.
THE 174 Intercollegiate Forensics
A continuation of THE 173.
Cr 1.

## THE 203F Musical Theatre Dance

This course will build upon basic movement skills with an emphasis on the dance styles required for musical theatre. Techniques offered will include jazz, ballet, and tap. In addition to skill training, class projects will include the staging and choreography of musical theatre selections. Cr 3 .

## THE 220 Acting III: Scene Study

This is a practicum course designed to introduce students to basic skills of stage movement and characterization through the use of scene work. The course evolves from simple storytelling through monologues to scenes. The emphasis is on internal preparation through developing a role as well as on external techniques for projecting that role. Prerequisites: THE 120 and 121 or permission of instructor.

Cr 3.

## THE 221 Acting IV: Contemporary Methods

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 224 Acting for the Camera

This course will give students practical experience acting in videotapeddramatic scenes, industrial role playing, commercials, and narration. The course will emphasize the difference between stage and video/film acting techniques. . Cr 3 .

## THE 225 Directing

This course is designed to train students in theatrical organization and rehearsed techniques. It encompasses composition, picturization, movement, and rhythm. Some practicum is involved. Prerequisite: THE 150 H or permission.

Сг 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 230 Designing for the Performer

This course offers the student an opportunity to explore the process of creating an environment for the performer, incorporating elements of scenic, costume, lighting, and audio design. Coursework includes the presentation of multimedia design projects, supplemented by a practicum as an assistant designer for one major Theatre Department play or media arts production.

Сг 3 .

## THE 231G Costuming

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 theare production. Concurrent enrollment in THE 232 Lab required. Cr 3.

## THE 232 Costuming Lab

The course is a laboratory session that allows practical application of theory discussed in THE 231G. Concurrent enrollment required in THE 231G.

Cr 1 .

## THE 233 Practicum in Stage Lighting

A course focusing on the practical application of contemporary stage lighting technology and on the implementation of a lighting plot. Prerequisite: Stagecraft or permission of instructor. Cr 1.

## THE 235 Theatrical Drafting

A lecture/discussion/lab course in basic theatrical drafting/graphic practices relating to theatrical construction and design techniques. Concurrent enrollment in THE 236 Stagecraft Lab required. Prerequisite: THE 135F or instructor consent. Cr 3.

THE 236 Stagecraft Lab
A labcourse allowing practical application of theory discussed in THE 235. Concurrent enrollment in THE 235 required.

Cr 1 .

## THE 250 Playwriting

A lecture-practicum course designed to acquaint the student with playwriting principles. Emphasis is placed on the one-act play form. Students will be required to complete a series of creative exercises culminating with writing of a one-act play. Prerequisite: THE 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 creation and performance of material designed to be performed exclusively through the medium of radio.

Cr 3 .

## THE 320 Acting V: Styles

This course will introduce the student to a variety of acting styles, ranging from Greek tragedy to Shakespeare and contemporary. Advanced skill training in stage voice and movement will be incorporated into each style. Prerequisite: THE 220.
requisites: THE 135F, THE 235, and THE 150 H 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 231G 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.

$$
\text { Cr } 3 .
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## THE 350 Advanced Playwriting

A course for those who have taken THE 250 or have already written several plays. Emphasis will be placed on writing a full length play for possible production by the University. A better-than-average competence in writing dialogue is imperative. Prerequisite: THE 250 or permission of the instructor.

Cr 3.

## THE 351 Dramatic Literature and Theatre History I: Origins to 15th Century

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, Euripedes, Plautus, Seneca, the Wakefield Master, and Chikamatsu. Critics include Aristotle and Horace. Prerequisite: THE 150H for majors, ENG 100C or ENG 101C for non-majors. Cr 3.

## THE 352 Dramatic Literature and Theatre History II: Renaissance to 1800

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 Castevetro, Chapelain, Dryden, Johnson and Diderot. Prerequisite: THE 150 H for majors, ENG 100C or ENG 101C for nonmajors.

Cr 3.

## THE 353G Dramatic Literature and Theatre History III: Romantic to World War II

A study of theatre and drama from Romantic period to World War II, covering early realist and antirealist 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.

Сг 3.

## THE 354 Dramatic Literature and Theatre History IV: Absurdists to Post-Modernism

A study of thealre 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.

## THE 371 Performance Arts

This theory and practice course allows students to experiment with the aesthetic interpretation of texts, focusing on extra-textual elements of presentation (such as sound, visual symbols/ images, spatial relations, hand-held light) in the staging of poetry, fiction, non-fiction, and drama. Theoretical and practical readings accompany in-class exercises and blackbox performances that strengthen skills in acting, directing, oral interpretation, forensics, play analysis, and design. Students elect a directing or a performance emphasis.

Cr 3.

## THE 372 Speaking to the Camera

This is an advanced public speaking and performance course introducing the student to the most common types of video presentations. Student performances of scripted speeches will be videotaped and evaluated based on content, delivery, and style.

Cr 3.

## THE 373 Advanced Public Speaking

A coninuation of public speaking with particular emphasis on performance in extemporaneous, impromptu, and manuscript persuasion. Students will analyze the work of peers and attend and critique area public speeches. All written and performance work will be critiqued by the instructor in a lecture/discussion format.

Cr 3.

## THE 421 Topics in Acting and Performance

An intensive study of a particular acting or performance technique chosen at the discretion of the instructor in accordance with his or her expertise and interests. May be repeated as topics vary, for a
maximum of 9 credits. Prerequisite: THE 221 or permission of instructor.

Cr 3.

## THE 430 Topics in Design

A seminar in advanced design practices and a continuation of THE 330 and/or 332. The course will stress improving design and presentation skills by developing and presenting design projects. The design project will involve thearical drafting, perspective sketching, rendering and model making techniques as required in the areas of specialty. Students will be required to work in two of the three areas of theatrical design: costume design, lighting design, or scenery design. In addition, historical styles will be surveyed in a lecture/discussion format. This discussion will include the impact of social and political attitudes as well as physical style and how these aspects may be applied to contemporary design. Prerequisite: any two of the following: THE 330, 331, or 332.

Cr 3.

## THE 451 Topics in Dramatic Literature and Theatre History

Anintensive study of a particular playwright, group, movement, or historical period chosen at the discretion of the instructor in accordance with his/her expertise and interests. May be repeated as topics vary for a maximum of nine credits. Prerequisite: THE 150 H for majors, ENG 100 C for non-majors. 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 thepurview of theatre. Students may select an interior intra-deparmental 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 nnake 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 Deparment at the conclusion of the intemship. 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 deparment. Prerequisite: permission of the Theatre Deparment. To be arranged. Cr 3-15.

## THE 493 British Tour

Students in this course will rehearse an original or scripted production which will be performed at USM and then transported to England for presentation at King Alfred's College in Winchester.

Cr 3 .

THE 494 Theatre Institute: Techniques of Michael Chekhov
This course provides an intensive overview of the acting techniques created by Michael Chekhov. Areas of focus will include characterization, scene study, stage movement and voice, and teaching methods.The course will conclude with a works-in-progress performance. Offered during the summers only. May be repeated for a maximum of nine credits.

Сг 3.

# College of Education and Human Development 

Dean: Richard E. Barnes<br>Director of Professional Development Center: George C. Lyons; Director of Center for Educational Policy, Applied Research and Evaluation: David L. Silvernail; Director of Southern Maine Partnership: Lynne Miller; Director of Student Affairs and Administration: Jane Andrews

The College of Education and Human Development prepares individuals for careers in teaching and related human service professions. In addition, the College offers courses and programs of study to students from all schools and colleges in the University in the areas of educaional theory and application, human development, and athletic coaching.

The mission of the College of Education and Human Development is to prepare educators and human development practitioners for America's future. The College and allied programs in art, music, and applied science at the University of Southern Maine prepare professionals for teaching, counseling, school psychology, administration, training and development, and teacher leadership. The content knowledge, shills, and understandings needed for these areas form the heart of our programs. Common to all of these fields is an emphasis on Connections and Partnerships, Reflection and Critical Inquiry, Diversity, and Performance Assessment.

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

The Execuive Council, comprised of department chairs and selected faculty and staff from the College, is the governing body for program review and evaluation for all advanced level professional education programs at USM.

USM's College of Education and Human Development degree programs are accredited by the National Council for Accreditation of Teacher Education (NCATE).

# Department of Teacher Education 

Chair: Nancy E. Harriman, 500 Bailey Hall, Gorham<br>Associate Professors: Austin, Colucci, Card, Davis, Harriman, Kimball, Kissen, Ma jor, Morrill; Professors Emeriti: Costello, Neuberger

It is widely recognized that the effective reform of America's schools depends on educated citizens and qualified teachers who come to teaching with a deep knowledge of their disciplines, a concern for the active engagement of all students in learning, and an avid interest in honing their skills of collaboration as they join their colleagues at work in schools.

To support the development of such citizens and teachers, the Department of Teacher Education was among the first in the counry, in the 1980s, to develop an "extended teacher education" program. Features of extended programs include:

- a strong liberal arts background
- sustained experience with students in K-12 partner school districts
- support for personal growth and reflective, critical thinking
- an emphasis on cohesive, continuous professional development extended into the graduate level and the first years of teaching.

USM's first extended program, ETEP, has earned a statewide and national reputation for graduates who are excellent teachers and leaders in their profession. Now, USM is offering two other extended program options designed specifically
for students who know upon admission to USM that they have a strong interest in teaching at the elementary or middle level (TEAMS) or in teaching mathematics or science at the secondary level (SESAME). Each of the programs is described below.

## The Extended Teacher Education Program (ETEP)

Programs and Requirements

## Undergraduate

At the undergraduate level students who are interested in teaching should pursue an undergraduate major and degree appropriate to their teaching goals. Prospective secondary school (grades 7-12) teachers should acquire a firm grounding in one of the liberal arts disciplines currently taught in public schools. Prospective middle school (grades 5-8) teachers should acquire depth in at least two disciplines. Students interested in teaching at the elementary school level should pursue a relevant major along with courses in mathematics, science, social science, and English. Students are encouraged to explore appropriate majors by contacting the College of Education and Human Development's Admissions and Advising Office. Health insurance is required of all students in the program.

In addition to completing all of the liberal arts courses required for teacher certification in the desired area, prospective teachers should seriously consider taking the minor in educational studies as a way of exploring their interest in and commitment to teaching.

## Minor in Educational Studies

The minor in educational studies is open to students in all majors within the University. The minor highlights topics in the areas of human development, teaching as a career, learning and schooling. The minor consists of 18 credits:

| EDU | 100 | Exploring Teaching as a Profession |
| :--- | :--- | :--- |
| EDU | 200 | Education in the United States |
| EDU | 210 | Theoretical Foundations of Learning |
| EDU | 300 | Educational Media and Technology |
| HRD | 333 J | Human Growth and Development |

Three EDU elective credits approved by the program advisor.
(A course fee is assessed in EDU 300.)
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 2.5 or above. Applicants must complete and submit a signed application for the minor. These forms are available in the College of Education and Human Development's Admissions and Advising Office, 118 Bailey Hall, Gorham campus.

Qualified USM undergraduates who successfully complete the minor in educational studies, including as an elective EDU 390, Topics in Education: Portfolio Development, have exclusive access to the early admission process for the postbaccalaureate internship level of the program. The deadline for applying for early admission is October 1.

For more information on the minor in educational studies, contact the College of Education and Human Development's Admissions and Advising Office.

## Post-baccalaureate

Certification Year The certification year phase of the Extended Teacher Education Program (ETEP) is for those students who are well-suited and committed to a career in teaching. This innovative phase consists of one year (approximately 33 graduate credits) of intensive study and teaching in one of the program's professional development school sites in southern Maine. Students form a cohort group within the school site, working and leaming with mentor teachers and University faculty at the site. Successful completion of this year-long program and the meeting of other state requirements, including passing the National Teachers Examination, leads to initial teacher certification in the state of Maine.

USM students apply to the certification year of ETEP as they near completion of their undergraduate studies. Applicants must indicate their desired teaching level and subject(s) at the time of their application. The possible options include elementary (grades K-8), middle (grades 5-8), secondary (grades 7-12), and visual arts (grades K-12). The possible subject areas at the middle and secondary levels
are English, foreign language, mathematics, physical science, life science, and social studies.

Outstanding USM undergraduates who are minoring in educational studies and have already completed the course in portfolio development may apply by October 1 of their senior year for early admission to the certification year. Early admission is conditional upon successful completion of undergraduate degree requirements and the minor in educational studies prior to the start of the certification year. The regular admission application deadline is January 8.

Students who complete a relevant academic major and the minor in educational studies with distinction are strong candidates for admission into the certification year. Completion of the baccalaureate degree and the minor in educational studies does not, however, guarantee admission to this phase of ETEP.

Students interested in this program should contact the College of Education and Human Development's Admissions and Advising Office, 118 Bailey Hall, Gorham, early in the fall for the program beginning the following August.

## Master's Degree in Teaching and Learning

Upon successful completion of the certification year and the meeting of specific criteria, which include the submission and acceptance of a portfolio, students will be invited to continue work toward completion of requirements for the master of science in education degree through the Teaching and Learning program. This finalphase of ETEP, which involves 13 credits of part-time summer and weekend study, is designed to further students' learning and professional development and to provide support during the first years of teaching.

## Art Education

The Department of Art in the College of Arts and Sciences offers a concentration in art education for bachelor of fine arts candidates who wish to teach art. Information on this program is included in the Department of Art section of this catalog.

## Teachers for Elementary and Middle Schools (TEAMS)

The College of Education and Human Development expects to accept the first students into this new extended elementary education program in 1998-1999. This program is designed for students who enter USM with a strong interest in teaching at the elementary school level. Students in this program will receive intensive advising and mentoring throughout their undergraduate years, strong subject area preparation, and yearly field experiences in selected professional development school sites.

Each year students will take complementary coursework in the liberal arts, courses toward an academic major, and a professional preparation strand which includes an integrative seminar designed to help students make connections among the disciplines they are studying. Students will graduate with a bachelor's degree in a major of their choice, other than education. In addition, they will complete a year-long internship at one of USM's partner school sites that culminates in a recommendation for teacher certification. Some coursework will count toward the master of science in education degree. This is a four-and-a-half-year program which includes requirements for teacher certification and a year-long internship. Students who complete the TEAMS program will be encouraged to apply to the master's in teaching and learning program withETEPgraduates, to complete their master's degree during their initial years of professional teaching.

Acceptance into this program is contingent upon admission to USM and successful completion of the University's writing and mathematics proficiency requirements. Other acceptance criteria include a strong GPA from previous study and fewer than 30 previously eamed college credits. Students interested in this program should contact the College of Education and Human Development's Admissions and Advising Office, 118 Bailey Hall, Gorham.

The Department of Music in the College of Arts and Sciences offers a teacher preparation program leading to a bachelor of music in music education degree. Information on this program is included in the Department of Music section of this catalog.

## Secondary Science and Math Education Program (SESAME)

This collaborative program is offered by the College of Education and Human Development and the College of Arts and Sciences. The program provides advising, support, and early field experiences for students who are specifically interested in mathematics or science education. Students complete a major in science or mathematics in the College of Arts and Sciences concurrently with a strand of professional preparation courses in the College of Education and Human Development.

Students are admitted to the program with a cohort of other mathematics or science majors. Each year students enroll in one or two professional preparation seminars and courses with their cohort. These courses deal specifically with the challenges and excitement of teaching mathematics and science. Certain courses may count toward the master of science in education degree. This is a five-year program which includes requirements for teacher certification and a year-long internship in a public school setting.

Acceptance into this program is contingent upon admission to USM and successful completion of the University's writing and mathematics proficiency requirements. Other acceptance criteria include a strong GPA from previous study and fewer than 30 previously earned college credits. Students interested in this program should contact the College of Education and Human Development's Admissions and Advising Office, 118 B ailey Hall, Gorham.

## Technology Education

The Department of Technology in the School of Applied Science offers teacher preparation programs leading to baccalaureate degrees in technology education and applied technical education. Information on these programs is included in the Department of Technology section of this catalog.

## Certificate Program in Athletic Coaching

This program is designed to prepare students for certain coaching responsibilities in scloools and recreational programs. The curriculum includes an introduction to the organization and administration of athletics as well as practical work in assisting coaches in selected sports. Attention is also given to the prevention and care of the most common injuries occurring in athletic programs. Students may take courses as electives or as part of the certificate program.

A certificate will be presented to students completing the minimum 18-hour program. In addition, the proper notation will be made on the student's official transcript indicating proficiency in the area of athletic coaching as determined by the certificate program.

Course of Study in Athletic Coaching (18-credit program)
Required

| PHE | 203 | Athletic Training for Coaches |
| :--- | :--- | :--- |
| PHE | 302 | Coaching Philosophy and Fundamentals |
| PHE | 314 | Organization and Administration of Athletics |
| PHE | 389 | First Aid and CPR |
| lectives |  |  |
| PHE | 106 | NCAA Life Choices |
| PHE | 198 | Physiology of Health Fitness |
| PHE | 303 | Coaching and Officiating Basketball |
| PHE | 311 | Coaching and Officiating Soccer |


| PHE | 312 | Coaching and Officiating Football |
| :--- | :--- | :--- |
| PHE | 315 | Coaching and Officiating Field Hockey |
| PHE | 316 | Coaching and Officiating Volleyball |
| PHE | 335 | Coaching and Officiating Baseball and Softball |
| PHE | 391 | Field Experience/Intemship |

## CPI 110/CPI 111 Individual Learning and

 Development in the TEAMS ProgramThese courses are the first in a series designed to integrate liberal arts study, educational pedagogy, and school field experiences. CPI 110, a seminar, and CPI 111, a school-based practicum, are to be taken concurrently with Human Growth and Development (HRD 333J). These courses have four purposes: 1) to develoop a community of learners through a variety of activities, including experiential education; 2) to have students examine their own development as they make the transition to University life and study; 3) to support students in applying the principles of human growth and development in partner school settings; and 4) to introduce students to the TEAMS program and the world of schooling. Prerequisite: admission to the TEAMS Program; corequisite: HRD 333J. Cr 3.

## 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 leaming 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.

## EDU 324 Student Teaching

For students matriculated in a USM undergraduate teacher education program in music education, technology education, or art education, a supervised student teaching experience of one full semester, carried out in an off-campus field setting, is required. Students must have met their program's requirements to register for student teaching. Prerequisites: vary according to major. This course requires health insurance.

Cr 12.

## EDU 336 Children's Literature

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. One of the sections of EDU 390 concentrates on the portfolio development process.

Cr 3.

## HRD 333J Human Growth and Development

Please refer to the course description in the Department of Human Resource Development section that follows.

Cr 3.

## 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 finess.

Cr 1 .

## PHE 106 NCAA Life Choices

This course is designed for student athletes in their first or second year at USM. The goal of the course is to enable students to develop their acadernic potential and to realize their personal and athletic goals during their college experience. Through large and small group work, topical readings, and community service projects, students will clarify goals and values. Prerequisite: open to first and second year students only.

Cr 3.

## PHE 198 Physiology of Health Fitness

The purpose of this course is to provide the student with a scientific background in exercise physiology and health concepts in order to develop and maintain a lifetime program of high level physical fitness and quality health.

Cr 3 .

## PHE 203 Athletic Training for Coaches

This introductory course in sports medicine/athletic training will provide the student with information about prevention and management of sports-related injuries. Pertinent anatomy and common injuries
will be discussed. This course is geared toward individuals involved in or pursuing allied health professions as well as coaching or teaching fields.

Cr 3.

## 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.

Cr2.

## PHE 232 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. 10-day program.

Cr 3.

## PHE 242 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 oneself). 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 competion. The psychological and emotional aspects of coaching are also invesigated. One segment of the course will be concerned with society's view of coaching as illustrated by today's literature. Cr 3.

## PHE 303 Coaching and Officiating Basketball

Coaching philosophy, coaching style, choosing a team, individual fundamentals, team play development, and the ability to organize and maintain a
quality program will be stressed. The course will also cover rules of basketball and techniques of officiating.

Cr 3.

## PHE 310 Experiential Learning in Outdoor Education Ropes/Initiative Course Construction and Use

Participants can expect to gain first-hand lnowledge and experience through actual paricipation 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 or her own educational program.

Cr 3.

## Mountaineering

Designed to gain knowledge in technical mountaineering and to improve capabilities in technical rock climbing.

Cr 3.

## Orienteering

Designed to gain knowledge in expedition planning and route finding.

Cr 3.

## PHE 311 Coaching and Officiating Soccer

The course will cover individual techniques and team tactics, drills to implement these techniques and tactics, practice and season organization and methods of starting, maintaining and improving programs at various levels. The course will also cover rules of soccer and techniques of officiating.

Cr 3.

## PHE312 Coaching and Officiating Football

Emphasis on the methods of teaching and coaching football. Offense and defense, player-coach relationship, team selections, planning of practice sessions and game situations will be areas of concentration. The course will also cover rules of football and techniques of officiating.

Cr 3.

## PHE 314 Organization and Administration of

 AthleticsThis course covers the principles and practices of athletic administration as related to middle schools, junior and senior high schools.

Cr 3.

## PHE 315 Coaching and Officiating Field Hockey

Emphasis on the methods of teaching and coaching field hockey. Offense and defense, player-coach relationship, team selections, planning of practice sessions and game situations will be areas of concentration. The course will also cover rules of field hockey and techniques of officiating. Cr 3.

PHE 316 Coaching and Officiating Volleyball
Emphasis on the methods of teaching and coaching volleyball. Offense and defense, player-coach relationship, team selections, planning of practice sessions and game situations will be areas of concentration. The course will also cover rules of volleyball and techniques of officiating. Cr 3.

## PHE 325 Workshop in Experiential <br> Education-Leadership and Learning Center at Wolfe's Neck Farm

This course is designed to promote personal growth through a group workshop in experiential education. Experiental education is an adventure-based model of the learning process; leaming takes place through action. Learning experiences in this course will include: exploring the natural world; problem solving; taking risks; taking action; and reflecting on relationships in a community. This course takes place at the USM Outdoor Center for Learning and Leadership ropes course in Freeport. Low ropes course and high ropes course elements will be included in the curriculum. Fee course. Cr 3.

## PHE 335 Coaching and Officiating Baseball and Softball

The course will cover individual and team techniques, drills to implement these techniques, practice organization and methods of starting, maintaining and improving programs at various levels. The course will also cover rules of baseball and softball plus techniques of umpiring.

Cr 3.
PHE 343 Experiential Education-The Outward Bound Experience-Hurricane Island Outward Bound School (Semester Internship Program)
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 paricipate in a solo, (an experience of self-isolation in a natural environment, designed for reflection into oneself). 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. 76-day program. Cr 6-12.

## PHE 353 Teacher Training-Experiential Education

This course focuses on facilitating techniques for leading groups through experiential activities. Group assessment, program design, sequencing, briefing, debriefing, group management, safety, and technical skills are included in the course curriculum. Methods and techniques for utilizing no-prop, field activities, indoor activities, low ropes course elements and high ropes course elements will be explored to discover strategies for involving people in new ways of learning. A practicum component is included where students co-facilitate with a variety of groups. The course is held at the USM Outdoor Center for Learning and Leadership ropes course in Freeport. Prerequisite: PHE 325 or instructor permission.

Cr 3-6.

## PHE 389 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, arificial respiration, wounds, poisoning, water accidents, drugs, bums, emergency childbirth, emergency rescue and transfer, and CPR. Successful completion of the course requirements will lead to: Advanced Red Cross FirstAid and CPR certification.

Cr 3.

## PHE 391 Field Experience/Internship

Practical field work in a coaching area. The student will be assigned as an assistant coach in a sport for a season. Supervision, evaluation, and guidance of the student will be provided by a staff member who is responsible for that coaching area. Prerequisites: PHE 203, PHE 302, PHE 314. Restricted to students in coaching certificate program.
Cr 1-6.

## PHE 398 Independent Study in Physical <br> Education

Provides students who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest, bearing upon it previous course experience and emerging with an intellectually sound, coherent synthesis reflecting a high caliber of performance. Prerequisite: permission of instructor.

Cr 1-6.

# Department of Human Resource Development 

Chair: C.E. (Zark) VanZandt, 400 Bailey Hall, Gorham<br>Professors: Brady, Murphy, Sutton, Van Zandt; Associate Professors: Atkinson, Fall, Steege, Stevens, Vess; Assistant Professors: Katsekas, Larson; Instructors: Bernacchio, Collins

The Department offers undergraduate courses that support the programs within the College of Education and Human Development and may serve as electives for programs outside the College. Please see the graduate catalog for information on graduate programs offered.

## HCE 500 Orientation to the Counseling Profession

The course provides a broad overview of the profession's historical and theoretical foundations, and starts the development of a professional idenlity. This course should be taken prior to matriculation into the counselor education program or must be taken the first semester following matriculation.

Cr 3 .

## HCE 502 The Family: Implications for Educators

This course reviews selected topics in the area of family life. The course will provide a multi-disciplinary overview of major theories of family behavior, precursors to marital and family life, and the variability of family life across the life span. Consideration will be given to such issues as parenting styles, sibling relationships, effects of divorce, single-parent families, blended families, family violence, and substance use, abuse, and dependence within the family.

Cr 3.

## HCE 504 Women's Issues in Counseling

This course will examine the impact of sex roles and sex role stereotypes on the development, understanding, and treatment of psychological problems. Biases in psychological theories and at itudes of professionals have often reflected the sexism of society at large, and these explanations of human motivation and behavior may not sufficiently describe mental health problems today. The course focuses on the role of human service professionals in promoring and understanding these concepts.

Cr 3 .

course encourages self-reflection, critical thinking about one's self in relation to others and the environment, and active participation in a community of learners interdependent with each other. 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 multi-disciplinary 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, guidedmeditation, dream work, and simulated vision quests.

Cr 3.

## HRD 335 Educational Psychology

Basic principles, techniques, and research in educational psychology. A special consideration given to the leaming process, perception, motivation, individual differences, and measurement, with reference to the facilitation of effective teaching and learning. Prerequisite: junior or senior status.

Cr 3 .

## HRD 337 Peer Leadership Seminar

This course is intended for students who participate in organized student leadership programs or are interested in learning more about leadership within higher education organizations. The course examines the nature of higher education organizarons, leadership theory, college student development theory, as well as both interpersonal and group communication skills. Through written and oral projects students learn how to integrate theory with
practice. Assignments and projects draw their focusfrom the individual's particular interests regarding student leadership.

## 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.

## HRD 501 Strategies and Techniques in Classroom Management

This course will consist of a variety of strategies, techniques, and philosophical issues related to adultchild relationships. The focus of the course will be to provide both a theoretical base and practical experience for dealing with classroom and schoolrelated issues.

Cr 3.

## HRD 530 Death, Dying, and Bereavement

This course examines the phenomenon of death in modern society. Issues such as the meaning of death, the dying process, survivorship, suicide and how death affects individuals of various ages are treated. Special attention is paid to the role of the professional in death education.

Cr 3.

## HRD 557 Gerontology for Educators

This course is an introduction to the field of educational gerontology. Key issues to be treated include demographic trends, theories of aging, problems and opportunities in later-life learning, productive retirement, and educational opportunities for elders. A major goal of the course is to invite professional educators to explore human aging with an eye toward improving teaching and/or program development with elder populations. Cr 3 .

## HRD 558 Summer Institute in Educational Gerontology: Aging and Life Review

This course examines the process of life review and its role in human aging. The phenomena of memory, imagination and identity in later age will be examined. Participants will develop practical methods of facilitating life review of themselves and older clients. Cr 3.

## HRD 559 Summer Institute in Educational Gerontology: Aging, Death and Bereavement

 This course examines the phenomenon of death in modern society with a special emphasis on implications of older persons. Issues such as the meaning of death, the dying process, survivorship, and suicide are treated. Special attention is paid to the role of the professional in death education. Cr 3.
# School of Business 

Dean: John M. Burt<br>Director of Student Affairs: Jean E. Gutmann; Director of External Linkages and Partnerships: Michael Donahue; MBA Program Directors: John J. Voyer and Valarie C. Lamont; Center for Business and Economic Research: Co-Directors: Bruce H. Andrews, Charles F. Davis; Maine Business Indicators Consulting Editor, Robert C. McMahon; Maine Small Business Development Centers Program Director: Charles F. Davis; Institute for Real Estate Research and Education: Director: Valarie C. Lamont; Associate Director: Susan M. Jones; Coordinators of Student Affairs/Academic Counselors: Sharon L. Bannon, Cynthia A. Young; Program Operations Manager: Alice B. Cash

## Department of Accounting

Chair: John J. Sanders, 417 Luther Bonney, Portland
Professors: Gutmann, Jagolinzer, Potts; Associate Professors: Sanders, Violette; Assistant Professor: Jackson

## Department of Business Administration

Chair: Warren Purdy, 118 Bedford Street, Portland
Professors: B. Andrews, Gold, Houlihan, Neveu; Associate Professors: Aiello, S. Andrews, Artz, Bay, Claggett, Clarey, Grover, MacDonald, Manny, Phillips, Purdy, Voyer, Westfall; Assistant Professors: Jensen, Munger, Rahman, Smoluk

## Programs and Requirements

The School of Business offers a number of programs to meet different 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 are available in accounting or business administration. The School also provides a graduate program leading to the degree of master of business administration (see graduate catalog for information).

To ensure that students graduate with a current understanding of their field, Deparmental approval is needed to use upper-level School of Business courses, or their transfer equivalents, to fulfill requirements for the major when the courses were taken more than 10 years before the awarding of the degree.

Any School of Business major or minor who has enrolled in an ABU, ACC, or BUS course more than twice must, before continuing in that course, complete and have approved by the Deparment chair, a course condition form (available from the School of Business academic advisors.) Failure to do so may result in course credit disqualification.

Note: Specific courses presented in this catalog may not be offered each semester.

## Cooperative Education Program

Students are encouraged to participate in cooperative education to experience on-the-job leaming. Employment in a professional setting provides opportunities to apply and evaluate classroom learning, develop work-related skills, and explore careers. Credit may be received for paid or non-paid positions with new employers or for new responsibilites with current employers. Credit is not granted for past work experience. Students obtain co-op positions by contacting the School of Business co-op coordinator, or by contacting employers to develop positions. All students should feel free to contact faculty and program chairs forco-op position availability or to make their own contacts with potential employers. A co-op student works a minium of 140 hours on-site and will be advised by a faculty member during the co-op process. The student negotitates with the faculty a leaming contract that contains a job description, the student's leaming goals, self-directed leaming activities, and the evaluation process. Grading is pass/fail. Refer to the course descriptions for ABU 285, ACC 395, ACC 396, BUS 395, and BUS 396 for prerequisites and restrictions. For further information, contact the School of Business Co-op Office at 780-4020.

## Master of Business Adminstration 3-2 Program

The master of business administration (MBA) 3-2 program allows interested and qualified students to complete a bachelor's degree and an MBA in five years depending on the undergraduate major. (Degree requirements for some majors necessitate a longer completion time.) Generally, students in the 3-2 program focus on their bachelor's degree requirements during their first three years, a mix of bachelor's and MBA requirements in the fourth year, and mostly MBA requirements in the fifth year. Each degree is awarded once the specific degree requirements are successfully met.

## Admission Requirements

Students may enroll in the 3-2 program either directly from high school, or after the end of their junior year of undergraduate studies. Students entering directly from high school need an SAT combined score of 1200 or higher. Students entering directly from high school will be required to attain a grade point average of 3.0 or higher after 90 credit hours of undergraduate coursework to remain in good standing and be allowed to continue in the 3-2 program. Students currently enrolled in a baccalaureate degree program at USM may enter the 3-2 program by meeting the regular MBA admission criteria of a formula score of 1100 or higher with a minimum GMAT score of 500 . (The formula is: undergraduate grade point average x 200, plus the GMAT total score.) Students entering the 3-2 program after they are enrolled at USM will be required to attain a grade point average of 3.0 or higher after 90 credit hours of undergraduate coursework to remain in good standing and be allowed to continue in the program.

## Enrollment in MBA-level courses

In either admission path, a student may not enroll in MBA-level courses until after they have accumulated 90 credit hours of undergraduate coursework.

The 3-2 program for majors outside the School of Business
USM Undergraduate Core 34 credit hours
Undergraduate Major \& Electives
*MBA Foundation Requirements
As determined by the major
18-21 credit hours
*MBA Core and Electives
Total:
30 credit hours
$150+$ credit hours (undergraduate and graduate)

The 3-2 program for Accounting and Business Administration majors
\(\left.$$
\begin{array}{ll}\text { USM Undergraduate Core } & \begin{array}{l}34 \text { credit hours } \\
\text { Undergraduate Major \& Electives }\end{array} \\
\text { *MBA Foundation Requirements }\end{array}
$$ \begin{array}{l}As determined by the major <br>
Fulled by undergraduate major <br>

requirements\end{array}\right]\)| *MBA Core and Electives | 30 credit hours |
| :--- | :--- |
| Total: | (undergraduate and graduate) |

*Please refer to the USM graduate catalog for MBA foundation, core, and elective courses.

## Associate of Science in Business Administration

The associate program in business administration is designed to meet the employment needs of today's business and nonprofit organizations. The curriculum has been developed based upon input from employers and from economic trends, which clearly indicate a need for a course of study that is entrepreneurial in nature but also covers the basics of business. The curriculum integrates instruction in accounting, marketing, management, oral and written communication, technology applications, decision making, and leadership development with hands-on work experience.

The associate program includes a common core of courses, which provides for a solid grounding in business and the liberal arts. Students will also have the opportunity to participate in at least one field-based experience. During the second year, students choose to focus on one of three courses of study.

Students who complete our associate program will be well-prepared to enter the workforce in entry-level management positions and training programs, or to increase their responsibilities with their current employers. Students may also choose to transfer into a baccalaureate programin business administration, or another field of study, at USM or another institution of higher education.

## 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 Southern Maine application and specify the associate in business administration program. Candidates also must complete the Scholastic Aptitude Test if applying within three years of high school graduation.

## Transfer Policy

All of the courses within the associate program are transferable to the baccalaureate programs, providing a grade of C - or better is obtained, as general electives or toward major requirements as described below.

To be admitted from the associate degree program to the baccalaureate status within the School of Business, 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 (2.0). ABU 260 Marketing must be validated. Other associate level courses do not have baccalaureate equivalency and therefore transfer as general electives.

From the time of admission to baccalaureate status within the School of Business, an individual must fulfill the remaining criteria for admission to a major in the same manner as any other baccalaureate student.

## Course Enrollment Policy

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 priorities:

1. They havedeclared a major which requires the course in its curriculum;
2. They have been admitted as baccalaureate degree students in the School of Business;
3. They are admitted to the University as degree candidates; and
4. They are non-degree students.

## Associate Degree Requirements

The minimum number of credits required for the degree is 60 (including 15 credits of ABU, SBU, ACC, orBUS courses completed at the University of Southem Maine).

Basic Requirements ( 15 credits)
ENG 100C College Writing
ABU 119 Business Communication
THE 170F Public Speaking
Social Science (J) from the Core curriculum (3 credits; cannot use economics)
Select one of the following three courses ( 3 credits)

| MAT | $105 D$ | Mathematics for Quantitative Decision Making |
| :--- | :--- | :--- |
| MAT | 108 | College Algebra |
| ABU | 110 | Analytical Tools for Problem Solving in Business |
|  |  |  |
| ABU Requirements | ( 30 credits) |  |
| ABU | 105 | Venturing into Business |
| ABU | 140 | Entrepreneurship and Small Business Management |
| ABU | $190^{*}$ | Computers in Business |

\(\left.$$
\begin{array}{lll}\text { ACC } & 110 & \begin{array}{l}\text { Financial Accounting Information for Decision Making } \\
\text { ACC }\end{array}
$$ <br>

Managerial Accounting Information for Decision\end{array}\right]\)| Making |
| :--- | :--- | :--- |

## Accounting Focus (15 credits)

This option includes additional courses in accounting, taxation, and special topics taught by members of the accounting faculty and professional practitioners from the business community. Students who elect the accounting focus will be preparing themselves for a variety of jobs upon graduation in the public accounting, business, and nonprofit sectors.

| ABU | 215 | Accounting Topics for Small Business |
| :--- | :--- | :--- |
| ABU | 225 | Small Business Finance |
| ABU | 285 | Cooperative Education (must be in accounting) |

Choose one of the following:

| ABU | 290 | Technology Applications in Small Business |
| :--- | :--- | :--- |
| ABU | 245 | Managing the Family Owned Business |
| ABU | 255 | Managing the Growing Business |
| ABU | 299 | Special Topics: Small Business and Entrepreneurship |
| General elective (3 credits) |  |  |

Entrepreneurial Management and Small Business Focus ( 15 credits)
Recognizing that over 95 percent of the people in the nation work for businesses employing under 100 people, this option takes an entrepreneurial approach including courses that emphasize theory and skill development directed toward employees in small and medium sized businesses.

| ABU | 255 | Small Business Finance |
| :--- | :--- | :--- |
| ABU | 243 | Planning the Business Venture |
| ABU | 285 | Cooperative Education (must be in small business) |
| Choose one of the following: |  |  |
| ABU | 290 | Technology Applications in Small Business |
| ABU | 245 | Managing the Family Owned Business |
| ABU | 255 | Managing the Growing Business |
| ABU | 299 | Special Topics: Small Business and Entrepreneurship |
| General elective ( 3 credits) |  |  |

## Pre-Baccalaureate Business Focus (15 credits)

Although associate degree courses are transferable, the pre-baccaulaureate business curriculum maximizes the number of credits that can be directly applied towards a bachelor's degree in business administration. This option is designed for students who plan to pursue a baccalaureate degree at some time in the future but wish to attain an associate's degree as a shorter-term goal.

| MAT | 211D | Probability |
| :---: | :---: | :---: |
| MAT | 212 | Statistics |
| ECO | 101J | Introduction to Macroeconomics |
| CAS | Elective |  |
| Choose one of the following: |  |  |
| ABU | 290 | Technology Applications in Small Business |
| ABU | 245 | Managing the Family Owned Business |
| ABU | 255 | Managing the Growing Business |
| ABU | 299 | Special Topics: Small Business and Entrepreneurship |

## Baccalaureate Programs in Business Administration and Accounting

The primary objective of the undergraduate baccalaureate programs in business administration and accounting is to develop the student's abilities to assume the responsibilities of general and financial management. The programs aim 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 programs are 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 kowledge of certain fields which are particularly relevant to the study of management. Third, the student undertakes to acquire a deeper knowledge of the selected major field, either accounting or business administration. This is accomplished by taking 27-36 credit hours beyond the common requirements in business and economics.

## 300-Level Course Policy

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.
3. They are admitted to the University as degree candidates.
4. They are non-degree students.

## Validation of Upper-Division School of Business

 Course RequirementsCourses in the School of Business which are numbered 300 or higher shall typically be taken only by juniors and seniors. In order for a student to receive credit toward a School of Business degree for a 300-level or 400 -level business or accounting course taken while 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 upperdivision business or accounting courses or their equivalents while they are freshmen, sophomores, or associate degree students at either USM, other University of Maine System instituions, or other community/junior colleges and baccalaureate degree granting institutions from which transfer credit may be requested. The School of Business normally accepts transfer credit from institutions which have regional accreditation (e.g., New England Association, North Central, WICHE, etc).

1. BUS 340 Managing Organizational Behavior may be validated by obtaining a passing score on the Dantes Organizational Behavior Subject Exam
2. BUS 360 Marketing may be validated by (1) obtaining a passing score on the CLEP subject exam Introductory Marketing or (2) earning a C (2.0) or higher in BUS 361 International Marketing, BUS 363 Advertising, BUS 365 Consumer Behavior, or BUS 367 Managerial Marketing
3. BUS 380 Advanced Legal Issues in Business may be validated by obtaining a passing score on the College Level Equivalency Program (CLEP) subject exam Intro to Advanced Legal Issues in Business I designed by the Educational Testing Service.
4. ACC 301 Intermediate Accounting I may be validated by earning a grade of C (2.0) or higher in ACC 302 Intermediate Accounting II.
Other 300-level or 400 -level courses in the School of Business cannot be validated at this time.

If a student does not succeed in validating a 300-level or 400-level business or accounting course taken as a freshman, sophomore, or associate degree student, then that course cannot be applied toward fulfilling a School of Business degree requirement or general elective, and the appropriate business or accounting course must be completed.

The School of Business 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 2.0 or higher in USM courses applied toward the degree. Students need a 2.0 average in School of Business courses that fulfill requirements for the accounting major or serve as advanced business study in general electives. Accounting majors and minors also must attain a grade of $\mathrm{C}(2.0)$ or higher in each ACC designated course. This minimum grade must be obtained before a course can serve as a prerequisite for later courses. If a student fails to meet the above grade requirements, ACC courses may be repeated once. Transfer students majoring in accounting will need to complete at least 12 credits of 300 -level or 400levelACC designated courses at USM to obtain a B.S. degree. In addition, at least 50 percent of the basic and major requirements for accounting majors must be taken at USM.

Students must be of junior standing (completed 53 credits) and are expected to have a minimum grade point average of 2.0 for USM courses applied toward the degree before taking any 300 - or 400 - level ACC or BUS designated courses.

The minimum number of credits, including the University's Core curriculum, required for the degree: 120 . A minimum of 60 credits must be taken from courses outside the disciplines of accounting or business. Students are encouraged to take more than the minimum. Further, students majoring in accounting are required to take 12 credits in one discipline outside the School of Business, with at least 3 of these credits at the 300 or 400 level. A combination of Core curriculum requirements and general electives may be used to achieve the 12 credit requirement.
A. Core Curriculum Requirements ( 28 credits)

Basic Competence

1. English Composition (3 credits)

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 credits)
3. Quantitative Decision Making

This requirement may be fulfilled by taking MAT 211D stipulated below under the supplementary requirements.
Methods of Inquiry/Ways of Knowing

1. Fine Arts
a. Performance-centered arts (3 credits)

This requirement may be fulfilled by taking the oral communication skills course stipulated below under the supplementary requirements in oral communication skills.
b. History-centered arts (3 credits)
2. Humanities
a. Literature (3 credits)
b. Other Times/Other Cultures ( 3 credits)
3. Social Science to exclude ECO, BUS, and SBU courses (6 credits)
4. Natural Science (4 credits)
5. Interdisciplinary COR course ( 3 credits)
B. Requirements for Accounting ( 69 credits)

1. Mathematics (6 credits)
a. MAT 211D Probability
b. MAT 212 Statistics
2. Oral Communication Skills (3 credits

THE 170F Public Speaking
3. Basic Requirements for Accounting ( 33 credits)

BUS 280 Legal Environment of Business
ECO 101J Introduction to Macroeconomics
ECO 102J Introduction to Microeconomics

| BUS | 270 | Quantitative Business Analysis |
| :--- | :--- | :--- |
| BUS | 320 | Business Finance |
| BUS | 340 | Managing Organizational Behavior |
| BUS | 360 | Marketing |
| BUS | 375 | Production/Operations Management |
| BUS | 381 | Law for Accountants |
| BUS | 450 | Business Policy and Strategy |
| Select an International Business or economics course such as BUS |  |  |
| 330, BUS 335, BUS 361, BUS 382, ECO 360, ECO 361, or ECO 370. |  |  |
| 4. Major Field (27 credits) |  |  |
| ACC | 110 | Financial Accounting Information for Decision |
|  |  | Making |
| ACC | 211 | Managerial Accounting Information for Decision |
|  |  | Making |
| ACC | 213 | Computers and Systems in Accounting |
| ACC | 301 | Intermediate Accounting I |
| ACC | 302 | Intermediate Accounting II |
| ACC | 305 | Cost Management Systems |
| ACC | 313 | Taxation |
| ACC | 410 | Auditing and Assurance |
| Selt |  |  |

Select one or more additional courses, totaling 3 credit hours, from among 400-level accounting offerings.
For those students pursuing a career in public accounting, we recommend taking ACC 441 Advanced Financial Accounting. For those students pursuing a career in industry, we recommend taking ACC 406 Advanced Managerial Accounting.
Certain accounting courses are offered only once a year. Students should inquire about these when developing their academic program.
C. General Electives: ( 23 credits)

Three of the 23 credit hours may be taken in economics. Thereafter, only six additional credit hours in general electives may be taken in accounting, business, or economics.

## Computer Proficiency

Certain courses in business and accounting have computer proficiency as a prerequisite. This proficiency may be demonstrated by successfully passing the School of Business Computer Proficiency Examination or earning a grade of Cor better in ABU 190 Computers in Business. The establishment of computer proficiency is a requirement for graduation in the accounting major.

## Minor in Accounting

The minor in accounting is designed primarily to permit undergraduate majors from outside the School of Business, as well as business administration majors, to develop a better understanding of accounting and its role in various decisions, and/or to explore the possibility of study for a career in accounting or related fields.

Students wishing to pursue the minor must obtain a copy of the Authorization for Accounting Minor form from the School of Business, complete and return it to the School of Business advisor, signed by the student's current advisor for his or her major. An overall GPA of 2.0 is required at the time of application.

Accounting minors must attain a C (2.0) or higher in each ACC designated course. A student may transfer to the minor up to six credit hours of comparable accounting courses, with grades of $\mathrm{C}(2.0)$ or better, from acceptable institutions.

The minor in accounting is 15 credit hours, normally consisting of the following courses:

| ACC | 110 | Financial Accounting Information for Decision Making <br> (3 credits) <br> Managerial Accounting Information for Decision <br> ACC |
| :---: | :---: | :--- |
| Making (3 credits) |  |  |


| ACC | 305 | Cost Management Systems (3 credits) |
| :--- | :--- | :--- |
| ACC | 313 | Taxation (3 credits) |
| ACC | 315 | Internal Auditing (3 credits) |

*Students must meet computer proficiency as a prerequisite to ACC 213. See computer proficiency description above.

## Minor in Economics

In cooperation with the Economics Department, an 18 -credit hour minor in economics is available to all accounting majors. To gain admission to the economics minor, accounting majors must be in good standing at the University and submit an Economics Minor Authorizarion Form to the Economics Department. The 18 credit hours must be completed with a 2.0 cumulative grade point average and must include: ECO 101J, ECO 102J; 3 credits from ECO 103E, ECO 105H, or ECO 106I; and 9 additional credits from 300- and 400 -level ECO courses.

## Bachelor of Science in Business Administration

## Degree Requirements

The minimum number of credits (including the University's Core curriculum) required for the degree: 120 . To be eligible for the B.S. degree, a student must have attained an accumulative grade point average of 2.0 or higher in USM courses applied toward the degree. Students need a 2.0 average in School of Business courses that fulfill requirements for the business administration major or serve as advanced business study in general electives.

Students must be of junior standing (completed 53 credits) and are expected to have a minimum grade point average of 2.0 for USM courses applied toward the degree before taking any 300 - or 400 - level ACC or BUS designated courses.

Of the 120 credits required for the degree, a minimum of 60 credits must be taken from courses outside the disciplines of accounting or business. Students are encouraged to take more than the minimum. A minimum of 50 percent of all the business courses (BUS/ACC/ECO) used to fulfill major requirements must be taken at USM.
A. Core Curriculum Requirements ( 28 credits)

Basic Competence

1. English Composition (3 credits)

Students who fulfill the English Composition Competence of the Core curriculum without eaming credits must complete three credits of elec-
lives from CLA, ENG, FRE, GER, GRE, LAT, or SPA courses.
2. Skills of Analysis/Philosophy (3 credits)
3. Quantitative Decision Maling

This requirement may be fulfilled by taking a mathematics course stipulated below under the business administration requirements.
Methods of Inquiry/Ways of Knowing

1. Fine Arts
a. Performance-centered arts

This requirement may be fulfilled by taking the oral communication skills course stipulated below under the business administration requirements.
b. History-centered arts (3 credits)
2. Humanities
a. Literature ( 3 credits)
b. Other Times/Other Cultures ( 3 credits)
3. Social Science (not to include ECO or BUS courses) ( 6 credits)
4. Natural Science (4 credits)
5. Interdisciplinary COR course ( 3 credits)
B. Requirements for Business Administration ( 63 credits)

1. Mathematics (6 credits)

MAT 211D Probability
MAT 212 Statistics
2. Oral Communication Skills (3 Credits)

THE 170F Public Speaking

| 3. Foundation Courses in Business (18 credits) |  |  |
| :---: | :---: | :---: |
| ACC | 110 | Financial Accounting Information for Decision Making |
| ACC | 211 | Managerial Accounting Information for Decision Making |
| BUS | 101 | Geting Down to Business |
| BUS | 280 | Legal Environment of Business |
| ECO | 101J | Introduction to Macroeconomics |
| ECO | 102J | Introduction to Microeconomics |
| Computer Proficiency (see below) |  |  |
| 4. Major Field (36 credits) |  |  |
| BUS | 270 | Quantitative Business Analysis |
| BUS | 320 | Business Finance |
| BUS | 327 | Investment Management |
| BUS | 340 | Managing Organizational Behavior |
| BUS | 345 | Information Technology/Management Information Systems |
| BUS | 360 | Marketing |
| BUS | 375 | Production/Operations Management |
| BUS | 450 | Business Policy and Strategy |
| Three credits must be taken from the following courses: |  |  |
| BUS | 330 | International Financial Management |
| BUS | 335 | International Business |
| BUS | 361 | International Marketing |
| BUS | 382 | International Business Law |
| Nine credits must be taken from the following courses: |  |  |
| ACC | 213 | Computers and Systems in Accounting |
| BUS | 328 | Financial Institutions and Markets |
| BUS | 330 | Internaional Financial Management |
| BUS | 331 | Portfolio Management |
| BUS | 332 | Advanced Corporate Finance |
| BUS | 335 | International Business |
| BUS | 346 | Personnel and Human Resource Management |
| BUS | 349 | Women in Management |
| BUS | 350 | Career Planning and Development (one credit hour) |
| BUS | 361 | International Marketing |
| BUS | 363 | Advertising |
| BUS | 365 | Consumer Behavior |
| BUS | 367 | Managerial Marketing |
| BUS | 368 | Service Quality and Customer Savisfaction |
| BUS | 369 | Marketing Research |
| BUS | 377 | Computer-Based Decision Modeling and Simulation |
| BUS | 380 | Advanced Legal Issues in Business |
| BUS | 381 | Law for Accountants |
| BUS | 382 | International Business Law |
| BUS | 385 | Entrepreneurship and Small Business Formation |
| BUS | 395 | Cooperative Education I |
| BUS | 396 | Cooperative Education II |
| BUS | 399 | Special Topics in Business and Management |
| BUS | 485 | Managing the Growing Entrepreneurial Venture |
| BUS | 490 | Independent Study |
| BUS | 499 | Special Topics in Business and Management |
| ECO | 310 | Money and Banking |
| C. General Electives ( 29 credits) |  |  |
| Three of the 29 credit hours may be taken in economics. Thereafter, only 12 additional credit hours in general electives may be taken in accounting, business, or economics. If SBU 165 J is taken as a Core class, the number of additional credit hours is reduced to 9 . |  |  |

## Computer Proficiency

Certain courses in business administration have computer proficiency as a prerequisite. This proficiency may be demonstrated by successfully passing the School
of Business Computer Proficiency Examination or earning a grade of C - or better in ABU 190 Computers in Business. The establishment of computer proficiency is a requirement for graduation in the business administration major.

## Finance Concentration

The finance concentration will prepare business administration majors for careers in corporate finance, banking, inves ments, and related fields. Students will learn a blend of theoretical and practical concepts and be encouraged to apply this knowledge to the real world. The program will develop analytical and critical thinking skills which will aid students throughout their careers. In addition to the core business courses (BUS 320 and BUS 327), the student must select three courses ( 9 credits) from the following concentration:

| BUS | 328 | Commercial Banking |
| :--- | :--- | :--- |
| BUS | 330 | Intemational Finance |
| BUS | 331 | Portfolio Management |
| BUS | 332 | Advanced Corporate Finance |
| BUS | 395 | Cooperative Education I (must be in the field of finance) |
| BUS | 490 | Independent Study (when done in the finance area) |
| ECO | 310 | Money and Banking |

## Minor in Business Administration

A self-designed 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 23 credit hours and a grade point average of 2.0 or higher.

The 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 minor must obtain the appropriate forms from the School of Business, complete the forms and return them to the School of Business signed by the student's advisor for his or her major. The courses to be included in the minor (minimum of 21 credit hours) are selected from the following: ACC 110, ACC 211, SBU 165J, BUS 101 orSBU 100, BUS 280, or 300-level or higher BUS courses. A minimum overall grade point average of 2.0 in minor area courses is required to complete successfully the self-designed minor in business administration. At least $50 \%$ of the courses ( 12 credits) must be completed in the School of Business.

## 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 office. Please refer to the graduate catalog for further information.

## Specific School of Business Courses in this catalog

## may not be offered each semester

## ABU 105 Venturing into Business

This course places students into the position of a member of a small business management team in a virtual marketplace in competition with other student teams. This provides an integrated, comprehensive overview of the way the typical small business operates and what it takes to manage one. It introduces students to the basic knowledge used in running such a business, and the interrelationships of such areas as marketing, finance, manufacturing, and management. Specific emphasis is placed on developing the knowledge and skills to operate as a member of an effective team. It also develops skills in planning, organizing, staffing, directing, and controlling a small business. The simulation is supported by readings, outside speakers, and class discussions. Thiscourse is open to any student who
has no more than 6 credits of college level business and/or accounting courses.

Cr 3.

## ABU 110 Analytical Tools for Problem Solving in Business

This course provides the student with a basis in problem-solving skills that will prove useful throughout his orher academic program and future career. It explores various areas of critical thinking concepts and problem-solving techniques. The course will reflect the contributions of various disciplines to the enhancement of critical thinking, including logic, mathematics, and the humanities in general. Much of what is learned will be through the application of a variety of techniques to the understanding and/or solution of specific problems. Prerequisite: MAT 010, MAT 015B, or evidence of
successfully completing the University's mathematics proficiency requirement.

## ABU 119 Business Communication

This course introduces students to business communication strategies and provides practice in the application of those strategies using the case method. Students compose business letters, short and long reports, and employment writing. (Formerly ENG 019) Prerequisite: ENG 100C. Cr 3.

## ABU 140 Entrepreneurship and Small Business Management

A comprehensive study of the fundamentals of management with an emphasis on entrepreneurial approaches to the start-up and management of small- to medium-sized businesses. Topics include venture opportunity analysis; managerial problem solving and decision making; planning, organizing, leading, and controlling; ethics and social responsibility; and international management. Prerequisites: ECO 102, ABU 105.

## ABU 180 Introduction to Computing

A first computer course, introduces computer technology through an extensive exploration of word processing, MS-DOS operating system, MS windows graphical user interface, and computer hardware, using IBM compatible computers. Also provided is substantial coverage of E-mail and other Internet activities, along with some exploration of presentation software. Exposure to other facets of modern compuing will be offered as time permits. There is substantial hands-on computing required outside of class. Prerequisites: none. (Students who have met the School's computer proficiency requirement, e.g., ABU 190, may not enroll.) Cr 3.

## ABU 190 Computers in Business

An examination of business problem-solving techniques using modern computer applications software. Primary focus is on the use of electronic spreadsheets as a business problem-solving tool, including proper spreadsheet model design and the use of appropriate graphical representation of model results. Other computer problem-solving software is examined. Interpretation and effective communication of results, both written and oral, are practiced. Prerequisite: MAT 011B or equivalent proficiency and computer literacy.

Cr 3.

## ABU 215 Accounting Topics for Small Business

The primary focus of this course is on small business taxation with coverage in the following areas: employee vs. independent contractor, sales tax, payroll requirements, Schedule C reporting, depreciation (MACRS), self-employment tax, home office deduction, etc. Addirional topics include budgeting, intemal control, cash flow forecasting, cash flow analysis, and spreadsheet problem sovling for accounting. As time permits the WWW, as an accounting tool forelectronic commerce, and Internet
search techniques for small business accounting, will be introduced. Prerequisites: ACC 110 and ACC 211.

Cr 3 .

## ABU 225 Small Business Finance

A study of financing concepts, financial planning tools, and financial practices of small businesses. Such topics as financial statement analysis, profit and cash flow analysis, working capital management, problem solving utilizing present and future value interest tables, business valuation, liability management, and tax environment will be examined. Prerequisite: ACC 110.

Cr 3.

## ABU 243 Planning the Business Venture

This course focuses on the development of a comprehensive business plan. We will examine the nature and importance of the planning function and look specifically at the types of information which are necessary for the development of both business and venture plans. Although the course will emphasize plans for start-up situations we will also look at planning as it relates to mature organizations and for business expansion. During the course each student will develop and present an actual business plan. Prerequisites: ABU 140, ACC 110, ACC 213, ABU 260.

Cr 3.

## ABU 245 Managing the Family Owned Business

Designed primarily forstudents interested in problems, issues, and challenges unique to familyowned businesses; topics include family dynamics; stages of family business evolution; organizational structure; strategic planning; and management succession. Prerequisite: ABU 140 or permission of instructor.

Cr 3.

## ABU 255 Managing the Growing Business

An examination of the challenges and issues in managing the growth of the firm through its stages of development beyond start-up to maturity. Topics include: building an effective organization; principles of leaming organizations; management control and information systems; delegation; team building; financing growth; altemative growth strategies; strategic alliances; network organiziations; partnering; and franchising. Prerequisites: ABU 140, ACC 211, ABU 260.

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, andlocal business community projects. Prerequisite: ECO 102J. 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. Enrollment is normally limited to associate business administration degree candidates. Prerequisites: GPA 2.5, sophomore standing and permission of the instructor and chair of the department.

Cr var.

## ABU 285 Cooperative Education

This cooperative education course is described in the catalog text. Prerequisites: sophomore standing, 2.0 GPA or higher, and permission of a School of Business advisor and instructor. Enrollment is normally limited to associate School of Business majors who have not completed degree requirements. A maximum of three credits of ABU 285 unay be used toward the degree. Cr 3.

## Baccalaureate Program

Certain accounting courses are offered only once a year. Students should inquire about these when developing their academic program.

## ACC 110 FinancialAccounting Information for Decision Making

This course is designed to help students appreciate the role of accountants in providing information helpful to decisions of investors, creditors, government regulators, and others, and how that information can be used. Emphasis is on understanding the meaning and value of the balance sheet, income statement, and statement of cash flows. The role of the auditor, internal controls, and ethical issues are examined. The annual report is used to explore how corporations apply accounting principles in presentations to the public. Prerequisites: evidence of successfully meeting the University's writing and mathematics proficiency requirements. Cr 3.

## ACC 211 Managerial Accounting Information

## for Decision Making

This course will assist in identifying which information is relevant for managers in making shortand long-term decisions. There will be a focus on the appropriateness and form of reports that can be constructed for management use, and the ethical issues underlying their development. The fundamentals of cost calculation for products or services, cost behavior as activity changes, the use of present and future values, and budgeting are explored in the context of managerial decisions. The partnership relationship of manager and accountant is examined in great detail. Prerequisites: ACC 110 and sophomore standing.

Cr 3.

## ACC 213 Computers and Systems in

 AccountingThis course is an introduction to, and experience with, a computerized integrated general ledger system. Hands-on practice provides experience with implementation, data entry, and report generation.

## ABU 290 Technology Applications in Small

## Business

This course enhances the business computing knowledge and skills acquired in earlier courses. It will explore a variety of issues in technology, with an emphasis on primary applications used in business. The topical areas that are presented or emphasized in this course will vary by semester and instructor. Consult your advisor or the instructor to find out the primary topics. Prerequisite: ABU 190.

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 1-3.

System selection factors, implementation planning, acquisition, and evaluation are included. In addition, practice will be required in accounting analysis and report-writing using spreadsheet software and database manipulation. A practice set, designed to develop and test proficiency in record keeping for the accounting cycle, will be utilized. Prerequisites: ACC 110 and ABU 190 or computer proficiency. Cr 3.

## ACC 301 Intermediate Accounting I

An examination of the conceptual framework, the primary financial statements, and the methods and rationale for recording and reporting assets. Emphasis is on the effect of present and potential economic events on the financial statements. The course discusses the advantages, limitations and deficiencies associated with generally accepted principles in connection with presenting decision useful information. Prerequisites: ACC 211, 213, and junior standing.

Cr 3.

## ACC 302 Intermediate Accounting II

An examination of the inethods and rationale for recording liabilities and owners' equity. The course also examines the statement of cash flows. Emphasis is on the effect of present and potential economic events on the primary financial statements. The course discusses the advantages, limitations, and deficiences associated with generally accepted principles in connection with presenting decision-useful information. Prerequisites: ACC 301 and junior standing.

Cr 3.

## ACC 305 Cost Management Systems

This course is designed to explore how cost management systems can be used to help organizations succeed in an increasingly competitive global economy. This is done, in part, through an understanding of the underlying concepts and fundamental techniques involved in cost accounting for manufacturing and service enterprises. Job-order, pro-
cess and standard costing are examined to support an understanding of Just-In-Time and Activities Based Systems, Continuous Improvement, quality measurements, and the theory of constraints, among others. Emphasis is on how cost measurement systems, with their performance evaluation and reward systems, encourage efforts to achieve an organization's strategic goals. Library research, group activities, writing assignments and open discussions are integral to this course. Prerequisites: ACC 301 andjunior standing.

Cr 3.

## ACC 313 Taxation

This course provides a conceptual understanding of the federal tax system, and its impact on individuals, corporations, and partnerships. The primary emphasis is on fundamental income tax concepts and principles, with an overview of other taxes. Detailed technical coverage and return preparation are minimized. The economic, political, social, and judicial reasoning underlying tax provisions are explored. Tax issues and changes under current consideration at the national, state, local and internaional levels are discussed. Basic research skills and methodology are introduced. Prerequisites: ACC 110, BUS 280, ECO 101J, ECO 102J, and junior standing.

Cr 3.

## ACC 315 Internal Auditing

This course focuses on the study of the nature of internal auditing, professional standards, organizaional controls, operational auditing, and internal audit reporting. Students will explore the philosophy behind, and the methods needed to evaluate adherence to company policies and the strength of internal controls. The partnership relationship with the external auditor will also be evaluated. Prerequisite: ACC 302, and senior standing. Cr 3.

## ACC395 Cooperative Education I

The first cooperative education course in accounting is described in the catalog text. Prerequisites: junior standing, 2.5 GPA or higher, and permission of a School of Business advisor and instructor. Enrollment is normally limited to accounting majors who have not completed degree requirements.

Cr 3.

## ACC 396 Cooperative Education II

This is the second cooperative education course in accounting. Prerequisites: ACC 395, 2.5 GPA or higher, and permission of a School of Business advisor and instructor. May not be taken concurrently with ACC 395. Enrollment is normally limited to accounting majors who have not completed degree requirements.

Cr 3.

## ACC 406 Advanced Managerial Accounting

This course will concentrate on the role of the accountant in the budgeting process, in managing risk, working capital, strategic costs and assets, and in control and performance evaluation. It will also
explore the role of, and issues facing the controller, in dealing with international customers. (This course will build upon the foundation laid for budgeting in ACC 211, cost systems and standards in ACC 305 and working capital and asset determinations in ACC 110, 301 and 302.) Prerequisite: ACC 305, and junior standing.

Cr 3.

## ACC 410 Auditing and Assurance

This course examines the public accounting profession, auditing standards, and professional ethics. The course explores the process by which an auditor forms an opinion as to the "faimess of presentarion" of financial statements, giving an overview of audit evidence and audit evidence accumulation methodology. The course exposes students both to the demand for and supply of the profession's flagship service, financial statement audits, and to the nature of the value-added assurance and attestation services decision makers demand in the information age. The course illustrates with real companies, links class discussion and assignments to student skills, and encourages unstructured problem solving. This course provides an opportunity for students to study auditing concepts and theory at an advanced level by examining a number of issues, with extensive reading from the auditing research literature, in addition to the textbook material. Prerequisites: ACC 302 and senior standing.

Cr 3 .

## ACC 420 Senior Seminar in Accounting

An insight into current developments in accounting and other specialized accounting topics. This course is scheduled on an as-needed basis. Prerequisites: ACC 301 and senior standing. Cr 3.

## ACC 441 Advanced Financial Accounting

This course focuses on the theoretical concepts associated with the basic accounting issues of purchase and pooling of interests in the context of direct asset acquisitions. The basics of preparing a consolidated income statement and balance sheet are explored. Students will examine the entire life cycle of a partnership including profit and loss agreements. Also considered is the international accounting environment which includes remeasurement and/or translation of a foreign entity's financial statements into U.S. currency. Students will examine govemmental accounting issues atthe state and local level and will study the standards regarding organization-wide accounting and financial reporting for private, not-for-profit entities. Prerequisites: ACC 302 and senior standing. Cr 3.

## ACC490 Independent Study in Accounting

Selected topics in the various areas of accounting, auditing, and income taxes may be studied and researched on an independent basis. Enrollment is normally limited to accounting degree candidates. Prerequisites: Permission of instructor and Department chair and senior standing.

Cr 1-3.

## BUS 101 Getting Down to Business

This course is an integrated, comprehensive overview of the way the average business operates and what it takes to manage one. It introduces students to the basic, interdisciplinary knowledge used in running a business, such as: finance, marketing, and management. It explores the business cycles of startup, take-off, maturity, and decline, utilizing speakers, class discussions, and by giving each student an extended opportunity to manage a business in a simulated business environment. This course is required for all business majors and minors and must be taken prior to achieving 9 credits in business courses (not including economics and computers) and 53 credit hours total. It is open to all University students who meet the above credit hour criteria. Students with credit for SBU 100 or ABU 100 may not enroll.

Cr 3 .

## BUS 270 Quantitative Business Analysis

This course examines the role, perspective, and commonly used tools of quantitative analysis in business decision making. Emphasis is placed upon developing students' abilities to recognize the need for quantification; formulate business problems quantitatively; select and test computer-based, de-cision-support system models; collect meaningful data; and interpret the implications of analysis results. Prerequisites: computer proficiency or ABU 190, MAT 211D, MAT 212, and sophomore standing. (Students with credit for BUS 371 may not enroll).

Cr 3.

## BUS 280 Legal Environment of Business

This course introduces students to the legal system, consumer law, agency law, administrative law, antrust 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 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: computer proficiency or ABU 190,ACC 110, ACC 211, (or concurrent), ECO 101J, ECO 102J, (or concurrent), MAT 211D, MAT 212, BUS 270 (or concurrent), and junior standing.

Cr 3.

## BUS 327 Investment Management

Introduction to the securities markets, investment media, and strategies for managing individual and instutional investment portfolios. Special attenion is directed to the risk and rate-of-retum aspects of corporate stocks and bonds, govemment bonds, options, futures, and mutual funds. Prerequisites: computer proficiency or ABU 190, ACC 110, ACC 211, ECO 101J, ECO 102J,MAT 211D, MAT 212, BUS 320, and junior standing.

Cr 3.

BUS 328 Financial Institutions and Markets
A comprehensive survey of the structure of the financial markets and the role of bank and nonbank financial institutions in the financial system. Topics address the financial markets as allocators of funds and distributors of risks, asset choices of financial institutions, and contemporary issues facing financial instution managers. Prerequisites: computer proficiency or ABU 190, ACC 110, ECO 101J, ECO 102J, 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 mulinationals require extensive knowledge of how to manage foreign exchange-denominated assets and liabiliies 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 intemational trade theory is provided. Other topics include: intemational import and export financing, intemational working capital management, multinational capital budgeting, and intemational cost of capital. Prerequisites: computer proficiency or ABU 190, ACC 110, ECO 101J, ECO 102J, BUS 320, and junior standing.

Cr 3.

## BUS 331 Portfolio Management

This course examines advanced portfolio management techniques for individuals and institutions. The objective of the course is to familiarize students with the risk andreturn characteristics of various stocks, options, and futures. Students are expected to put academic theory into practice when they manage several thousand dollars of assets during the portfolio project. The students analyze and select stocks, options and futures focusing on advanced trading strategies. Prerequisites: computer proficiency or ABU 190, ACC 110, ACC 211,ECO 101J, ECO 102J, MAT 211D, MAT 212, BUS 320, BUS 327, and junior standing.

Cr 3.

## BUS 332 Advanced Corporate Finance

The theory and practice of business and corporate valuation provides the focus for this course. Applications include purchase and sale, mergers and acquisitions, and spin-offs. Topics from cost to capital, capital structure, financing strategies, and working capital policy are introduced as needed. Course materials include cases, readings, and software packages. Prerequisites: computer proficiency or ABU 190, ACC 110, ACC 211, ECO 101J, ECO 102J, MAT 211D, MAT 212, BUS 270, BUS 320, and junior standing.

Cr 3.

## BUS 335 International Business

Introduction to the global economy and the political and cultural environments of international business. Topics include financial, marketing, and human resource issues in intemational business. Prerequisites: ECO 101J, ECO 102J, and junior standing.

Cr 3.

BUS 340 Managing Organizational Behavior
A comprehensive survey of the disciplines of management and organizational behavior, and of the practices managers employ in planning, organizing, leading, and controlling organizations. Topics include self-awareness, perception, motivation, leadership, group dynamics and teamwork, communication, strategic planning and organizational design, planned change and continuous improvement, and information and control systems. The environmental context, workforce diversity, the global economy, and managerial ethics are core integrating themes. Prerequisite: junior standing.

Cr 3.

## BUS 345 Information Technology/ Management Information Systems

Surveys information/systems technology for the management of corporate information as a resource. Managerial and technical dimensions of information systems are blended in a framework of information technology. Specific topics will evolve with the field but may include data communications, information systems theory, database concepts, and decision support systems. Prerequisites: computer proficiency or ABU 190, and junior standing.

## BUS 346 Personnel and Human Resource Management

Analysis of professional practice issues in personnel and human resource management. Topics include human resource planning, staffing, performance appraisal, compensation and reward system design, training and development, employee rights and safety, labor-management relations, legal aspects of human resource management practice, and the international dimension of human resource management. Prerequisites: BUS 280, BUS 340 (or concurrent) 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

The course assists students in identifying and developing career goals and plans. Students will engage in activities aimed at personal and professional interest profiling, job search techniques, interest and employment inventories, interview preparation, resume construction, and other topics relevant to finding and securing employment. Prerequisite: junior standing.

Cr 1.

## BUS 360 Marketing

This course is an introduction to the field of marketing. Topics include marketing strategy for products and services, market segmentation, product issues, pricing, promotion, distribution, consumer behavior, marketing research and information systems, international marketing, and nonprofit marketing. Prerequisite: junior standing.

Cr 3.

## BUS 361 International Marketing

This course addresses the critical marketing skills required for business survival in today's world economy. It deals with intemational environments, international marketing management, and links intemational marketing with a company's overall strategic planning activities. Practical case work is included. 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 altemative explanations of consumer behavior. Emphasis is placed on cultural, sociological, and psychological influences on consumption. Other topics include consumer decision processes and the way managers use consumer characteristics to segment the market and develop marketing plans. Prerequisites: BUS 360 and junior standing. Students with credit for SBU 165J may not enroll.

Cr 3.

## BUS 367 Managerial Marketing

Students gain experience making marketing decisions. The emphasis is on applying a "systems" approach to marketing decision maleing and on integrating knowledge gained in the other functional business areas into a strategic market planning framework. Prerequisites: BUS 360 and junior standing.

## BUS 368 Service Quality and Customer Satisfaction

Service quality has become a top priority, if not an obsession, for well-managed firms. In this course, students will learn how organizations assess service quality and customer satisfaction, and use that information to improve customer service. The course emphasizes services marketing as well as interrelationships among marketing, human resource management, and operations. Prerequisites: BUS 360 (or concurrent) 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 require-
ments, data analysis, interpretation and sampling. Prerequisites: BUS 360, MAT 211D, MAT 212, BUS 270, (or concurrent), and junior standing.

Cr 3.
BUS 375 Production/Operations Management An examination of the role of operations within manufacturing and service organizations. Emphasis is placed upon recognizing operational opportunities and tradeoffs, and employing quantitative and qualitative tools and decision-support systems to assist strategic and operational decision maling. Topics include: quality management, capacity management, process design, facility location, layout, and production planning. Prerequisites: computer proficiency or ABU 190, MAT 211D, MAT 212, BUS 270, and junior standing.

Cr 3.

## BUS 377 Computer-Based Decision Modelling and Simulation

An 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: computer proficiency or ABU 190, MAT 211D, MAT 212, BUS 270, BUS 375 (or concurrent), and junior standing.

Cr 3.

## B US 380 Advanced Legal Issues in Business

This course will cover negotiable instruments, contract law, rusts and estates, property law, and other legal topics. This course is intended to provide detailed study of many important legal issues facing businesses. Prerequisite: BUS 280, junior standing, or permission of the instructor.

Cr 3 .

## BUS 381 Law for Accountants

This course will concentrate on the UCC and cover contracts, sales, secured transactions, securities regulation, banlruptcy, accountants' legal liability, and other topics. This course is designed to assist students preparing for the CPA examination. Prerequisite: BUS 280, junior standing, or permission of the instructor.

Cr 3.

## BUS 382 International Business Law

An examination of legal issues affecting intemational business transactions. Topics include contracts, sale of goods, letters of credit, regulation of imports and exports, business competition law, protection of intellectual property rights, and ethical issues. Prerequisites: BUS 280 or equivalent, and junior standing.

Cr 3.

## BUS 385 Entrepreneurship and Small Business Formation

This course is about starting a business and about the benefits and costs, both personal and professional, of an entrepreneurial career. Students learn how to establish start-up teams, identify opportunities, and obtain resources. The course involves written self-appraisals, case analyses, team work,
and presentations of comprehensive business plans. Prerequisites: ACC 110, ACC 211, and junior standing.

Cr 3.

## BUS 395 Cooperative Education

The first cooperative education course in business administration is described in the catalog text. Prerequisites: junior standing, 2.0 GPA or higher, and permission of a School of Business advisor and instructor. Enrollment is normally limited to baccalaureate School of Business majors who have not completed degree requirements. A maximum of six cooperative education credits may be used toward the degree.

Cr 3.

## BUS 396 Cooperative Education II

This is the second cooperative education course in business administration. Prerequisites: BUS 395, 2.0 GPA or higher, and permission of a School of Business advisor and instructor. Enrollment is normally limited to baccalaureate School of Business majors who have not completed degree requirements. A maximum of six cooperative education credits may be used toward the degree. Cr 3.

## BUS 399 Special Topics in Business and Management

Prerequisite: junior standing.
Cr 3.

BUS 450 Business Policy and Strategy
An in-depth examination of the strategic management process in large complex organizations. Case study analysis and discussion are used to provide students with opportunities to learn and to apply strategic management theories and concepts. These include competitive analysis, value-chain analysis, generic business strategies, corporate strategy, and global strategy. Prerequisites: BUS 320, BUS 340, BUS 360, and senior standing. Cr 3.

## BUS 485 Managing the Growing Entrepreneurial Venture

An interdisciplinary course emphasizing the application of entrepreneurial management concepts and strategies to the growth-oriented small business beyond the start-up stage to eventual maturity and harvest. Topics include venture opportunity analysis, stages of small business growth, making the transition from entrepreneur to entrepreneurial manager, formulating and implementing growth strategies, building an effective organization, marshaling organizational and financial resources for growth, managing under adversity, and managing rapid growth. Prerequisites: BUS 320, BUS 340, BUS 360, and senior standing.

Cr 3.

## BUS 490 Independent Study

Selected topics in business administration may be studied and researched on an independent basis. Enrollment is normally limited to business administration degree candidates. Prerequisites: junior standing and permission of instructor and Department chair.

Cr 1-6.

## BUS 499 Special Topics in Business and

 ManagementPrerequisite: senior standing. $\quad \mathrm{Cr}$ var. 1-3.

## SBU 100 Introduction to Business

This course is designed to introduce the student to the contemporary business environment and the variety of typical activities engaged in by business professionals. It explores how different business functions are integrated in order to accomplish the goals of the business within an increasingly competitive business environment. It is designed for anyone interested in becoming knowledgeable about successful business practices. (Students with credit for BUS 101 may not enroll. When taken by business majors, this course gives general elective credit.)

Сг 3.

## SBU 165J Consumer Studies

This course explores the dynamics of consumption. Emphasis is placed on cultural, sociological, and psychological forces affecting consumers. Other topics: consumer decision making, materialism in society, marketing, and consumer research. Prerequisites: English 100C or 101C or concurrent (Students with credit for BUS 365 may not enroll. When taken by accounting majors, this course gives general elective credit).

Cr 3.

## SBU 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 opimal 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 plannings. The coursework 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.) $\quad \mathrm{Cr} 3$.

## SBU 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 permission of the instructor.

Сг 3.

## SBU 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.

Cr 3.

## SBU 294 Introduction to Databases

This course is an introduction to modern relational database and fourth generation languages on a microcomputer. It includes single and multiple file databases, structured and non-procedural queries and reports, relating of multiple files, and the development of multi-step procedures. Prerequisite: ABU 190 or permission of the instructor. Cr 3.

## Center for Business and Economic Research

Co-Directors: Bruce H. Andrews, Charles F. Davis<br>Senior ResearchAssociates: B. Andrews, C. Colgan, J. Jensen, J. Westfall. Senior Editor, MBI: R. McMahon. Associate Editor, MBI: S. Max

The Center for Business and Economic Research (CBER) was formed in 1974 as a business development and research project. CBER serves as a conduit for bringing the expertise and skills of Business School faculty to the challenges and opportunities facing the public and private sectors in Maine and operates within the School of Business at the University of Southem Maine. CBER is dedicated to helping the state prosper.

Supported by both public and private sources, the Center offers assistance to economic development districts, profit and nonprofit organizations, and individuals through its Technical Assistance Center. Business services provided by CBER include market research, forecasting, strategic planning, quality management and information management. The Center also conducts applied research involving the design and tesing of innovative economic development strategies, feasibility studies, design and administration of surveys, economic modeling, and social and economic measurement. CBER publishes Maine Business Indicators and the Overall Economic Development Plan Supplement, a detailed presentation of economic and demographic data for Maine, its counies, and its Development Districts. Recently, CBER has helped develop and maintain Maine's economic development wide area network. For addional information, contact the Center for Business andEconomic Research, University of Southem Maine, P.O. Box 9300, Portland, ME 04104-9300, (207) 780-4187.

## Center for Entrepreneurship and Small Business

Director: Valarie C. Lamont

In November 1996 the Board of Trustees of the University of Maine System approved the creation of the Center for Entrepreneurship and Small Business. Housed within the School of Business, the Center is simultaneously developing an academic set of courses for undergraduate students and a set of noncredit programs to serve the needs of start-up and existing small businesses. More information can be found on the Center's website at www.usm.maine.edu/~cesb or by contacting the Center for Entrepreneurship and Small Business Office at the University of Southern Maine, P.O. Box 9300, Portland, ME 04104-9300, (207) 7805919.

## Maine Small Business Development Centers

Director: Charles F. Davis. Associate Director: Alma Newell

Established in 1977 as one of eight pilot programs across the country, the Maine Small Business Development Centers (MSBDC) provide comprehensive business assistance to emerging and exising companies statewide. Through a network of seven centers, sixteen satellite offices and a staff of qualified, experienced business counselors, the MSBDC provides business diagnosis/analysis, one-on-one counseling, management information resources and business research service, seminars and conferences, and linkage with other economic development organizations. In addition, the MSBDC, in conjunction with the University of New Hampshire's Office of Economics Initiatives/NHSBC and the Vermont SBDC, produces the nationally recognized Northern New England Products Trade Show. This wholesale, juriedtrade show is held annually in Portland and features giftware and specialty food products manufactured in the three states. The MSBDC is a partnership of the U.S. Small Business Administration, the Maine Small Business Commission, the University of Southem Maine's School of Business, and local sponsoring organizations. More information can be found on the MSBDC's home page (http://www.usm.maine.edu/~sbdc) or by contacting the MSBDC State office at the University of Southern Maine, P.O. Box 9300, Portland, ME 041049300, (207) 780-4420.

## Institute for Real Estate Research and Education

Director: Valarie C. Lamont

The Institute for Real Estate Research and Education was established to address the statewide education and research needs of the real estate community. The Institute consists of two centers: The Center for Real Estate Education (CREE) was established in 1977 and provides prelicensing and continuing education courses in real estate, appraisal, banking, and property management. A variety of media is used to address the educational needs of students, including live classroom, public television, video, computer, and correspondence courses. Real estate courses can be used for academic credit. The Center for Housing and Land Use was established in 1987 to conduct, disseminate, and promote research related to real estate issues in Maine and nationally. Research activities are undertaken at the local, county, regional, and state levels. Liaison is maintained with other government agencies, public and private associations, and other organizations which have an interest in public policy related to housing and land use. Persons interested in additional information may contact the Insitute for Real Estate Research and Education, University of Southem Maine, 68 High St., Portland, ME 04101, (207) 874-6520.

# School of Applied Science 

Dean: Brian C. Hodgkin, 100 John Mitchell Center, Gorham<br>Assistant Dean: W. Douglas Thompson, 607 Law Building, Portland

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, applied technical education, technology education, and applied technical leadership. In addition to the B.S. in electrical engineering, the first year or more of chemical, civil, and mechanical engineering, and engineering physics is available.

The School offers the M.S. degree in computer science and a master's in manufacturing management. The M.S. degree in applied immunology is offered in collaboration with the Maine Medical Center and the Foundationfor Blood Research. The M.S. in industrial education is offered in collaboration with the College of Education and Human Development. Further information regarding the School's graduate programs may be found in the Graduate Catalog.

Applied Science degree programs prepare students for productive and rewarding lives as well as provide knowledge and skills for the many jobs of a career. Students, faculty, and alumni apply theory and use scientific and mathematical principles and techniques to solve practical problems. Applied Science academic programs are designed and delivered so that all students who are prepared and motivated can successfully complete them. Graduates have (1) technical competence with both depth and breadth, (2) a wide range of knowledge enabling them to function effectively in the professional world, (3) transferable skills such as reasoning, problem solving, verbal and written communications, teamwork and leadership, and (4) motivation to continue to learn and grow professionally. Graduates achieve extremely good employment and graduate school placement.

## External Programs

The External Programs unit helps the School carry out its mission of education, research and development, and technology transfer. It connects the School to the business, industrial, and education communities. It delivers workshops, seminars, conferences, and short courses; provides opportunities to bring real-world problems and projects into the classroom; and arranges internships and cooperative education experiences for students. For further information, call 780-5439.

## 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 fortb 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. See the Engineering section of the catalog for Core curriculum requirements for electrical engineering majors.

# Department of Computer Science 

Chair of the Department: David Briggs, 220 Science Building, Portland Professors: Heath, Welty; Associate Professors: Briggs, Fenner, MacLeod; Assistant Professor: Boothe; Adjunct Faculty: El-Taha, Flagg

The Department of Computer Science offers a four-year program leading to a B.S. in computer science and a five-year program leading to both the B.S. and M.S. degrees in computer science. Computer science courses concern the theory and practice of solving problems by computer. More specifically, computer scientists build and analyze tools that allow complex problems to be solved. A component of computer science is the study and use of various programming languages, but computer science consists of much more than programming. The mathematical theory of computer science aids in determining the efficiency and correctness of algorithms and programs. In addition, a computer scientist must understand how computers are built and operate. The systematic application of general methods and compuing technology to actual problems is also part of computer science. The undergraduate degree in computer science prepares students both for careers in the computing profession and for graduate study. Course requirements ensure that students receive instruction in both practical and theoretical aspects of computer science. The B.S. degree program in computer science is accredited by the Computer Science Accreditation Commission (CSAC) of the Compuing Sciences Accreditation Board (CSAB), a specialized accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation (CORPA) and the U.S. Department of Education.

## Bachelor of Science 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.

The total number of credits for graduation is 120 .
Courses used to fulfill major requirements in sections A through E below must be passed with a grade of C - or better. The accumulative grade point average of all courses applied to the ma jor 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: C++ |
| :--- | :--- | :--- |
| COS | 161 | Algorithms in Programming |
| COS | 170 | Sructured Programming Laboratory |
| COS | 250 | Computer Organization |
| COS | 251 | Software Systems |
| COS | 255 | Computer Organization Laboratory |
| COS | 280 | Discrete Mathematics |
| COS | 285 | Data Structures |
| COS | 360 | Programming Languages |
| COS | 499 | Ethical Conduct and Social Responsibility |

B. Successful completion of seven additional COS courses numbered 300 and above, excluding COS 498.

In order to ensure that depth of knowledge is obtained in a broad range of areas in computer science, at least one course must be chosen from each of the following four groups:

| Algorithms and |  |  |  |
| :---: | :---: | :---: | :---: |
| Data Structures | Languages and <br> Software Design | Systems and <br> Architecture | Theoretical <br> Foundations |
| COS 474 | COS 365 | COS 355 | COS 385 |
| COS 452 | COS 368 | COS 450 | COS 480 |
| COS 472 | COS 372 | COS 460 |  |
|  | COS 457 | COS 465 |  |

C. Mathematics requirement
(1) Successful completion of either
a. MAT 152D Calculus A

MAT 153 Calculus B
or
b. MAT 299 One Variable Calculus with Mathematica
(2) Successful completion of MAT 199 Algebra and Discrete Mathematics for Computer Science
MAT $380 \quad$ Probability and Statistics (MAT 281 and MAT 282 may together substitute for MAT 380)
(3) Successful completion of an additional mathematics course with second digit 5 or greater, excluding MAT 260 , MAT 290 , and MAT 390.
D. (1) Completion of a two-semester sequence of either CHY 113 K with CHY 114 K and CHY 115 with CHY 116
or
PHY 121K with PHY 122 K and PHY 123 with PHY 124
or
BIO 105 K with BIO 106 K and BIO 107 with BIO 108
(2) Two additional courses from any of the departments of Electrical Engineering, Biology, Chemistry, Physics, Geosciences, or Environmental Science and Policy, provided that the course is a course in science that can be used for credit toward the degree offered by that respective deparment. Courses from other departments may also be approved to satisfy this requirement, provided they have a strong emphasis on quantitative measures and the application of the scientific method.
E. Successful completion of THE 170F.
F. Successful completion of 30 credit hours in the humanities, arts, or social sciences. Courses in these disciplines that satisfy Core curriculum requirements also satisfy this requirement.

## Suggested Schedule

The following schedule of mathematics and computer science courses is typical for the freshman and sophomore years.

|  | Fall | Spring |
| :--- | :--- | :--- |
| First year | COS 160 | COS 161 |
|  | COS 170 | MAT 299 |
| MAT 199 |  |  |
| Second year |  |  |
|  | COS 251 | COS 250 |
|  | COS 280 | COS 255 |
|  |  | COS 285 |

## Combined Bachelor of Science/Master of Science in Computer Science

During the junior year a student may apply for and be admitted to a five-year program that awards both the bachelor of science and master of science degrees in computer science upon its completion. The program's requirements are the following.

1. Complete all requirements for the B.S. degree in computer science.
2. In the fifth year, a minimum of four computer science courses (excluding COS 598), totaling at least 12 credits, at least two of which must be 500leve1, must be completed. In addition, a six-credit Master's Project, COS 698 , must be completed. The topic of the project must be in the same track area as the coursework of the next item.
3. Within the five years complete either one of the following tracks.
a. Computer Systems
(1) Complete the following courses with an average grade of $B$ or better: COS 355 Computer Architecture
COS 450 Operating Systems

COS 460/540 Computer Networks
COS 465/542 Distributed Operating Systems
(2) Complete at least one of the following courses with a grade of B or better:
COS 543 Distributed Systems: A Second Course
COS 552 Advanced Computer Networks
COS 555 Advanced Computer Architecture
COS 562 Performance Analysis
COS 570 Seminar: Advanced Topics in Computer Science
b. Software Development
(1) Complete, with an average grade ofB or better, any four courses from the following list:
COS 365 Object Oriented Design
COS 368 Graphical User Interface Design
COS 372 Software Engineering
COS 452 Computer Graphics
COS 457 Database Systems
COS 469 Introduction to Compiler Construction
(2) Complete at least one of the following courses with a grade of B or better:
COS 558 Database Management
COS 565 Software Design and Development
COS 570 Seminar: Advanced Topics in Computer Science
COS 574 Advanced Computer Graphics
COS 587 Introduction to Parallel Computation
4. After the junior year, complete an internship experience in the area of the track selection. The duration and placement of the internship must be approved by the Computer Science Department.
5. Complete a total of at least 138 credits, 43 of which must be COS courses numbered 300 or higher, excluding COS 498 and COS 598, and 18 of which must be COS courses numbered 500 or higher, excluding COS 598. Graduate level courses from other departments may be substituted with prior approval from the Computer Science Department.

## Double Majors

Students who opt to pursue a double major with computer science as one of the major fields of study must satisfy all computer science degree requirements. The general requirements for a double major are listed under the heading Double Major in this catalog.

## Minor in Computer Science

A minor in computer science may be obtained by successfully completing the following courses with an accumulative grade point average of 2.0 in these courses: COS 160 and COS 170; COS 161; COS 251; COS 250 and COS 255; COS 285, and one additional COS course numbered 250 or greater, excluding COS 498 and COS 499.

Course Fees

Course fees to cover the cost of materials and supplies are assessed in some computer science courses.

## COS 101D Quantitative Decision Making Using Computers

The primary objective of this course istoteach students how to use logical reasoning and quantitative methods to solve problems. Students will practice quan itative skills using packaged software (e.g., database systems, spreadsheets, statistical analysis tools) on microcomputers. This class requires no previous computer experience. Prerequisite: Two years of high school algebra. Cr 3.

## COS 120E Deductive Logic

This course will teach the formal techniques that allow one to infer valid conclusions from valid premises in ordinary English discourse. These rules of propositional and predicate logic are based solely on the logical form of statements, independent of their content, and can be used to analyze rational arguments in any discipline. English sentences will be translated into a moreprecise symbolic language that elucidates their structure. Prerequisite: Two years of high school algebra or equivalent. Cr 3.

COS 160 Structured Problem Solving: C++
An introduction to the use of digital computers for problem solving, employing the $\mathrm{C}++$ programming language as a vehicle. Content includes elementary control structures and data representation methods provided by C++ and the top-down programming methodology. Course requirements include a substantial number of programming projects. This course must be taken concurrently with COS 170. 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: COS160.

Cr 3.

## COS 170 Structured Programming Laboratory

Computational experiments will be designed to teach students how to construct reliable software using $\mathrm{C}++$. Topics to be covered include: Windows system, conditional program flow, iteration, procedures and functions, and symbolic debugging. This course must be taken concurrently with COS 160.

Cr 1 .

## COS 211 The C Programming Language

A first course in the C programming language. This course should provide students with fundamental skills of $C$ programming. Small to medium size programming projects will be written. Prerequisite: A previous course in problem solving and programming (e.g., COS 160) or instructor's permission.

Cr 3.

## COS 212 The UNIX Operating System

Introduction to the UNIX system, system commands, standard editors, shells, and more. Prerequisite: Experience with some computer operating system.

Cr 1.

## COS 214 Introduction to $\mathbf{C + +}$

Introduces the basics of $\mathrm{C}++$ programming. Coverstypes, expressions, control structures, functions, and a brief introduction to classes and objects. This course will prepare students for further object-oriented courses. Prerequisite: a previous college-level course in problem solving and programming or instructor's permission.

Cr 3.

## COS 215 Introduction to $\mathrm{C}++$ for $\mathbf{C}$ Programmers

The changes in the syntax and semantics of $C$ that resulted in C++ are presented. C++ will be covered up to and including a brief introduction to classes and objects. This course will prepare students for further object-oriented courses. Prerequisite: a previous course in problem solving and pro-
gramming in C (e.g. COS 211) or instructor's permission.

Cr 1.

## COS 230 Programming in COBOL

A study of the programming language used primarily in business. Prerequisite: COS 160 or analogous experience.

Cr 3.

## COS 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 basic hardware, architecture, and software of computer systems are covered. Subjects include digital logic design, microprogramming, machine languages, assembly languages, and operating systems. Prerequisite: $\operatorname{COS} 161$. This course must be taken concurrently with COS 255 . Normally offered only in the spring semester.

Cr 3.

## COS 251 Software Systems

A study of systems programming concepts and software, including the Unix programming environment, C++ programming language, and Unix operating systems interface. Students develop their abilities in these areas through programming exercises and projects. Normally offered only in the fall semester. Prerequisite: COS 161.

Cr 3 .
COS 255 Computer Organization Laboratory
Students design, build, and test combinational and sequential logic circuits and write assembly language programs. This course must be taken concurrently with COS 250.

Cr 1 .

## COS 280 Discrete Mathematics

Concepts of modern algebra, set theory, Boolean algebra, elements of graph theory, and their application to computer science. Prerequisite: $\operatorname{COS} 161$.

Cr 3.

## COS 285 Data Structures

Basic abstract data types and their representations, fundamental algorithms, and algorithm analysis. Consideration is given to applications. Specific topics include linked structures, trees, searching and sorting, priority queues, graphs, and hashing. Course requirements include a substantial programming component. Prerequisites: COS 251 or permission of instructor. Normally offered in spring semester only.

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. Prerequisite: COS 250.

Cr 3.

## COS 360 Programming Languages

Examination of basic concepts and consructs of high-level languages via consideration of several representative languages. Topics include scope of declarations, binding time of constituents, type cheching, and control organization. Study of implementation methods for various programming language features. Study of the methods of formal specifications of programming languages: regular, context-free, and attribute grammars and operational semanics. Exposure to programming in languages that deviate from the imperative style such as Lisp and Prolog. Prerequisites: COS 250, COS 285.

Cr 3.

## COS 365 Object Oriented Design

Various languages uilizing the object oriented programming paradigm are covered with an emphasis on C++. Topics include principles of object oriented design and programming; classes with inheritance and polymorphism; function and operator overloading. Prerequisite: COS 285.

Cr 3.

## COS368 Graphical User Interface Design

Principles of graphical user interface design are utilized to build working interfaces. The programming language used may vary from offering to offering. Possible languages include Java and C++. Students will work in an object-oriented, eventdriven environment. Prerequisite: COS 285 or COS 251 with insructor's permission. 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

Study of methods applied to large-scale software development, including topics such as requirements analysis and specification, design, validation and verification, and project management, with emphasis on principles of design. Students use methods on a large programming project. Prerequisites: COS 250, COS 285.

Cr 3.

## COS 374 Numerical Analysis

A study of the theory and application of computaional algorithms for interpolation, equation solving, matrix methods, integration; error analysis. Prerequisites: MAT 252 , COS 160 , and permission of instructor.

Cr 3.

## COS 385 Design of Computing Algorithms

An introduction to the design and analysis of algo-
rithms. Techniques for designing algorithms, such as divide-and-conquer, greedy method, dynamic programming, and backtracking are emphasized and illustrated. Problems of practical importance including minimum spanning tree, single source shortest path, traveling salesperson, graph search, and patterm matching are covered. The concepts of NP-hard and NP-complete are also considered. Substantial programming in a high-level language. Prerequisite: COS 285, and either MAT 153 or MAT 299.

Cr 3.
COS 400 Introduction to Simulation Modeling Introduction to general principles of discrete event simulation modeling. Topics include design of simulation models, their implementation in a computer simulation language, and analysis of simulation data. Applications will emphasize computer and communication science. Requirements include a substantial programming component. Prerequisites: COS 285 and MAT 380 or equivalent. Cr 3.

## COS 450 Operating Systems

Bottom up construction of a layered operating system beginning with the hardware interface and ending with the user interface. Specific topics covered include concurrent processes, process management, I/O, virtual memory, file management, resource scheduling, and performance measurement. Students are assumed to be familiar with general machine architecture, functions of system software (compilers, loaders, editors, etc.), data structures, and to have some experience with UNIX or another mulliprogramming operating system. Prerequisites: COS 250, 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

Study of the methods and principles of database management systems (DBMS). Topics addres-sed include DBMS objectives and architecture, data models, data definition and data manipulation languages, and concurrency control. The entity-relarionship and relational models are emphasized and their use required in a design project. Prerequisite: COS 285.

Cr 3.

## COS460 Computer Networks

A description of computer networks organized as a layered architecture based on the OSI Reference Model. Protocols and services of each layer are examined in detail. Specific local area networks, metropolitan area, and wide areanetworks will be considered. Prerequisites: COS 285, COS 251. Cr 3.

## COS 465 Distributed Operating Systems

Detailed examination of the elements of distributed operating systems. Topics include an introduction to computer networks, client-servermodels, remote procedure call, processes and threads, distributed file systems, name services, and shared data. Specific examples of distributed systems are considered in detail. Prerequisites: $\operatorname{COS} 450$ and $\operatorname{COS} 460$, or their equivalents, or permission of the instructor.

Cr 3.

## COS 469 Introduction to Compiler Construction

Definition of a language, context-free grammars, rigorous definition of a typical small language, design and implementation of a compilerforprograms within this language. Prerequisite: $\operatorname{COS} 360 . \mathrm{Cr} 3$.

## COS 472 Artificial Intelligence

An introduction to the underlying concepts and applications of intelligent systems. Topics include pattern matching, production systems, computer representations of knowledge, heuristic search techniques and computer problem solving, and automatic theorem proving. The programming language Lisp is introduced. Students will develop programs in Lisp applying the concepts and techniques introduced. Prerequisites: COS 280, COS 285. Cr 3.

## COS 480 Theory of Computation

Study of the theoretical foundations of computer science, including elements of set theory and logic, the specification of formal languages via finite automata, regular expressions, push-down automata, context free grammars, and Turing machines. Also
introduces the concepts of recursive and recursively enumerable sets. Prerequisite: COS 280. Cr 3.

## COS 497 Independent Study in Computer

## Science

An opportunity for juniors and seniors who have demonstrated critical and analytical capability to pursue a project independently, charting a course and exploring an area of interest within their major field. At most, three credits of COS 497 can be used to satisfy requirement B, as noted under Programs and Requirements. Prerequisites: junior or senior standing and permission of the Department chair and instructor.

Cr 1-3.

## COS 498 Computer Science Internship

An opportunity for students to gain practical experience in computer science-related employment. The University internship program provides placement. This course is offered on a pass/fail basis only, does not fulfill any computer science requirement, and a maximum of 6 credits may be taken. Cr 3 .

## COS 499 Ethical Conduct and Social Responsibility

A study of ethical perspectives and social responsibilities of computer professionals. Assigned readings provide the basis for class discussions of such issues as social control and privacy, computer viruses, ACM code of professional conduct, hacking, limits of correctness in computer software, military influence on computer science research and education. Prerequisite: senior standing. Normally offered in spring semester only.

Cr 1.

# Department of Engineering 

Chair of the Department: Mustafa G. Guvench, 106 John Mitchell Center, Gorham; Professor: Guvench; Associate Professors: Ellis, Hodgkin, Jankowski, Smith; Assistant Professor: Lück

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 programsinclude the bachelor of science degree program in electrical engineering, the first two years of civil and mechanical engineering, and the first year for several other engineering specialties.

Preparation for an undergraduate engineering program should include high school chemistry, physics, and mathematics including algebra and trigonometry. Courses are available at the University of Southern Maine for those students needing to make up prerequisites.

## Programs and Requirements

Admission<br>Requirements

## 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 sys-
tems. 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. Computer usage is integrated throughout the curriculum. 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 multiskills setting, and be prepared for a lifetime of leaming and professional growth. The electrical engineering program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Requirements for the bachelor of science degree in electrical engineering at the University of Southern Maine include:

Mathematics

| MAT | 152 D | Calculus A |
| :--- | :--- | :--- |
| MAT | 153 | Calculus B |
| MAT | 252 | Calculus C |
| MAT | 350 | Differential Equations |

One advanced mathematics course selected from among the following: MAT 295, 352, 355, 364, 380, 381, 382. MAT 295 or 380 are recommended.
Computer Science
COS 160, 170 Structured Problem Solving: C++ and Lab
Basic Science
CHY $\quad 113 \mathrm{~K}, 114 \mathrm{~K}, 115,116$ Principles of Chemistry I and II PHY $\quad 121 \mathrm{~K}, 122 \mathrm{~K}, 123,124$ General Physics I and II
Electrical Engineering
ELE 100 Introduction to Engineering
ELE 172 Digital Logic
ELE 210, 211 Electric Circuits I and II
ELE 262 Physical Electronics
ELE 271 Introduction to Microprocessors
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
either
ELE 425 Control Systems
or
ELE 483 Communications Engineering
Mechanical Engineering
MEE 230 Thermodynamics
Technical Electives
Three technical electives must be taken. At least two must be in electrical engineering. The third required technical elective can be chosen from selected physics, chemistry, mathematics, computer science, electrical engineering, and other technical disciplines as available and approved by the student's academic advisor.
Core Curriculum Courses

| Category | Description | Course |  |
| :---: | :--- | :--- | :--- |
| C | English Composition | ENG 100C | College Writing |
| D | Quantitative Decision Making | MAT 152D | Calculus A |
| E | Skills of Analysis/Philosophy | PHI 100-level One E-designated |  |
|  |  | course |  |
| F | Performance-Centered Arts | THE 170F | Public Speaking |
| G | History-Centered Arts | One course |  |
| H | Humanities: Literature | One course |  |

J Social Science
K Natural Sciences
COR Interdisciplinary
PHI 300-level- One I-designated course or one course from the Arts or Humanities which provides depth*
*Depth is defined as: ECO 101J, ECO 102J
PHY $121 \mathrm{~K}, 122 \mathrm{~K}$
One course

1. A sequence of two courses taken in the same department, or
2. A sequence of two courses in which one is a prerequisite for the other, or
3. A sequence of two courses which are closely related; such as Greek Philosophy and Greek Literature.
Credits to graduate: 134
Grade point average: 2.0 overall and 2.0 average 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 172, ELE 210, ELE 211, ELE 262, ELE 271, 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, civil engineering, computer engineering, electrical engineering, engineering physics, forest engineering, mechanical engineering, pulp and paper technology, and surveying engineering.

## Course Fees

Course fees to cover the cost of materials and supplies are assessed in some electrical engineering courses.

## ELE 100 Introduction to Engineering

Engineers use mathematics extensively, reason quantitatively, communicate effectively in both written and oral forms, and work in teams. This course introduces students to the tools, tasks, and culture of engineering. Students undertake a series of small projects, each one utilizing a computer tool widely used by engineers in their work: spreadsheets, introduction to computer-based computation, e-mail, and the Intemet. All projects are completed with brief oral reports and demonstrations. One large group project integrates all the tools explored. Prerequisites: none. Typing skills are useful. Lecture 1 hr ., Lab 3 hrs .

Сг 3 .

## ELE 172 Digital Logic

Introduction to the design of binary logic circuits. Combinatorial and sequential logic systems. Design with small and medium scale integrated circuits and programmable logic devices (PLDs). Registers, counters, and random access memories (RAMs). The algorithmic state machine (ASM). Lecture 3 hrs. Lab. 2 hrs. 2 Design Cr. Cr 4.

## ELE 210 Electric Circuits I

An examination of fundamental circuit laws and theorems, network analysis, physical properties and modeling of resistors, inductors, and capacitors, and time-domain analysis of first- and second-order systems. The course also covers the operation of meters, oscilloscopes, power supplies, and signal generators. Prerequisites: MAT 153, PHY 123. Lecture 3 hrs., Lab./Comp. 2 hrs.

Cr 4.

## ELE 211 Electric Circuits II

An examination of electric circuit analysis in the frequency domain, sinusoidal steady-state operation, the phasor method, impedance and power. Study and application of Laplace transforms, transfer functions, poles and zeros, frequency response, step and impulse response, and Fourier series. Also a study of quality factor of circuit elements, and modeling of two-port systems. Prerequisite: ELE 210. Lecture 3 hrs., Lab./Comp. 2 hrs. Cr 4.

## 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.

## ELE 271 Introduction to Microprocessors

Introduction to microprocessors: architecture, operating principles, and programming. Binary representation and algebra.The microcomputer and its component parts: central processing unit, memory, and input-output microcontrollers. Prerequisite: ELE 172. Lecture 3 hrs., Lab. 2 hrs. 1 Design Cr.

## ELE300 Seminar

Exploration of various professional and technical topics such as ethics and aesthetics in engineering, résumé preparation, interview slills, the role of engineering in contemporary civilization, experiment design, engineering economy. Prerequisite: junior standing in engineering. Lecture 1 hr . (Pass/fail grade only)

Cr 1.

## ELE 314 Linear Signals and Systems

Introduction to the theory of linear signals and systems. Linear, time-invariant system properies and representations; differential and difference equations; convolution; Fourier analysis; Laplace and Z transforms. Selected topics in sampling, filter design, discrete signal processing, and modulation. Prerequisites: ELE 211, MAT 350, COS 160 or equivalent. Lecture 3 hrs. Lab 2 hrs. 1 Design Cr.

Cr 4.

## ELE 323 Electromechanical Energy Conversion

Basic concepts of magnetic circuits and transformers. Three-phase system and power transmission. Conversion between electrical and mechanical energy through magnetic fields. Study of direct current motors and generators. Study of alternating current machines: induction motors, synchronous machines, and single-phase motors. Modeling and analysis of electric machines and transformers with Mathematica. Prerequisite: ELE 211. Lecture 3 hrs., Lab. 2 hrs.

Cr 4.

## ELE 342 Electronics I

Fundamentals of electronic circuits with emphasis on the nonlinear nature of electronic devices, their modeling and applications in power conversion, waveshaping and smallsignal amplification. Analysis, design, and SPICE simulation of such circuits. Prerequisites: ELE 262, ELE 211. Lecture 3 hrs., Lab. 2 hrs. 1.5 Design Cr.

Cr 4.

## ELE 343 Electronics II

Analysis and design of multistage amplif iers. Principles of operation of analog and digital integrated circuit building blocks. Applications in signal generation, amplification, and waveshaping. Topics include differential, multi-stage, and power amplifiers; frequency response of transistor amplifiers;
feedback amplifiers and oscillators; operational amplifiers and applications; I.C. logic families. Prerequisites: ELE 342 or equivalent, SPICE simulation. Lecture 3 hrs., Lab. 4 hrs. 3 Design Cr. Cr 4.

## 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 252, 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 Practice

Work experience in electrical engineering. An opportunity for students to obtain credit for a project or study sequence completed while employed. The activity must have both components of design and analysis and be pre-approved by the faculty. Prerequisite: junior standing.

Cr 1-3.

## ELE 401, 402, 403 Design Project I, II, IT

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 including ELE 342 but not ELE 300. (Semester 2) Completion of at least five 300 - and/or 400 -level electrical engineering courses. 7 Design Cr. Cr 1, 4, 2.

## ELE 417 Introduction to Robotics

Introduces robotics and the operation of manipulators with their application in automation. Includes a general review of robot structures, spatial descriptions and coordinate transformations, manipulator linematics and solutions, dynamics, robot control, trajectory and path planning, robot programming. Prerequisites: COS 160, MAT 252, PHY 121. Lecture 3 hrs .

Cr 3.

## ELE 425 Control Systems

Introduction to feedback control systems. Modeling and analysis of control systems using frequency response, root locus, and computer methods. Design and compensation of feedback control systems. Prerequisite: ELE 314 or permission. Lecture 3 hrs., 1 Design Cr.

Cr 3.

ELE 442 Introduction to Digital VLSI Design
Principles of internal circuit and layout design of digital VLSI circuits. Topics include NMOS and CMOS logic circuits, electrical and physical design of logic gates, chip layout rules, parasitics and performance estimation. CMOS technology is emphasized. Simulation, layout and electronic design automation tools are demonstrated and used. Prerequisites: ELE 172 and ELE 342. Lecture 3 hrs. 2 Design Cr.

Cr 3.

## ELE 444 Analog Integrated Circuits

Topics in the internal circuit design and system applicaions of analog integrated circuits; current sources, differential amplifiers, level shifters, operational amplifiers, regulators, high frequency considerations; digital-to-analog and analog-todigital converters, phase-locked loops. Simulation, layout and electronic design automation tools are demonstrated and used. Prerequisite: ELE 343. Lecture 3 hrs. 2 Design Cr.

Cr 3.

## ELE 445 Digital Integrated Circuits

Analysis and design of digital integrated circuits. Principles of silicon I.C. fabrication. Structure, characteristics and models of integrated circuit components. Nonlinear and charge control models for transistors. MOS logic families: PMOS, NMOS, CMOS. Bipolar logic families: DTL, TTL, Schotky TTL, ECL, I2L. Layout design and parasitics. Performance limitations and comparison of logic families. Interfacing. Regenerative circuits. Memory circuits. Prerequisites: ELE 262, ELE 343. Lecture 3 hrs .

Cr 3.

## ELE 463 SolidState Electronic Devices

The theory of selected solid stateelectronic devices and an introduction to device fabrication teclinology. Devices studied include bipolar junction-based structures, MOS and optoelectronic devices. An occasional laboratory period may be substituted for equivalent class ime. Prerequisite: ELE 262. Lecture 3 hrs. 1 Design Cr.

Cr 3.

## ELE 464 Microelectronic Fabrication

Principles of processes used in the fabrication of bipolar and MOS integrated circuits and components. Photolithography, crystal and epitaxial growth, oxidation, diffusion and ion implantation, chemical and physical film deposition and etching. Passive and active component and process design. Occasional laboratory periods may be substituted for equivalent class ime. Lecture 3 hours. One design credit. Prerequisite: ELE 463 or permission.

Cr 3.

## ELE 471 Microprocessor Systems

The organization of microprocessor-based computers. Microprocessor architecture and operation; buses and system concepts; memory system organization and operation; software and programming: instruction formats and addressing modes. Inputoutput concepts: programmed I/O, interrupts. Microprocessor arithmetic. Prerequisites: ELE 172, 271. Lecture 3 hrs. 1 Design Cr.

Cr 3.

## ELE 475 Sequential Logic Systems

Methods of design and testing of logic systems with memory. Algorithmic approaches to digital system design. Microprogramming. Arithmevic algorithms and implementations. Organization and design of a simple digital computer. Prerequisite: ELE 172. Lecture 3 hrs. 1 Design Cr.

Cr 3.

## ELE 483 Communications Engineering

Basic principles of modern communication engineering. Analog and digital signals and systems; analysis methods. Modulation techniques: AM, FM, and carrier modulation of digital signals. Baseband signaling and coding. Noise in communication systems. Prerequisites: MAT 350, ELE 314. Lecture 3 hrs.

Cr 3.

## ELE 486 Digital Signal Processing

Basic principles of processing digital signals. Sampling and quan ization. Tirne and frequency domain representation and analysis of discrete-time signals and systems. FIR and IIR systems. Digital filter design; review of classic analog filter design (Butterworth, Chebychev). Quantization and finiteprecision effects. DSP hardware. Computers will be used to design and realize various signal processors. Prerequisites: ELE 314, COS 160 or equivalent. Lecture 3 hrs. Cr 3.

## ELE 489 Digital Image Processing

The theory and practice of digital processing of images by computer. Introduction to two-dimensional signal processing theory: sampling, ransforms, and filters. Image acquisition and representation; enhancement methods; image coding; image analysis; and image processing hardware. Lecture 3 hours. Prerequisites: ELE 314, COS 160 or equivalent.

Cr 3.

## ELE 497 Independent Study

An opportunity for the student to explore topics not covered in available courses or to pursue a topic of interest in-depth. By prearrangement with a faculty member.

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. 0-2 Design Cr.

Cr 1-3.
The following are engineering courses in the first $t$ wo years of civil and mechanical engineering. MEE 230 is a required course in the electrical engineering program.

## MEE 150 Applied Mechanics: Statics

A study of force systems and equilibrium, structural models, friction, distributed forces. Designed to develop the ability to analyze and solve engi-
neering problems. Prerequisites: MAT 152D and one semester of physics. Lecture 3 hrs . Cr 3 .

MEE 230 Thermodynamics I
Energy and energy transformations, the First and Second Laws applied to systems and to control volumes, thermodynamic proper ies of systems, availability of energy. Prerequisites: MAT 153, PHY 121 K . Lecture 3 hrs .

## MEE 251 Strength of Materials

The principles of solid mechanics and their applications to practical problems, stresses and deflections in axial loading, torsion, beams, columns, combined stresses. Prerequisites: MEE 150, MAT 153. Lecture 3 hrs.

Cr 3.

## MEE 270 Applied Mechanics: Dynamics

Motion of particles and rigid bodies, impulse and momentum, work and energy and simple harmonic motion, force, mass and acceleration. Prerequisites: MEE 150, MAT 252. Lecture 3 hrs . Cr 3.

# Department of Technology 

Chair of the Department: John Zaner, 101B John Mitchell Center, Gorham Associate Professors: Anderson, Kirk, Moore, Nannay, Zaner; Assistant Professors: Marshall, Walker; Adjunct Assistant Professor: Early

Technology is the study of the creation and utilizarion 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 academic, technical, and professional courses designed to prepare individuals for careers in teaching or leadership positions in business and industry. Several degree programs leading to a bachelor of science degree are offered by the Deparment of Technology. Each program is designed to meet the educational needs of students with a variety of backgrounds and career aspirations.

The following programs are designed for students who are interested in teaching as a career.

## Technology Education (TCE)

Technology educationteachers help students leam about industry and technology by working with the tools, machines, materials, and processes of manufacturing/construction, energy, transportation, and graphic communication industries. They help youth leam to design, plan, and create useful articles from different materials; discover their abiliies and talents; leam more about how to select, buy, and care for the products of industry; and develop problem-solving skills.

The technology education teacher may teach in a general laboratory of technology or in specific laboratories such as manufacturing/construction, energy/conrols, or graphic communications. General programs are usually taught in the elementary and junior high schools while more focused programs are common at the secondary school level.

## Applied Technical Education (ATE)

Graduates of the applied technical education program can expect to find teaching opportunilies in schools and organizations such as secondary vocational-technical schools, post-secondary schools (community, junior, agricultural, and technical colleges), adult continuing educaion, departments of correctional services, departments of mental hygiene and health, private trade schools, industrial training programs, apprenticeship programs, training programs, armed forces training programs, and vocational-technical teaching.

Typical occupational areas for which teaching opportunimes exist include automotive services, air conditioning and refrigeration, building construction rades, drafting, electrical/electronics, food services, metal trades, maintenance and repair services, and health and personal services.

Certification for teaching applied technical education requires a minimum of three years of occupational experience.

## Secondary Computer Endorsement

A series of courses is available that can lead to an endorsement as a computer technology teacher for individuals currently holding or pursuing a Maine teaching certificate. A sequence of courses in computer and computer-related subjects is selected in consultation with an academic advisor. Upon completion of the courses, holders of a valid provisional or professional Maine teaching certificate with a K-$8,7-12$, or K-12 endorsement, can obtain the computer technology endorsement by submitting transcripts for analysis and approval.

For those students interested in careers in technology supervision, management, and leadership, the following programs are appropriate.

## Industrial Technology (INT)

Industrial technologists are technically oriented management professionals who develop, manage, and control production and manufacturing systems. Graduates of the program assume leadership positions in a wide range of business and industrial organizations. They play a crucial role in optimizing organizational productivity.

Students can elect to pursue the general program or one of the concentrations available within the industrial technology degree program. The available concentrations are:

## Industrial Technology

The general industrial technology degree program is designed to meet the need for technically oriented management professionals who develop, manage, and control production and manufacturing systems.

## Industrial Technology-Manufacturing Concentration

This concentration is designed to prepare manufacturing professionals to develop and apply contemporary manufacturing techniques in a broad variety of industries. It provides significant coursework in technical subject areas of the programleading to increased technical specialization.

## Industrial Technology-Environmental Safety and Health Concentration

This concentration is designed to provide qualified individuals with the lnowledge needed to meet the demands of modern day environmental policy and practice. The program provides significant coursework in technical subject areas and environmental safety and health.

## Industrial Technology-Computer Applications Concentration

This concentration is designed to provide a solid background in computer applications to meet the needs of managers and computer support personnel. It provides significant coursework in a variety of computer applications.

Industrial technology programs offer two different options for acquiring the technical background required for the degree. The options are:

## Option I: Skill Development

Designed to prepare individuals without prior occupational experience. A general technical background is developed through completion of technical courses and internships designed for traditional students seeking entry positions in business and industry.

## Option II: Occupational Assessment

Designed to assist practicing technicians in advancing to leadership positions. Technical proficiency is or has been gained via associate degrees, military training, occupational experiences, apprenticeships, or some combination of the above. Technical courses are available to supplement and complement expertise. Option II is designed for nontraditional students seeking career enhancement.

Areas of Minor Study

## Admission Requirements (All Programs)

## Programs and Requirements

## Applied Technical Leadership (ATL)

This program is designed to provide career ladder opportunities for personnel employed in a variety of technically oriented career fields such as fire science, law enforcement, medical technology, office occupations, and the service industry.

Technical and professional competencies are gained via associate degrees, military training apprenticeships, occupational experience or some combination of the above.

Prior learning assessment is available.
Four areas of study in the Department of Technology are available as minors: computer applications, environmental safety and health, industrial management, and manufacturing technology. Each minor will consist of a minimum of 18 credit hours approved and monitored by a faculty advisor in the Department. The courses used for each minor will be selected from those approved for that minor by the Department faculty. Admission to the minor will require the completion of at least 24 credits with a grade point average of 2.0 . Successful completion of the minor will require a grade point average of 2.0 in the courses making up the minor.

Students must meet all University of Southem Maine admission requirements. Prospective students are required to interview with the Department chair, a program coordinator, or another program representative. Résumés are expected from students applying to the Industrial Technology Opion II, Applied Technical Education, and Applied Technical Leadership majors.

All students must meet University Core curriculum requirements and additional departmental requirements. Specific requirements for bachelor of science degree programs offered through the Department of Technology are indicated in the following tables. A minimum of 15 credithours or 5 courses must be taken in the Department.

## Teaching

Bachelor of science in technology education(TCE) - 127 credits
Bachelor of science in applied technical education (ATE) - 121 credits
Technology education majors must have a 2.5 cumulative grade point average to enroll in the professional sequence courses: ATE 380, ATE 381, and EDU 324. No more than one D grade will be accepted in the technical and professional courses required of the technology education program.

## Non-teaching

Bachelor of science in industrial technology (INT Options I and II) - 127 credits

- with manufacturing concentration (Options I and II) - 127 credits
- with environmental safety and health concentration (Options I and II) 131 credits
Bachelor of science in applied technical leadership - 121 credits


## Internship

The Department of Technology, recognizing the value of integrating theory and practice through application in actual work environments, encourages intemships for qualified majors. An intemship provides a wide range of opportunimes for applying knowledge and skills obtained in a classroom or laboratory to actual work situations.

An intemship is an option that qualified students may pursue as an integral component of their degree program. It provides an opportunity to participate in a supervised program relevant to the student's major.

Permission of the instructor is needed to register for an intemship.

| UNIVERSITY CORE - 34 CREDITS TEACHING MAJORS | TCE | ATE |
| :---: | :---: | :---: |
| BASIC COMPETENCY - 9 CREDITS |  |  |
| C-English | X | X |
| D- Quantitative Decision Making | X | X |
| E-Reasoning | X | X |
| FINE ARTS - 6 CREDITS - Different Departments |  |  |
| F - Performance Centered | X | X |
| G- History Centered | X | X |
| HUMANITIES - 6 CREDITS - Different Prefixes |  |  |
| H- Literature | X | X |
| I - Times/Culture | X | X |
| SOCIAL SCIENCES - 6 CREDITS - Different Departments |  |  |
| J - Human Growth \& Development | X | X |
| J - | X | X |
| NATURALSCIENCES W/LAB - 4 CREDITS |  |  |
| K- With Lab | PHY | * |
| CORE - 3 CREDITS - May substitute for University Core Requirement |  |  |
| Interdisciplinary | X | X |
| TOTALS | 34 | 34 |
| *University Natural Science K PHY = Physics |  |  |


| UNIVERSITY CORE - 34 CREDITS NON-TEACHING MAJORS | $\begin{array}{\|c\|} \hline \text { INT } \\ \text { Opt I \& } \\ \text { Opt II } \end{array}$ | $\begin{gathered} \text { INT } \\ \text { MFG } \end{gathered}$ | INT <br> ES\&H <br>  <br> Opt II | $\begin{gathered} \text { INT } \\ \text { CA } \end{gathered}$ | ATL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BASIC COMPETENCY - 9 CREDITS |  |  |  |  |  |
| C- English | X | X | X | X | X |
| D- Quanlitaive Decision Making | X | X | X | X | X |
| E-Reasoning | X | X | X | X | X |
| FINE ARTS - 6 CREDITS - Different Departments |  |  |  |  |  |
| F - Performance Centered | X | X | X | X | X |
| G- History Centered | X | X | X | X | X |
| HUMANITIES - 6 CREDITS - Different Prefixes |  |  |  |  |  |
| H- Literature | X | X | X | X | X |
| I - Times/Culture | X | X | X | X | X |
| SOCIALSCIENCES - 6 CREDITS - Different Departments |  |  |  |  |  |
| J - Introduction to Macroeconomics | X | X | X | X | X |
| J - | X | X | X | X | X |
| NATURALSCIENCES W/LAB - 4 CREDITS |  |  |  |  |  |
| K- With Lab | PHY | PHY | CHEM | PHY | * |
| CORE - 3 CREDITS - May substitute for University Core Requirement |  |  |  |  |  |
| Interdisciplinary | X | X | X | X | X |
| TOTALS | 34 | 34 | 34 | 34 | 34 |
| * University Natural Science K |  |  |  |  |  |
| $\begin{gathered} \text { PHY }=\text { Physics } \\ \text { CHEM }=\text { Chemistry } \end{gathered}$ |  |  |  |  |  |


| DEPARTMENTAL REQUIREMENTS - 18 CREDITS <br> TEACHING MAJORS | TCE | ATE |  |
| :--- | :---: | :---: | :---: |
| SCIENCE/MATH - 12 CREDITS |  |  |  |
| Mathemarics | X | X |  |
| Statistics | X | X |  |
| Computer Science | X | X |  |
| Natural Science | $*$ | X |  |
| GENERAL ELECTIVES -6 CREDITS | X | X |  |
| Academic/Professional/Technical | X | X |  |
| Academic/Professional/Technical |  |  |  |
|  |  |  |  |
| *Physics or Chemistry | $\mathbf{1 8}$ | $\mathbf{1 8}$ |  |


| DEPARTMENTAL REQUIREMENTS NON-TEACHING MAJORS | $\begin{gathered} \hline \text { INT } \\ \text { Opt I } \end{gathered}$ | $\begin{gathered} \text { iNT } \\ \text { Opt II } \end{gathered}$ | $\begin{aligned} & \text { INT } \\ & \text { MFG } \end{aligned}$ | INT ES\&H OptI \& Opt II | $\begin{aligned} & \text { INT } \\ & \text { CA } \end{aligned}$ | ATL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SCIENCEMATH - 12/13 CREDITS |  |  |  |  |  |  |
| Mathematics | X | X | X | X | X | X |
| Statistics | X | X | X | X | X | X |
| Computer Science | X | X | X | X | * | X |
| Physics or Chemistry | X | X | X | BIO | X | SCI |
| GENERALELECTIVES |  |  |  |  |  |  |
| Academic/Professiona/Technical | X | X | X | X | X | X |
| Academi//Professiona/Technical |  | X | X | X |  | X |
| TOTALS | 15 | 18 | 18 | 19 | 16 | 18 |
| * COS 160/170 (4 Credits) <br> BIO $=$ Biology with Lab <br> SCI $=$ Science |  |  |  |  |  |  |


| TECHNICAL REQUIREMENTS | TCE | $\begin{aligned} & \text { INT } \\ & \text { OptI } \end{aligned}$ | $\begin{array}{\|c\|} \hline \text { INT } \\ \text { MFG } \end{array}$ | $\begin{array}{\|c\|} \hline \text { INT } \\ \text { ES\&H } \\ \text { Opt I } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { INT } \\ \text { ES\&H } \\ \text { Opt II } \end{array}$ | $\begin{aligned} & \hline \mathrm{INT} \\ & \mathrm{CA} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITT 102 - Intro to Industrial Technology | X | X | X | X |  | X |
| ITT 103 -Materias Properties \& Tesing | X | X | X | X |  | X |
| ITT 181 - Introduction to Computers | X | X | X | X |  | X |
| ITT 221 - Power \& Energy Processing | X | X | X | X |  | X |
| ITT 222 -Electronic Control Technology | X | X | X | X |  | X |
| ITT 231 - Technical Graphics | X | X | X | X |  | X |
| ITT 241 - Graphic Communication | X | X | X | X |  | X |
| ITT 251 -Material Processes - Metals | X | X | X | X |  |  |
| ITT 261 - Material Processes - Woods | X | X | X | X |  |  |
| ITT 271 -Material Processes - Polymers | X | X | X | X |  |  |
| ITT 282 - Comp.AidedDesign (CAD) | X | X | X | X |  | X |
| ITT 453 - Comp. Aided Manufacturing (CAM) |  |  | X |  |  | X |
| TCE 370 - Computer Networking |  |  |  |  |  | X |
| BUS 345 - Info. Technology/Mgmt. Info Sys. |  |  |  |  |  | X |
| DOT Computer Elective |  |  |  |  |  | X |
| DOT Computer Elective |  |  |  |  |  | X |
| Internship/Senior Capstone |  | X | X |  |  | X |
| TECHNICAL ELECTIVES | 12 | 6 | 15 |  |  | 3 |
| TOTAL TECHNICAL CREDITS | 45 | 42 | 54 | 33 | * | 45 |
| CAPSTONE EXPERIENCES - 6 CREDITS |  |  |  |  |  |  |
| ITS 420 - Ergonomics Practicum |  |  |  | 3 | 3 |  |
| ITS 430 - Environmental Practicum |  |  |  | 3 | 3 |  |
| * SEE OCCUPATIONAL COMPETENCY |  |  |  |  |  |  |


| OCCUPATIONAL COMPETENCY | ATE | ATL | INT <br> Opt II | INT <br> ES\& $\&$ <br> Opt II |
| :---: | :---: | :---: | :---: | :---: |
| ITT 400- Occupational Competency | $*$ | $*$ | $*$ | $*$ |
| ITT 440 - Related Occu. Exp.Internships | $*$ | $*$ | $*$ | $*$ |
| Associate Degree Transfer | $*$ | $*$ | $*$ | $*$ |
| Technical Courses | $*$ | $*$ | $*$ | $*$ |
| Military | $*$ | $*$ | $*$ | $*$ |
| Combination | $*$ | $*$ | $*$ | $*$ |
| * TOTAL CREDITS | $\mathbf{3 9}$ | $\mathbf{3 9}$ | $\mathbf{3 9}$ | $\mathbf{3 3}$ |
| *AVALABLE |  |  |  |  |


| PROFESSIONAL REQUIREMENTS - TEACHING | TCE | ATE |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| ATE 280 - Facility Organization \& Management |  | X |  |  |  |
| ATE 300 - Occupational/Trade Analysis |  | X |  |  |  |
| ATE 312 - Teaching Students With Special Needs | X | X |  |  |  |
| ATE 350 - Philosophy of Vocational Education |  | X |  |  |  |
| ATE 380 - Curriculum Development |  | X |  |  |  |
| ATE 381 - Methods/Materials of Instruction |  | X |  |  |  |
| ATE 411 - Measurement \& Evaluation |  | X |  |  |  |
| ATE 402 - Student Teaching (6 Credits) |  | X |  |  |  |
| EDU 100 - Exploring Teaching as a Profession | X |  |  |  |  |
| ITP 210 - Technical Writing | X |  |  |  |  |
| ITP 320 - Occupational Safety \& Health | X |  |  |  |  |
| TCE 380 - Curriculum Development | X |  |  |  |  |
| TCE 381 - Methods \& Materials of Instruction | X |  |  |  |  |
| EDU 324 - Student Teaching (12 Credits) | X |  |  |  |  |
| Elective |  | X |  |  |  |
| TOTAL CREDITS |  |  |  | $\mathbf{3 0}$ | $\mathbf{3 0}$ |


| PROFESSIONAL REQUIREMENTS NON-TEACHING | $\begin{gathered} \text { INT } \\ \text { Opt I \& } \\ \text { Opt II } \end{gathered}$ | $\begin{gathered} \text { NNT } \\ \text { MFG } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { INT } \\ \text { ES\&H } \\ \text { Opt I \& } \\ \text { Opt II } \\ \hline \end{array}$ | $\begin{gathered} \mathrm{INT} \\ \mathrm{CA} \end{gathered}$ | ATL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ITP 210 - Technical Writing | X | X | X | X | X |
| ITP 280 - Industrial Organization \& Mgt. | X | X |  | X | X |
| ITP 300-Ergonomics \& Time Study | X | X | X | X | X |
| ITP 310 - Plant Layout \& Material Handling | X | X |  | X |  |
| ITP 320-Occupational Safety \& Health | X | X | X | X | X |
| ITP 330-Production Control | X | X | X | X |  |
| ITP 340 - Fundamentals of Quality | X | X | X | X | X |
| ITP 350-Conference Leading | X |  | X | X | X |
| ITP 381 - Human Resource Dev. in Industry | X |  |  | X | X |
| ITP 490-Cost Analysis \& Conrol | X |  |  | X |  |
| ITS 321 - Work Place Design/Ergonomics |  |  | X |  |  |
| ITS 331 - Basic Toxicology |  |  | X |  |  |
| ITS 332-Industrial Hygiene |  |  | X |  |  |
| ITS 334 - Environmental Air Quality |  |  | X |  |  |
| ITS 341 - Environmental Policies |  |  | X |  |  |
| ITS 342-Loss Control Management |  |  | X |  |  |
| ITS 346 - Hazardous Waste Systems/Mgt. |  |  | X |  |  |
| ACC 110-Fin. Acct. Info.Decision Making | X |  |  | X | X |
| ECO 102J - Inroduction to Microeconomics | X |  |  | X | X |
| Elective |  |  |  |  | X |
| TOTAL CREDITS | 36 | 21 | 39 | 36 | 30 |

Laboratory Fees
Laboratory fees to cover the cost of materials and supplies are assessed in ITT courses.

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 324 Student Teaching

Full-ime 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 EDU 100, ATE 380, ATE 381, and HRD 333J. Cr 12.

## ATE 280 Facility Organization and Management

A course in which the student will develop an understanding of the administrative principles and practices which provide for highly effective instruction in industrial, vocational, and technical classrooms and laboratories. Students will organize systems for personnel supervision and accountability; organize personnel and maintenance systems; develop and employ a safety education program in compliance with state of Maine and OSHA regulations; develop and employ an organized budget/ procurement schedule; and design and implement a contemporary laboratory/workplace environment.

## ATE 300 Occupational and Trade Analysis

 Identification of occupational or trade fields, units, operations, and items of related information. Cr 3 .
## ATE 312 Teaching Students with Special Needs

A foundational requirement providing technical managers, vocational instructors, and technology educators with a fundamental understanding of the federal legislation regarding special needs, its implementation in the workplace and learning environment. Students will be aware of federal legislation and its implications in the related environment; identify and diagnose exceptional individuals; provide appropriate materials for exceptional individuals; modify working and learning environments; and monitor, assess, and advise exceptional individuals in the working and learning environment.

Cr 3.

## ATE 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 cooperaive half-ime training, community survey, advisory committees, laws and regulations; and examination of the responsibilities and activities of the coordinator. Cr 3 .

## ATE 350 Philosophy of Vocational Education

A survey of the history and philosophy of vocational education in the United States with emphasis upon recent developments.

Сг 3.

## ATE 380 Curriculum Development

A course in the identification and development of curriculum materials focusing on the techniques needed to develop units and courses of study. Students will analyze the instructional situation; develop educational goals and objectives; identify educational activities to achieve those objectives; identify evaluation activities related to the objectives; specify subject content forthe course; schedule unit and course activities; and locate resources to support the instruction. Prerequisite: ATE 300 forATE majors.

Cr 3.

## ATE 381 Methods and Materials of Instruction

A course of study in which the students are introduced to the various teaching methods and techniques of professional and effective practitioners. Students will develop their own learning and teaching styles. Included in this course are the procurement/creation and uilization of contemporary instructional equipment and teaching materials. Students will evaluate, prepare, and utilize appropriate, relevant instructional materials; plan, prepare, and present lessons; promote effective student use of the learning environment; and organize objecives, develop teaching plans, and evaluate measures of learning.

Cr 3.

## ATE 402 Student Teaching

Full-ime student teaching during the senior year is provided for one semester under direct supervision in off-campus situations for all who meet requirements. Prerequisite: salisfactory completion of professional requirements and advisor's permission.

Cr 6.

## ATE 411 Measurement and Evaluation

A course in educational measurement and evaluation, focusing on teacher made achievement and performance tests, and grading. Students will examine the characteristics of effective evaluation instruments and grading systems; evaluate various types of measurement instruments; develop and effectively use evaluation instruments; and create and use effective competency-based and norm-referenced grading systems.

Cr 3.

## ATE 420 Trends in Contemporary Vocational Education

Identification, analysis, and discussion of major problems and trends in vocational education.

Cr 3.

## ATE 450 Local Administration and

Supervision of Vocational Education
Procedures and practices utilized in establishing, promoting, coordinating, supervising, controlling vocational programs on the local level. Cr 3.

## ATE 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.

## 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: USM English and writing proficiency requirements must have been met. Prerequisite: English composition or instructor permission.

Cr 3.

## ITP 280 Industrial Organization and Management

Anintroduction to industrialorganization and management. A study of the common elements of industry as it relates to the areas of research and development; industrial relations; production; financial control; marketing; and labor. Management practices will be highlighted. Emphasis will also be placed upon contemporary issues/problems/ trends associated with a global economy. $\quad \mathrm{Cr} 3$.

## ITP 300 Ergonomics/Time Study

A study of how the human body interacts with a workplace while performing human activity. Surface electromyography measurement techniques are employed in measuring stress on the human body in an effort to eliminate cumulative trauma disorders. Time measurement techniques are employed in the development of time standards. Prerequisite: basic math concepts or instructor permission.

Cr 3.

## ITP 310 Plant Layout and Material Handling

A study of facility and workplace design. Emphasis will be on efficient layout and material flow through manufacturing, warehousing, and service facilities with attention given to the resulting impacts on product and process quality and environmental factors.

Cr 3.

## ITP 320 Occupational Safety and Health

This is an introductory awareness course showing the importance of safety and health in the workplace. Emphasis will be placed on the worker, his/ her work environment including such special emphasis areas as OSHA and other regulatory agencies, hygiene, hazard identification, machine safeguarding, hazardous waste, loss control, life safety, building construction, and other areas of concern.

Cr 3.

## ITP 330 Production Control

Lectures, discussions, and problems dealing with the principles and practices of production and inventory control. Study includes information flow, forecasting, scheduling, capacity planning, mate-
rial requirements planning, shop floor control, economic order quantities; order point analysis, ABC analysis, line balancing, project scheduling and just-in-time techniques. Prerequisite: basic math competency.

Cr 3.

## ITP 340 Fundamentals of Quality

An overview addressing fundamental concepts and principles of quality control applied to manufacturing and service sector industries. Major topics include incoming material control, acceptance sampling, statistical process control, continuous quality improvement, and management of quality operations. The methodology, materials, and processes associated with solving problems, developing and achieving standards, and techniques of analysis in attaining and improving quality will be the primary focus of the course. Prerequisite: math proficiency or instructor permission.

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, organizing, and leading meetings, conferences, and seminars.

Cr 3.

## ITP 381 Human Resource Development in Industry

An introduction to the development of human resources in industrial settings. Students are introduced to the organizational environment and the various functions of human resource management. Topics covered include human resource developments and requirements, training and development, compensation management, job analysis and classification, employee management relations, and other pertinent functions. Students become involved in career development for possible preparation of a portfolio of their prior learning and work experience.

Cr 3.

## ITP 490 Cost Analysis and Control

Theory and application of concepts used in analysis and control of costs pertaining to planning, developing, and managing industrial operations. Concepts include activity-based costing/management, time value of money, methods of evaluating competing alternatives, capital equipment cost jusification, and cost estimating. Prerequisite: accounting/minimum college algebra or instructor permission.

Cr 3.

## ITS 321 Workplace Design Ergonomics

This course has been developed to educate the student in the use of ergonomicprinciples as they apply to the design/redesign of workstations as they exist in all types of working environments. Muscular stress measurements will be taken on the human body to establish base line stress levels for various jobs and later compared to redesigned jobs to verify the significance of the change. State-of-the-art surface electromyography techniques and
equipment will be used in both laboratory and field applications. Prerequisite: ITP 300, equivalent, or instructor permission.

## ITS 331 Basic Toxicology

Basic toxicology is a course designed to introduce students to physical and health hazards in the environment and to teach the basic concepts of comparative toxicology. Students will concentrate on hazards, target organs, routes of entry, toxicology concepts/terminology, and how chemicals are classified fortoxicity, indexing, and referencing chemicals as well as chemical toxicity recognition. Prerequisite: ITP 320 or instructor permission. Cr 3 .

## ITS 332 Industrial Hygiene

This course will cover the general concepts and principles of industrial hygiene with direct application to workplace environments. Direct topic coverage will include: common health hazards, air contaminates, biological hazards, an introduction to air quality, noise, respiratory control, ventilation, hygiene sampling equipment/techniques, OSHA, and related standards. Prerequisite: Chemistry with lab.

Cr 3.

## ITS 334 Environmental Air Quality

The emphasis of the course will be on indoor air quality topics and will scan outdoor air quality topics. The course content will cover contaminates in the environment, employee problems and/or reactions to contaminants, sampling and analysis of pollutants, how contaminates/pollutants travel within facilities, and regulation/control methods commonly utilized. Prerequisites: ITP 320 and ITS 332 . Cr 3.

## ITS 341 Environmental Policies

This course is designed to introduce the student to the major environmental laws issued by local, state, and federal govemments. Major topics will include: legislation on clean air, hazardous waste, controlling water pollution, regulation of heavy metals, etc. Strategies for being in compliance and dealing with various agencies (local, state, and federal), including enforcement actions, will be covered.

Cr 3.

## ITS 342 Loss Control Management

This course is about the risk management process, the steps it involves, and the administrative aspects of carrying it out. Students will learn how to analyze the exposures to accidental losses facing individuals and organizations; describe, analyze and apply alternative risk management techniques; develop, justify, and apply decision rules for choosing risk management techniques; and apply a practical analysis or risk/loss management techniques through the study of Maine's workers' compensation system. Prerequisite: ITP 320, equivalent, or instructor permission.

Cr 3.

## ITS 344 Administrative Accountability and Tracking

A course structured to assist management level personnel in administering a company safety and health system. Course content will center around: existing management principles, the assessment of needs, systems development, assigning responsibilities, program tracking/oversight, and evaluation methodology. Prerequisite: ITP $320 . \quad$ Cr 3.

## ITS 346 Hazardous Waste Systems/ Management

Management skills necessary to bring an employer into compliance are covered in this course. The course covers management understanding of state and federal regulations, such as EPA, OSHA, RCRA, and DOT. Topics will include types of generators, filing methods and regulations for generators, hazardous waste/materials, cataloguing systems used, how wastes are stored, transportation methods, and training requirements. Prerequisites: ITP 320 and ITS 331.

Cr 3 .

## ITS 420 Ergonomic Practicum

This course places the senior level student in the workplace for the purpose of completing his/her study of ergonomic principles. The opportunity to apply the materials covered in ergonomics/time study and workplace design ergonomics now can be put into practice. Students will be placed at various work site locations and will be assigned an ergonomic project within each site. To be included in the project are problem identification, hazard analysis, and problematic corrective actions. Each student practicum will be assigned a faculty advisor. Prerequisites: ITP 300, ITP 320, ITS 321, and senior level status.

Cr 3 .

## ITS 421 Process Systems Hazard Analysis

This advanced course provides management and application skills needed to better control hazards as they relate to industrial processes which are system structured. Key areas focus around hazards of materials (chemicals) used in systems, equipment design, operating standards, and methods used to identify, analyze, and evaluate process systems. Prerequisite: ITP 320.

Cr 3.

## ITS 430 Environmental Practicum

This course places the senior level student in the workplace for the purpose of completing his/her study of environmental principles. The opportunity to apply the materials covered in environmental policies, basic toxicology, industrial hygiene, and environmental air quality now can be put into practice. Students will be placed at various work site locations and will be assigned an ergonomic project within that site. To be included in the project are problem identification, hazard analysis, and problematic corrective actions. Each student practicum will be assigned a faculty advisor. Prerequisites: ITP 320, ITS 331, ITS 332, ITS 334, ITS 341, and senior level status.

Cr 3.

ITT 102 Introduction to Industrial Technology
An introductory study of industrial technology. Course emphasis is on developing an understanding of basic concepts and functions of industry, the application of technology in industry, and the design and production of industrial products. Cr 3.

## ITT 103 Materials Properties and Testing

A study of the basic properties of industrial materials, their structures, and testing procedures used to determine those properties. Studies include physical, mechanical, optical, chemical, thermal, and electrical properties. Testing, associated literature research, reporting procedures, calculation, and measurement are also included.

Cr 3.

## ITT 181 Introduction to Computers

An introduction to current and emerging computer applications. The course includes an overview of basic computer hardware and operation, and an introduction to general application software. Emphasis is on computer terms, concepts, and the integration of activities, including word processing, spreadsheets, graphics, and communication. Lecture and lab.

Cr 3.

## ITT 221 Power and Energy Processing

A technical invesigation into energy converters and transactional power systems. Course emphasis is on mechanical, hydraulic, and pneumatic power transmission systems and their applications to modem industrial equipment.

Cr 3.

## ITT222 Electronic Control Technology

A study of the fundamental concepts, devices, and applications of electronic components and controllers utilized on industrial equipment. Laboratory sessions focus on a teamed work cell approach to monitoring and controlling manufacturing processes. Prerequisites: ITT 181, ITT 221, ITT 251, equivalent, or instructor permission. Cr 3.

## ITT 231 Technical Graphics

Concepts and practice with spatial relationships and visualization techniques. Basic skill development and understanding taught through freehand illustrations as well as conventional instruments and devices. Multiview projections, pictorial techniques, detail and assembly working drawings, and reproduction techniques. Contemporary industrial practices and processes. A basis for CADD/CAM. Cr 3.

## ITT 241 Graphic Communications

A comprehensive study of technologies associated with the creation, duplication, conversion, storage/ retrieval, and transmission of graphic images. Included are laboratory activities involving the design, development, and production of graphic materials uilizing current and emerging graphic reproduction techniques. Lecture and lab. Prerequisite: computer literacy.

Cr 3.

## ITT 251 Material Processes-Metals

A laboratory course consisting of the study of manufacturing processes including computer integrated manufacturing which represent today's metal manufacturing industries. Processes covered include material identification; material removal-manually and with CNC; 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, or instructor 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 tumn the student will design around the provided criteria and design prototypes using standard methods and processes utilized in industry. Prerequisites: ITT 102 and ITT 103, or instructor permission.

Cr 3.

## ITT 271 Material Processes-Polymers

A study of basic plastic technology and problem solving related to plastic materials and processes. Topics include identification and properties of plastic materials, basic processing methods, product design, and process research.

Cr 3.

## ITT 282 Computer-Aided Design

An introduction to computer-aided drafting and design systems and their relationship to design, drafting, production, and documentation processes. Emphasis is on understanding and utilizing com-puter-aided design (CAD) hardware and software. The course focuses on basic 2D and 3D functions as they generally apply to computer-aided design applications. Lecture and lab. Prerequisites: computer literacy and interpretation of technical drawings.

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 222 or instructor permission.

Cr 3.

## ITT 323 Control Systems

The study of instuments, controls, and sensory devices used to monitor and control industrial processes. Emphasis is placed on design, operation, utilization, and troubleshooing of industrial control systems. Prerequisite: ITT 222 or instructor permission.

Cr 3.
ITT 331 Engineering Design Graphics
Contemporary industrial design practices and tech-
niques as they relate to consumer products. Emphasis will be on design criteria selection and implementation employing standard scientific procedures. Both individual and team assignments will be used. Prerequisite: ITT 231 or instructor permission.

## 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 energy consumption factors. Prerequisite: ITT 231 , equivalent, or instructor permission.

## 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 computerprogram. Topics include: solar strategies, insulation techniques, air-vapor retarders, indoor air quality, heating systems, glazing, lighting, cooling, ventilation, domestic hot water, and economic issues.

Cr 3.

## ITT 342 Advanced Graphic Communications

A study of graphic communications industries with an emphasis on offset lithographic print production. Laboratory experiences include design, copy preparation, photographic and electronic conversion, film assembly, platemaking, and press production processes. Computer and photographic techniques for copy preparation, line and halftone conversion, and color separation are also included. Lecture and lab. Prerequisite: ITT 241 or equivalent or instructor permission.

Cr 3.

## ITT 343 Desktop Publishing and Design

An introduction to the principles of design and layout in the development of copy for graphic reproduction. Emphasis is on computer-based desktop publishing and related design tools, computer and photographic techniques as they apply to design, cost analysis, and preparation of production specifications. Prerequisite: computer literacy. $\operatorname{Cr} 3$.

## ITT 351 Machining and Fabrication

A study of metal industries concemed with electric, TIG, MIG, and gas welding and machining techniques including computer numerical control. Students will design and fabricate useful products using the above mentioned processes. Prerequisite: ITT 251 or instructor permission.

Cr 3.

## ITT 352 Fabrication and Forming

A study of fabrication and forming techniques used in the production of metal products manufactured in today's industry. Sheet metal processes and metal
casting processes will be covered as well as various welding assembly techniques. Prerequisite: ITT 251 or instructor permission.

Cr 3.
ITT 361 Production Manufacturing in Wood Production and wood manufacturing problems including production planning, mass production, jigs, fixtures, special machine operations, CNC application, CADD development, and advanced finishing techniques. General maintenance procedures on production equipment. Group and individual research assignments and related technical problems. Prerequisite: ITT 261 or instructor permission.

Cr 3.

## ITT 362 Residential Construction

A study of the residential construction industries including construction principles, computer cost estimating, insight into energy efficient building design, 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 instructor permission.

Cr 3.

## ITT 383 Robotics

An introduction to the technology, nomenclature, integration and application of automated manufacturing/robotics and their associated systems. This course provides a 'working knowledge' for any individual interested in automated manufacturing/ robotics. Prerequisite: ITT 221 or instructor permission.

Cr 3 .

## ITT 384 Advanced Computer-Aided Design

An advanced computer-aided design course focusing on three-dimensional modeling, image rendering, animation, and customization. Emphasis is on understanding and uilizing current and emerging computer-aided and design hardware and software for design, production development, presentation, and documentation. The course emphasizes basic concepts of three-dimensional model creation and use. Prerequisites: computer literacy, experience with computer-aided design software, and interpretation of technical drawings. Cr 3.

## ITT 400 Occupational Competency

This course is designed to allow credit for technical expertise leamed 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. Majors only. See advisor for further information.

Cr 1-39.

## ITT 413 Instrumentation

A study of instruments and sensing devices used to monitor, observe, and/or control industrial processes. Laboratory and field experiences to research
and construct instruments of interest to the student. Prerequisite: ITT 222 or instructor permission.

Cr 3.

## ITT 414 Digital Electronics

A study of the fundamentals of digital logic and logic systems. Laboratory experiences with typical digital circuits. Prerequisite: ITT 222 or instructor permission.

Cr 3.

## ITT 423 Fluid Power

A study of fluids at work. Investigation of the theory and application of hydraulics and pneumatics in technology and industry. Design, purpose, construction, and maintenance of fluid power devices and systems included.

## ITT 440 Related Occupational Experiences/ Internships

This experience is designed to advance technical and supervisory sleills during employment with a business or industry. Interested students must meet with the internship coordinator prior to the job search process, and the hosting firm must be approved by the coordinator prior to course registration. Securing suitableemployment is the student's responsibility. Formal assignments will be discussed during weekly seminars. Contact the internship coordinator for additional information. Health insurance is required of students in this course.

Cr 1-3.

## ITT 444 Photographic and Electronic Reproduction

A study of photographic and electronic methods of creating, manipulating, and reproducing monochrome, continuous tone, match and process color images. The course explores photographic and com-puter-based concepts, processes, and techniques for working with images and integrating those images into graphic designs. Prerequisite: ITT 241, equivalent, or instructor permission.

Cr 3.

## ITT 452 Metallurgy and Metrology

A study of the properties of metals and how they are altered to meet industrial requirements. Measurements and testing of these properties along with inspection techniques and heat treatment activities will be performed. Individual and group activities will be conducted. Prerequisite: ITT 103, ITT 251, or instructor permission.

Cr 3.

## ITT 453 Computer-Aided Manufacturing (CAM)

This course is designed to provide students with basic understanding of computer control of machine tools. Manual programming at the machine conroller, designing using EZ-featuremill and EZ-tum software, and computer code generation instruction will be given. Emphasis will be placed on the basics of CNC machining, practical approaches to solving machining problems, and hands-on activities with CNC. Prerequisite: ITT 181 and ITT 251, or instructor permission.

Cr 3.

ITT 490 Special Problems in Technology
Provides upper-level students an opportunity to pursue independently atopic, project, or experiment of interest. Students will prepare a contract or proposal for study to be conducted and, upon completion, submit findings in a scholarly report or other evidence of merit. Prerequisite: instructor permission.

Cr variable.

## TCE 370 Networking Computers

The goal of this course is to develop an understanding of computer networks and provide basic background necessary for their construction and maintenance. It consists of readings, discussions, tours, and hands-on activities dealing with the structure, hardware, software, and protocols that make up computer networks. A basic proficiency with personal computers is assumed.

Cr 3.

## TCE 380 Curriculum Development

A course in the identification and development of curriculum materials focusing on the techniques needed to develop units and courses of study. Students will analyze the instructional situation; develop educational goals and objectives; identify educational activities to achieve those objectives; identify evaluation activities related to the objecives; specify subject content for the course; schedule unit and course activities; and locate resources to support the instruction.

Cr 3.

## TCE 381 Methods and Materials of Instruction

A course of study in which the students are introduced to the various teaching methods and techniques of professional and effective practitioners. Students will develop their own leaming and teaching styles. Included in this course are the procurement/creation and utilization of contemporary instructional equipment and teaching materials. Students will evaluate, prepare, and utilize appropriate, relevant instructional materials; plan, prepare, and present lessons; promote effective student use of the learning environment; and organize objectives, develop teaching plans, and evaluate measures of leaming.

Cr 3.

## TCE 482 Internet Web Site Development

This course develops a basic understanding and skill in the design, development, and maintenance of Internet web sites. Topics include web site design methods, Intemet fundamentals, HTML, web-based multimedia, and working with clients. Students will develop sample web documents and work with a client to design a web site. It is assumed that the students have a working knowledge of personal computers.

Cr 3.

# College of Nursing 

Interim Dean: Marianne W. Rodgers
Associate Dean: Janet Z. Burson; Chairof Undergraduate Nursing Program: Susan Vines; Chair of Graduate Nursing Program: Phyllis Healy; Chair of Recreation and Leisure Studies: William McCullough; Director of Sports Medicine Programs: Brian Toy

Faculty in Nursing Programs<br>Professor: MacPherson; Associate Professors: Burson, Foumier, Hastings-Tolsma, Healy, Johnson, Keith, Peake-Godin, Rodgers, Skoner, Thompson, Tiffany, Tukey, Smith, Vines; Assistant Professors: Childs, Elliott, Moody, Sepples; Instructors: Caton-Lemos, Doane; Associate Professor Emerita: Normandeau<br>Faculty in Recreation and Leisure Studies<br>Associate Professors: McCullough, Meyer; Instructor: Sandstrum; Professor Emeritus: Sullivan<br>Faculty in Sports Medicine Programs<br>Associate Professor: Toy; Assistant Professors: Croteau, Rosene, Willoughby

The College of Nursing (CON) offers programs leading to baccalaureate or master's degrees in nursing and baccalaureate or associate degrees in therapeutic recreation, a baccalaureate degree in health science, and a baccalaureate degree in sports medicine. In addition, it offers a minor in health studies. 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 CON is approved by the Maine State Board of Nursing and accredited by the National League for Nursing. For further information, please contact the National League for Nursing Accrediting Commission, 350 Hudson Street, New York, N.Y. 10014, telephone (212) 989-9393.

The goals of the College are to:

1. Provide nursing, therapeutic recreation, health science, and sports medicine education to a diverse student population within a state institution of higher education.
2. Prepare health professionals to respond to the health needs of the people of Maine.
3. Conduct and disseminate research as a means of increasing knowledge and improving practice.
4. Promote a model of practice based on the highest standards of humane and ethical professional conduct.
5. Provide professional service and consultation to the community and University in the areas of nursing, health, sports medicine, and therapeutic recreation.

## Department of Undergraduate Nursing

The undergraduate program prepares graduates to begin their nursing practice in a variety of health care settings and in a variety of specialty areas. They possess the foundation needed to assume beginning leadership and management positions and to begin graduate studies.

The undergraduate program requires the completion of 120-125 credits of study and culminates in a baccalaureate degree. Graduates are eligible to sit for State Board licensure exams upon completion of the program.

In addition to requirements established for admission to the University, the undergraduate nursing program requires high scloool chemistry and biology with labs. See admission section of the catalog for further requirements.

Because somuch of the undergraduate nursing program entails supervised clinical experience, the CON faculty reserves therighttolimit enrollments. Admission

## Academic <br> Requirements

to the baccalaureate program is highly selective. The process includes consideration of SAT scores, high school class rank, academic record, and references.

Any student enrolled in or seeking enrollment in CON courses must be advised by CON faculty. Transfer admission into the sophomore year of the nursing program is available on a limited basis according to the number of open seats. Admission is selective according to GPA and previous academic record. To be considered, transfer students must have a minimum GPA of 2.5.

Because health care workers are at a higher risk for certain illnesses, all students must meet the health requirements of the College. These requirements are listed in the student handbook, available through the dean's office. Students must have at least two of three hepatitis $B$ immunization injections prior to entry into Health Assessment and/or Fundamentals of Nursing. The total series of three must be completed prior to entry into clinical courses. Studenthealth records must be on file in the College of Nursing prior to entry into clinical courses.

To cover lab costs, a $\$ 10.00$ lab fee is assessed for each seven-week laboratory course; a $\$ 20.00$ fee for each semester long laboratory course. 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 ransportation to rural as well as urban areas. Professional liability insurance is highly recommended for students in the nursing major. Health insurance, equal to or better than the USM Student HealthInsurance Basic Plan, is required prior to beginning clinical coursework.

## Prerequisite Areas

Prerequisite courses to the upper-division nursing major consist of competencies (English Composition, Quantative Decision Making, Skills of Analysis/Philosophy), physical and behavioral sciences, humanities, and fine arts. For graduation, no more than three credits of non-nursing elective courses can be taken passfail and only one D grade from elective, humanities, fine arts, or COR course areas will be accepted. Grades below C- are not acceptable in any other prerequisite course.

General Requirements
English Composition 0-3 credits
Skills of Analysis/Philosophy 3 credits
Humanities 6 credits
Fine Arts 6 credits
Statistics $\quad 3$ credits
18-21 credits
Physical Science Requirements
Human Anatomy and Physiology and Lab
8-9 credits
Chemistry for the Health Sciences and Lab
4-6 credits
Microbiology and Lab
Human Nutrition
4-5 credits
3 credits
Pathophysiology 3 credits
$\begin{array}{lr}\text { Social Science Requirements } & 22-26 \text { credit } \\ \text { Introductory Psychology } & 3 \text { credits }\end{array}$
Introductory Sociology 3 credits
Human Growth \& Development (life span preferred) 3 credits
9 credits
General Electives (can include nursing electives) and COR course

## Prerequisites to Sophomore Nursing Courses

The following courses must be taken beforeentry into sophomore level nursing laboratory courses (NUR 209/210 or NUR 212/213), in addition to having completed 30 credits and holding a minimum cumulative GPA of 2.5 :

English Composition
Human Anatomy and Physiology and Lab
Chemistry for the Health Sciences and Lab
Human Growth and Development

Introductory Psychology
Introductory Sociology
In addition to sophomore-level prerequisite courses, the following courses must be taken before entry into junior-level clinical nursing courses:

| Course | Prerequisites |
| :--- | :--- |
| Skills of Analysis/Philosophy | College Writing |
| Introduction to Nursing |  |
| Pathophysiology | Anatomy/Physiology I \& II |
| Microbiology and Lab | Organic Chemistry \& Anatomy/Physiology |
|  | I \& II |
| Human Nutrition | Organic or Biochemisry; Anatomy/Physiology |
|  | I \& II |
| Health Assessment |  |
|  | Human Nutrition |
| Fundamentals of Nursing |  |
| In addition, Statistics must be completed before taking NUR 401, Health-Re- |  |
| lated Research. |  |

## Nursing Courses

Nursing content at the upper division is organized to facilitate the integration of nursing knowledge and skill and to draw on a foundation of leaming from other disciplines. Courses focus on the promotion, maintenance, and restoration of 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, public health settings, nursing homes, schools, and industries are used for clinical experiences.

| Upper Division Nursing Courses |  |  |  |
| :---: | :---: | :--- | :--- |
| NUR | 301 | Sociocultural Issues in Health and <br> Health Care |  |
| NUR | 302 | Pharmacology | 3 credits |
| NUR | 311 | Reproductive \& Sexual Health Nursing | 3 credits |
| NUR | 312 | Reproductive \& Sexual Health Nursing Lab | 2 credits |
| NUR | 315 | Child Health Nursing | 2 credits |
| NUR | 316 | Child Health Nursing Lab | 2 credits |
| NUR | 320 | Introduction to Adult Health Nursing | 3 credits |
| NUR | 321 | Introduction to Adult Health Nursing Lab | 2 credits |
| NUR | 324 | OlderAdult Health Nursing | 2 credits |
| NUR | 325 | Older Adult Health Nursing Lab | 2 credits |
| NUR | 330 | Mental Health Nursing | 2 credits |
| NUR | 331 | Mental Health Nursing Lab | 2 credits |
| NUR | 341 | Community Nursing Lab | 2 credits |
| NUR | 356 | Concepts in Community Health | 3 credits |
| NUR | 401 | Health-Related Research | 3 credits |
| NUR | 402 | Adult Health Nursing | 3 credits |
| NUR | 403 | Adult Health Nursing Lab | 2 credits |
| NUR | 470 | Professional Issues | 2 credits |
| NUR | 480 | Concentrated Clinical Practicum | 3 credits |
|  |  |  | 45 credits |

Course sequencing: During the first semester junior year, students take NUR $320 / 321$, NUR 324/325 and NUR 302. During the next two semesters two clini$\mathrm{cal} /$ theory course combinations must be taken from the following list: NUR 311/ 312, NUR 315/316, NUR 330/331, andNUR 341. NUR 301, Sociocultural Issues in Health and Health Care, must be taken during the junior year. NUR 356, Concepts in Community Health, must be taken concurrently with, or previous to, NUR 341, Community Nursing Lab. NUR 480, Concentrated Clinical Practicum, is taken as the final clinical course of the final semester.

## Retention/Progression Policies

The following are exceptions or additions to University progression policies.
Students in the nursing programs must maintain class standing according to hours accomplished, with a grade point average as follows:

| Credit Hours | For Good Standing | For Probationary Standing |
| :---: | :---: | :---: |
| $46-120$ | 2.50 | 2.25 |
| $31-45$ | 2.25 | 2.0 |
| $0-30$ | 2.0 | 1.8 |

Standards apply to both part-time and full-time students. These standards allow the beginning or non-traditional student to adjust to school and studies. By maintaining a 2.5 GPA or above during the upper-division years, the student maintains a standard appropriate to professional practice. Probation lasts for a period of one semester.

The faculty of the College of Nursing reserves the privilege of accepting and retaining only those students who, in the judgment of the faculty, satisfy the requirements of scholarship and health necessary for nursing. A student who admits to or is found guilty of a violation of academic integrity (see USM Student Academic Integrity Policy) or the American Nurses' Association guidelines for ethical practice (see College of Nursing Student Handbook) is subject to suspension or dismissal from the University. The Maine State Board of Nursing may refuse to grant a license on the basis of violation of academic or professional integrity or on the basis of criminal history record information relating to convictions denominated in Title 5, Chapter 341, Subsection 5301 of the Maine Revised Statutes Annotated.

Nursing lecture and clinical courses must be taken concurrently the first time a student is enrolled in each course.

A grade of D or F in a nursing lecture or clinical course will stop progression within the College of Nursing until corrected. Only the course in which the D or $F$ is received 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 lecture or clinical course. A course may be repeated only once. To allow progression, the Admissions and Advancement Committee may make an exception to this policy as it pertains to a nursing lecture course, after consulting with the course instructor, student's advisor, clinical instuctor (from the concurrent clinical course), and the student. A request for consideration of exception must be initiated by the student.

A student who receives an F grade in a course with a NUR designation, who is able to maintain a grade point average of 2.5 , will be allowed to repeat 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 2.5 , but whose average remains above 2.0 , is on probation within the College of Nursing. Such a student may take support courses unil his or her grade point average has been restored to the level of 2.5 or above, at which point progress in nursing lecture and clinical 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 2.0 will not be allowed to maintain matriculation in the College of Nursing and will either be dismissed, required to change majors, or suspended from the University according to its policies.

The academic record of a student who receives muliple grades of D or F in the same semester in prerequisite, nursing, and/or support courses, or who receives a D or F in one of the above listed courses when repeating the course due to an unsatisfactory grade, or an F in a nursing clinical course will be reviewed by the committee for academic advancement. A student may not repeat more than two prerequisite, nursing, or support courses without an academic review by and permission from the Admissions and Advancement Committee. Matters of personal concern to the student will be considered. The committee will recommend to the dean a decision regarding progression or dismissal.

## Incomplete Grades

A temporary grade may be assigned by a faculty member when a student, because of extraordinary circumstances, has failed to complete course requirements in a nursing course. Incomplete grades in upper division nursing courses must be completed with a letter grade of C - or better before progressing to the next course.

$R N$ Studies Option

## 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 120-125 credit hours with a grade point average of at least 2.5 .

Recognizing the need and desirability for registered nurses to attain baccalaureate and master's degrees within the state, the CON faculty has 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 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 or Sallie Nealand at 753-6589.

All RNs must fulfill the University's 30 credit residency requirement.
The CON recognizes a maximum of 30 nursing credits (RN credit options) transferred from an associate degree (ADN) program, accredited by the National League for Nursing (NLN) at the time the degree was awarded, as basic nursing credits required in the baccalaureate program. These credits are applied toward fulfillment of the baccalaureate requirements for RN students who have successfully completed NUR 304, RN Transition. Nursing credits earned in the ADN program beyond the basic 30 credits above may be used as elective credit.

RNs graduating from a diploma program or an associate degree program school not accredited by the NLN atthe time theirdegree was awarded may elect to sit for an examination or to prepare a portfolio documenting their learning. Portfolio evaluation is obtained through the Office of Prior Learning Assessment.

The following courses must be completed prior to entry into the upper division nursing courses or are available for credit by examination.

English Composition $\quad{ }^{* *}$ Anatomy and Physiology I \& II
General Psychology Growth and Development
General Sociology
Pathophysiology Microbiology
**Anatomy and physiology requirement is waived with the successful completion (grade of 70) of pathophysiology.

The following courses must be completed prior to entry into the upper division nursing courses.

Chemistry for the Health Sciences $\dagger$
Statistics (prerequisite to research)
Philosophy
$\dagger$ Chemistry requirement is waived with the successful completion-grade of 70 -of pathophysiology

University requirements in the humanities, fine arts, and Core curriculum may be taken any time prior to graduation.

Upper division nursing courses in required sequence for RNs include:
Credits Prerequisites
A. *Health Assessment 4
and
RN Transition 5 English Composition
B. (in any order)

RN Credit Options
Sociocultural Issues in Health and $3 \quad$ RN Transition Health Care
Health-Related Research 3 Statistics, RN Transition
Concepts in Community Health 3 RN Transition
C. RN Lab

RN Transition, Health Assessment, and RN Credit Options
Professional Issues 2 RN Transition
RN credit options ( 30 credits) may be completed at any point prior to the RN Lab.
*Available for credit by examination

## Admission Requirements for the RN to BS Option

The RN applicant must (a) meet the general admission requirements of the University, (b) provide evidence (photocopy) of current licensure as a registered nurse in Maine, and (c) must have a GPA of 2.5 or better. Applications of those with a GPA below 2.5 will receive consideration by the Undergraduate Admissions and Advancement Committee. All policies applicable to students in the baccalaureate program (refer to Retention/Progression Policies) also apply to students in the RN to BS option program.

## Option for Non-nurses with Degrees in Other Fields (second degree option)

Recognizing the increasing interest in nursing by individuals with baccalaureate degrees in other fields, CON faculty members have designed an accelerated option leading to a master's degree (MS) in nursing. Details regarding this option are found in USM's Graduate Catalog.

The programs of the College of Nursing are subject te change at any time without notice in advance.

## Minor in Health Studies

The College of Nursing minor in health studies is designed to meet a growing interest in preventive health measures, self-care, and fitness. 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 Holisic Health II, and REC 219, Lifetime Physical Fitness and Wellness
2. Complete three credits from the following:

REC 226 or 3 one-credit RHF courses
3. Complete six credits in elective courses from the following:

REC 216
REC 285
NFS 252
HRD 333J
SPM 330
SPM 381
NUR 590
Not all courses are offered every semester. Some courses have prerequisites.
Other electives may be added by permission of Health Studies Committee.
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. Students may ransfer in six credits toward completion of the minor.

## NFS 252 Human Nutrition

This course examines the basic concepts of human nurition and their application to the needs of human beings throughout the life cycle. Discussion of factors affecting food practices and attitudes is included. Prerequisites: Anatomy and Physiology; Organic Chemistry or Biochemistry. For challenge information contact the School of Nursing. Cr 3.

N UR 200 Introduction to Professional Nursing This course introduces the studentto historical and contemporary perspectives on 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 roles of nurse as caregiver, communicator, and teacher, for diverse, vulnerable populations in a variety of settings. Open to any sophomore standing University student.

Cr 2.

## NUR 209 Health Assessment

This course provides knowledge and skills essential to conduct an in-depth bio-psycho-social-cultural health assessment of well individuals throughout the life span. Emphasis is placed on data collection through development of communication and physical examination skills. Data will then be analyzed and nursing diagnoses developed. Prerequisites: Anatomy and Physiology, NUR 200, Nurition.

Cr 2.

## NUR 210 Health Assessment Practicum

This course provides opportunities for students to apply knowledge and skills necessary to conduct total health assessment of clients of all ages. (Concurrent with Health Assessment.) Cr 2.

## NUR 212 Fundamentals of Nursing

This course introduces the student to concepts and shills basic to the art and science of nursing. The nursing process is a problem-solving tool, and sci-
entific principles as the basis forfoundational nursing therapeutics/shills used in most practice setings are presented.

Cr 3.

## NUR213 Fundamentals of Nursing Practicum

This course focuses on the cognitive basis, scientific principles, and manipulative component of psychomotor skills used when implementing foundational nursing therapeutics which promote, maintain, and restore the health of the client. Cr 2.

## NUR 288 Transition to Professional Nursing: Role Development and Skill Acquisition

This introductory accelerated course for students in the M.S. 2nd Degree Option Program surveys historical and contemporary perspectives on the nature and scope of nursing. It builds on the student’s broad base of lnowledge and experience as it examines the philosophical and research basis of nursing practice. Skills essential to nursing praclice are explored from both a theoretical and practical approach.

Сr 3.

## NUR 301 Sociocultural Issues in Health and Health Care

This course explores professional nursing's role in mediating client health care needs and societal values. Students examine the influence of gender, age, ethnicity, culture, spirituality, and lifestyle on the client's definition of optimal health and the attainment of health care. The nursing roles of advocate and communicator are emphasized.

Сr 3.

## NUR 302 Pharmacology

The purpose of this course is to provide a scientific lnowledge base regarding the benefits and risks of drug therapy, with emphasis on preparing nursing students for the safe administration of drugs to clients during concurrent and subsequent clinical courses. Prerequisites: Human Anatomy and Physiology. Junior standing students in nursing accepted. Permission of instructor for non-nursing majors.

Cr 3.

## NUR 304 RN Transition

This course introduces the RN student to the nature and scope of baccalaureate nursing. The student studies the theories and concepts that form a basis for professional nursing practice. Students examine nursing history and the development of nursing theory. They explore current and professional nursing roles. Legal and ethical issues related to the delivery of health care are discussed. Open toRNstudents only. Prerequisite: RN license and English composition.

Cr 5.

## NUR 311 Reproductive and Sexual Health

## Nursing

This course focuses on the theory and research in reproductive and sexual health care. While emphasis is placed on health promotion from preconception through the childbearing process, high risk conditions and the interventions necessary for successful adaptation are also discussed. In addition, select reproductive/sexual alterations across the
lifespan are reviewed. Prerequisites: NUR 302;
NUR 320/321; NUR 324/325.
Cr 2.

## NUR 312 Reproductive and Sexual Health

## Nursing Lab

This course offers students an opportunity to focus nursing practice on promotion and maintenance of reproductive/sexual health. Emphasis is placed on health needs and alterations during the childbearing process. The utilization of a variety of clinical sites will allow the student access to populations in need of reproductive and sexual health care services across the life span. (Concurrent with NUR 311)

Cr 2.

## NUR 314 RN Credit Options

RNs graduating from a diploma program or an associate degree program at a school not accredited by NLN at the time their degree was awarded may elect to sit for an examination or to prepare a portfolio documenting their learning.

Cr maximum of 30 .

## NUR 315 Child Health Nursing

In this course participants study family-centered nursing care in the health promotion and health care of children. Class discussions focus on theories, research, and literature related to health needs and common health problems of children. Family, heredity, environment, and socioeconomics are among the factors examined in discussions of nursing in child health. Prerequisites: NUR 302; NUR 320/ 321; NUR 324/325.

Сr 2.

## NUR 316 Child Health Nursing Lab

Child health lab provides an opportunity for the student in various health care setlings to apply the theoretical concepts of health promotion, maintenance, and restoration with children and their families who are at risk or may be experiencing alterations in health. (Concurrent with NUR 315.) Cr 2.

## NUR 320 Introduction to Adult Health

 NursingDuring this course, students will explore researchbased nursing therapeutics which support adult clients experiencing health problems. The major health problems in the United States are emphasized. This course will enable students to develop and practice critical-thinking shills necessary for delivery of fam-ily-centered care in today's complex health care system. The roles of collaboration, advocacy, and teaching are introduced as the nurse interacts with clients who are viewed as holistic beings. Prerequisites: NUR 202, NUR 209/210, NUR 212/213.

Cr 3.

## NUR 321 Introduction to Adult Health

## Nursing Lab

Students will intervene therapeutically with adults experiencing health problems. Students will practice problem-solving skills and critical thinking as they perform nursing roles in acute care settings. (Concurrent with NUR 320)

Cr 2.

## NUR 324 Older Adult Health Nursing

This course will offer students a broad based perspective on current gerontological theories and issues related to aging in this society. The older person is viewed within a holistic realm relevant to nursing practice. Emphasis will be placed on health care needs and growth potential of aging persons. Prerequisites: NUR 200, NUR 209/210, NUR $212 /$ 213.

Cr 2.

## NUR 325 Older Adult Health Nursing Lab

This course offers students an opportunity to focus nursing practice on the unique health problems and psychosocial issues of older adults. A variety of clinical sites may be utilized including, but not limited to, home health agencies, long-term care facilities, and acute care hospitals. (Concurrent with NUR 324.)

Cr 2.

## NUR 330 Mental Health Nursing

This course introduces concepts and principles basic to mental health nursing. The focus will be on the understanding of personality development and its behavioral manifestations. Assessment of clients and intervention strategies are explored. Interdisciplinary aspects of mentalhealth care delivery and current issues in mental health nursing will be discussed. Prerequisites: NUR 302; NUR 320/321; NUR 324/325.

Cr 2.

## NUR 331 Mental Health Nursing Lab

This course offers students an opportunity to focus nursing practice on promotion, maintenance, and restoration of mental health. Clinical experience is provided in a mental health/psychiatric nursing setting. The emphasis is on application of concepts of mental health/psychiatric nursing. (Concurrent with Mental Health Nursing, NUR 410)

Cr 2.

## NUR 341 Community Nursing Lab

This course offers students an opportunity to learn nursing therapeutics relevant to community-based care of adults with chronic health problems. The course allows students to integrate concepts of community health and adult health nursing. (Concurrent with NUR 340)

Cr 2.

## NUR 346 Cooperative Clinical Elective I

This is the first in a series of three integrated cooperative courses which can be taken following second semester of the sophomore year. It allows the student to work in an institution as a cooperative employee under nursing supervision. The student may care for patients, practicing the skills of communication, therapeutic intervention, and critical thinking which have been completed in the nursing program. This allows the student to begin to apply previously learned lnowledge and skills, and to take the responsibility and practice the role set of the professional nurse. Students will meet at least once a month with faculty.

Cr var.

## NUR 347 Cooperative Clinical Elective II

This is the second in a series of three integrated cooperative courses. It allows the student to work
in an institution as a cooperative employee under nursing supervision. The student may care for patients, practicing the shills of communication, therapeutic intervention, and critical thinking which have been completed during the first semester of the junior year and in the sophomore year of the nursing program. This allows the student to begin to apply previously learned kowledge and skills, and to take the responsibility and practice the role set of the professional nurse. Students will meet at least once a month with faculty.

Cr var.

## NUR 348 Cooperative Clinical Elective III

This is the third in a series of three integrated cooperative courses. It allows the student to work in an institution as a cooperative employee under nursing supervision. The student may care for patients, practicing the skills of communication, therapeuic intervention, and critical thinking which have been completed during the sophomore and junior years. This allows the student to begin to apply previously learned lnowledge and skills, and to take the responsibility and practice the role set of the professional nurse. Students will meet at least once a month with faculty.

Cr var.

## NUR 356 Concepts in Community Health

This course introduces the concepts and principles basic to the development and maintenance of the community's health and relates them to nursing. The epidemiological process guides the survey of current major health issues. The course focuses on the health issues of groups in the community at local , state, national, and global levels. Must be taken concurrent with or previous to NUR 340/341.

Cr 3.

## NUR 385 Parallel Clinical Internship

This is the first in a series of three integrated clinical courses. It can be taken following the first semester of the junior year. It allows the student to practice the role of the professional nurse under the guidance of a registered nurse preceptor up to and including all of the lnowledge and skills completed by the first semester of the junior year. The student applies the lnowledge and skills of communication, critical thinking and therapeutic intervention completed in the curriculum. Prerequisites: NUR 200, NUR 209/210,NUR 212/213, NUR 302, NUR 320/321, NUR 324/325

Cr 2-3.

## NUR 386 Parallel Clinical Internship

This is the second in a series of three integrated clinical courses. It can be taken following the second semester of the junior year. It allows the student to apply the knowledge and skills learned in the curriculum. The student can practice the role of the professional nurse under the guidance of a registered nurse preceptor using those knowledges and skills of communication, critical thinking and therapeutic intervention previously completed in the curriculum. Prerequisites: either NUR 311/312 and NUR 315/316 or NUR 340/341 and NUR 330/331.

Cr2-3.

## NUR 387 Parallel Clinical Internship

This is the third in a series of three integrated clinical courses. It can be taken following the first semester of the senior year. It allows the student to apply the lnowledge and skills learned in the curriculum. The student can practice the role of the professional nurse under the guidance of a registered nurse preceptor and use those lnowledges and skills of communication, critical thinking, and therapeutic intervention that were previously completed in the curriculum. Prerequisites: NUR 330/331, NUR 340/341, NUR 356, NUR 311/312, NUR 315/ 316.

Cr 1-2.

## 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; RN students; senior standing in the College of Nursing, or permission of instructor. Cr 3.

## NUR 402 Adult Health Nursing

During the course, students will examine researchbased therapeutic nursing interventions which support adult clients experiencing increasingly complex health problems. This course will enable students to continue to practice critical thinking skills necessary for delivery of care to individuals, families, groups, or aggregates in both structured and unstructured settings. The course emphasizes major health problems in the United States. The roles of leader, collaborator, and coordinator are discussed as the nurse interacts with clients who are viewed as holistic beings.

Cr 3.

## NUR 403 Adult Health Nursing Lab

Students will intervene therapeutically with adults experiencing complex health problems. Students practice problem-solving skills and critical thinking as they perform nursing roles in acute care settings. (Concurrent with NUR 402.)

Cr 2.

## NUR 404 Adult Health Nursing Lab

Students will intervene therapeutically with adults experiencing complex health problems. Students practice problem-solving skills and critical thinking as they perform nursing roles in acute care set-
tings. Open to second degree option students only. (Concurrent with NUR 402.)

## NUR 417RN Lab

In this course the student is expected to utilize the nursing process to care for clients in diverse settings. This experience provides the student with an opportunity to care for culturally diverse individuals, families, and groups within a community setting. Leadership roles of the nurse will be emphasized in practice. A two-credit alternative clinical experience is available (NUR 418). Prerequisite: NUR 314.

Cr 2 or 4.

## NUR 470 Professional Issues

Using theories related to complex systems, leadership and change, students explore professional and ethical issues which affect the delivery of health care.

Cr 2.

## NUR 480 Concentrated Clinical Practicum

This practicum provides a culminating intensive clinical experience that affords students an opportunity to refine their clinical practice. The course emphasizes the integration of the multiple roles of nursing in the delivery of nursing therapeutics and serves as a vehicle for enhancing critical thinking and communication skills. To the degree possible, students select a practicum site consistent with their area of special interest.

Cr 3.

## NUR 493/NUR 494 Community-Based Primary Prevention with Vulnerable Populations

This interdisciplinary community-based elective provides students with the opportunity to work with inner-city youth developing, implementing, and evaluating an HIV and substance abuse prevention program. Students develop mentoring relationships with at-risk youth and their families. They learn to apply activity-based therapeutics designed to develop a positive peer culture, enhance self-esteem, and empower youth with skills in communication and decision making. Students lead small group discussions about issues related to HIV, alcohol, tobacco, and other drugs. Those taking NUR 593 apply program evaluation methods to analyze program effects and establish a plan for program improvement.

Cr 3.

## 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 approaclies tohealing, 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.

## School of Health Professions

The School of Health Professions, part of the College of Nursing, includes the Department of Recreation and Leisure Studies, the Department of Sports Medicine, and the bachelor of science in health sciences program.

The bachelor of science in health sciences is a baccalaureate completion program for associate degree allied health graduates. This program provides a career track for those with a technical degree and a desire to broaden their education and to develop depth in one of the areas of minor concentration. In this way, students may continue their focused studies on issues related to their practice. As health care shifts to outpatient and community settings, and more health promotion and health education, these graduates with their expanded professional role capability will be able to provide more effective care to the community.

## Admission Requirements

Applicants must (a) meet the general admission requirements of the University, (b) hold an associate's degree of 60 credits or more in a health care discipline from a regionally accredited educational institution, and (c) hold a GPA of 2.0 or better.

## Academic Requirements

The curriculum reflects the different educational goals and breadth of needs of the students enrolled in the program. In addition to the 60+ credits transferred from the associate's degree, the curriculum includes completion of the USM Core curriculum requirements, a seven-course interdisciplinary completion degree core, electives, and a choice of a minor concentration in education, management/administration, health promotion, or a combination drawn from all three areas.
Program Credit Allocation
Associate's Degree
Associate's Degree $\quad 60+$
Completion of USM Core curriculum 16
Interdisciplinary completion core 21
Minor concentraion 18
Electives 5-6
Total $120-121+$

The interdisciplinary completion core consists of the following courses:
Statistics (D) 3
Growth and Development (J) 3
Foundations of Learning 3
Health-Related Research 3
Concepts in Community Health 3
Principles of Management 3
Professional Issues/Ethics/Leadership Seminar
Total 21

Three minor concentrations are available. Students may choose one concentration or a mix of courses drawn from the three concentrations, according to their educational goals.

| (A) Education | (B)Management | (C)Health |
| :--- | :--- | :--- |
| EDU 300 | ACC 301 | NUR 301 |
| HRD 334 | ACC 302 | NUR 302 |
| HRD 335 | BUS 280 | NFS 252 |
| HRD 339 | BUS 340 | NUR 209 |
|  | BUS 346 | NUR 280/281 |
|  | BUS 360 | NUR 324 |
|  | ITP 300 | NUR 330 |
|  | ITP 320 | REC 219 |
|  |  |  |

## Progression Policies

Students in the health sciences program must maintain class standing according to hours accomplished, with a GPA as follows:

| Credit Hours | For Good Standing | For Probationary Standing |
| :---: | :---: | :---: |
| $61-90$ | 2.0 | 1.8 |
| 91 or more | 2.0 | 1.9 |

Standards apply to both part-time and full-time students. Students must achieve a grade of C - or better in courses designated as part of the interdisciplinary completion core. The course in which a D or F is received needs to be repeated with a grade of C - or better. A course may be repeated only once. The academic record of a student who receives multiple grades of D or F in the same semester in interdisciplinary core courses or when repeating a course due to an unsatisfactory grade will be reviewed by the Admissions and Advancement Committee. The committee will recommend a decision regarding progression or suspension to the dean.

## Graduation Requirements

To be eligible for graduation with a bachelor of science degree in health sciences, the student must have successfully completed all requirements, and a minimum of 120 credits with a GPA of at least 2.0.

## Department of Recreation and deisure Studies

The Department of Recreation and Leisure Studies in the College of Nursing offers two degree programs for students interested in pursuing careers in therapeutic recreation. The associate degree program in therapeutic recreation consists of 60 credit hours. Upon completion of the degree requirements, the student may seek employment as a therapeutic recreation assistant or recreation generalist in a variety of settings.

The baccalaureate degree program in therapeutic recreation consists of 120 credit hours. Upon completion of the degree requirements, the student may seek employment as an activity coordinator, therapeutic recreation specialist, or recreation generalist. Students who complete intemships under the supervision of a Certified Therapeutic Recreation Specialist will be eligible to sit for the National Council for Therapeutic Recreation certification examination.

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 College of Nursing also offers a minor in health studies. See description in College of Nursing section of catalog.

## Retention/Progression Policies

The Department of Recreation and Leisure Studies adheres to the minimum grade and academic suspension standards described in the Academic Policies section of this catalog. In addition the faculty reserves the privilege of retaining only those students who, in the judgment of the faculty, satisfy the requirements of scholarship, skill, and health necessary for practice as therapeutic recreation specialists or therapeutic recreation assistants. A student who admits to or is found guilty of a violation of academic integrity (see USM Student Academic Integrity Policy) or the National Therapeutic Recreation Society's Code of Ethics is subject to suspension or dismissal from the University. (The ethics statement is posted in the Department's reception area, is discussed in REC 294 and REC 494, and is available in the Department chairperson's office.)

A grade of D or Fin a REC-prefix core course will stop progression within the respective degree course sequence. Students who receive a grade of $D$ or $F$ in any REC-prefix course must repeat the course and eam a grade of C- or better. Students whoreceive a grade of D or F in an intemship course, REC 295 or REC 495, will be allowed to repeat the course once, providing that the student is able to secure an internship placement and the faculty agrees that the student possesses the knowledge, skills, and health necessary to work with clients in an intemship

## Course Fees

## Programs and Requirements

seting. Students who repeat Internship mustenroll in the appropriate pre-intermship course the semester immediately preceding Internship. Students who receive a D or F in a Deparment theory or clinical course must obtain a grade of C - or better when the course is repeated.

## Internship Policies

Policies regarding internship are specified in the Department's Student Internship Manual. Internship eligibility requirements are as follows:
B.S. Degree In order to be eligible for the REC 495 Internship placement, baccalaureate degree students must be therapeulic recreation majors, have completed at least 24 credits from the Core curriculum, plus all of the program's required foundation courses. Students must also possess current Red Cross Emergency Response and CPR certifications, have a grade point average of at least 2.0 and have completed the following major courses: REC 110, REC 121, REC 125, REC 232, REC 241, REC 382, REC 494, a health/fimess elective; a recreation leadership elective, and a leisure studies elective. Students wishing to complete an internship outside of the faculty's direct supervision area (approximately a 120mile radius from USM) must have a GPA of at least 2.6. Internship opportunities extend throughout New England. The Department cannot guarantee that students will be able to obtain internships in the southern Maine area.
A.S. Degree In order to be eligible for the REC 295 Internship placement, associate degree students must be therapeuric recreation majors and have completed at least 36 credit hours of coursework including REC 110 , REC 121, REC 232, REC 241, REC 294, and one recreation leadership elective. Students must also possess current Red Cross Emergency Response and CPR cerifications and have a grade point average of 2.0 . A grade point average of 2.6 will be required in order to complete an internship outside of the faculty's direct supervision area. Internship opportunities extend throughout New England. The Department cannot guarantee that students will be able to obtaininternships in the southern Maine area.

A course fee is assessed in Karate (RHF 102) and Emergency Response (REC 216), and Arts and Crafts Programming and Leadership (REC 231).

## Associate Degree in Therapeutic Recreation

The two-year program in therapeutic recreation consists of the following courses leading to the associate of science degree. The curriculum is subject to change as a result of faculty evaluation.

General Foundation Courses
Required: ( 16 cr ) Credits
ENG 100C College Writing 3
BIO 100 K Biological Basis of Human Activity 3
BIO 102 K Biological Experiences 1
PSY 101J General Psychology I 3
SWO 266 Perspectives on Disability 3
THE 170F Public Speaking 3
Electives: ( 9 cr )
Humanilies 3
General (two courses) 6
Major Core Courses
Required: ( 23 cr )
REC 110 Introduction to Recreation \& Leisure 3
REC 121 Introduction to Therapeutic Recreation Services 3
REC 125 Recreation Analysis \& Adaptation 3
REC 232 Methods in Therapeutic Recreation Program Design 3
REC 241 Leadership and Supervision in Leisure Services 3
REC 294 Therapeutic Recreation Practice/Pre-Internship 2
REC 295 Internship 6
Note: Students must obtain Red Cross CPR and Emergency Response certificates before taking Internship. This can be done by taking REC 216 or by taking courses offered by the Red Cross.

## Programs and Requirements

Recreation Leadership Electives: ( 6 cr ) Choose two:
REC 219 Lifetime Physical Fitness \& Wellness 3
REC 226 Lifetime Leisure Activities 3
REC 231 Arts and Crafts Programming and Leadership 3
REC 250 Adapted Aquatics 3
Three 1 credit Recreation \& Leisure Activity courses 3
Leisure Studies/Therapeutic Recreation Electives: (3 cr)
REC 224 Therapeutic Recreation and Community Integration 3
REC 233 Environmental Recreation 3
REC 300 Leisure and Older Adults 3
REC 285 Perspectives on Animal Assisted Therapy 3
General Recreation Electives: (3 cr)
Any recreation elective including courses listed in the Recreation Leadership \& Leisure Studies elective categories that have not already been taken. No more than three 1 credit activity courses can be accepted for graduation credit.

Total credits 60

## Transfer into the B.S. Degree Program in Therapeutic Recreation from other USM Academic Programs

Students enrolled in the Department's A.S. degree program may transfer into the B.S. degree program provided space is available and they have completed REC 110 and REC 121 with grades of at least " $B$ " and ENG 100C, PSY 101J, and a human biology course with grades of " $C$ " or better. Students must meet with the Department chairperson to discuss transfer requirements and procedures.

Students enrolled in other USM programs of study must meet with the Department chairperson to discuss transfer requirements and their reasons for transfer. Such students should have completed REC 110 and REC 121 with grades of at least "B" and ENG 100C, PSY 101J, and BIO 111 or equivalent with grades of "C" or better. Acceptance into the program is also dependent on reasons for transfer and space availability. Students may not take 200-level Therapeutic Recreation core courses until accepted as a major.

## Baccalaureate Degree Program in Therapeutic Recreation

In satisfying Core curriculum requirements, students are urged to take PSY 101J and HRD 333J to fulfill their social sciences requirement. BIO 111/106K are required 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. The curriculum is subject to change as a result of faculty evaluation.

Required recreation core courses ( 35 cr ) Credits
REC 110 Introduction to Recreation \& Leisure Services 3
REC 121 Introduction to Therapeutic Recreation Services 3
REC 125 Recreation Analysis and Adaptation 3
REC $232 \begin{array}{ll}\text { Methods in Therapeutic Recreation Program } \\ \text { Design }\end{array}$
REC 241 Leadership and Supervision in Leisure Services 3
REC 382 Therapeutic Recreation Interventions \& Protocols 3
REC 494 Therapeutic Recreation Practice/Pre-Internship 2
REC 495 Internship 12
Note: Students must obtain Red Cross CPR and Emergency Response certificates before taking Internship. This can be done by taking REC 216 or by taking courses offered by the Red Cross.
$\begin{array}{lll}\text { REC } 498 & \begin{array}{l}\text { Management \& Supervision in Therapeutic } \\ \text { Recreation }\end{array} & 3\end{array}$
Leisure studies electives ( 3 cr )
REC 300 Leisure and Older Adults 3
REC 314 Leisure Education and Counseling 3
REC 372 Issues in Recreation and Leisure 3
Health/fitness electives ( 3 cr )
REC 219 Lifetime Physical Fitness and Wellness 3
Three 1-credit health/fitness courses such as Aerobics, Step Aerobics, Beginning Weight Training, or Weight Training for Women


## RHF 100-Level Recreation/Fitness Courses

Each 100-level course provides instruction in one of the following areas: RHF 101 Tennis; RHF 102 Karate; RHF 103 Wallyball; RHF 104 Racquetball; RHF 105 Golf; RHF 106 Ballroom Dance; RHF 107 Aerobics; RHF 108 Step Aerobics; RHF 109 Beginning Weight Training; RHF 111 Intermediate Weight Training (Prerequisite: RHF 109) RHF 112 Pickleball; RHF 113 Challenge Games; RHF 114 Rock Climbing; RHF 115 Weight Training for Women; RHF 116 Country Line Dancing; RHF 117 Low Impact Aerobics. Note: The RLS Deparment reserves the right to request written medical clearance for participation in courses which require high intensity exercise. Cr 1 each.

## REC 110 Introduction to Recreation and Leisure

This course addresses the concepts of leisure, play, and recreation, emphasizing the role leisure should play in modern society. Lectures and discussions on societal attitudes toward work and leisure stresses the need to keep these in proper perspective. Students will concenrate on the psychological aspects of optimal experience and quality of life. Community leisure services will be addressed. Assignments will encourage students to explore leisure lifestyle attitudes.

Cr 3.

## REC 121 Introduction to Therapeutic Recreation Services

An overview of therapeutic recreation including historical and philosophical foundations, service models, professional functions and service setings. A survey of diseases and disabilities with implications for service delivery will also be included. Pre-
requisite: therapeutic recreation major or instructor permission.

Cr 3.

## REC 125 Recreation Analysis and Adaptation

 This course will examine the physical, emotional, cognitive and social domains that underlie human activity as well as methods that can be used to analyze the therapeutic potential of recreational activi-ries. The roles of leisure education activities and leisure-oriented assistive technology will be discussed and a variety of activity and equipment adaptations will be examined. Prerequisite: REC 110 or instructor permission.

Cr 3.

## REC 216 Emergency Response

This course will cover the topics prescribed by the American Red Cross in their emergency response course, including respiratory and cardiac emergencies, wounds, poisoning, sudden illness, bums and other topics. Successful completion of the course requirements will lead to Emergency Response certification, including adult, child, and infant CPR, from the American Red Cross. Cr 3.

## REC217 Basic Sailing \& Seamanship

An intensive study of the theoretical and practical elements involved in coastal sailing. Emphasis is on USCG safety regulations, seamanship, navigaion, and sail handling. Cr 3.

## 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 raining tech-
niques, 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.

Cr 3.

## REC 224 Therapeutic Recreation and Community Integration

This course will explore the issues related to the integration of persons with disabilities into leisure services. The issues/concepts of attitudes, accessibility, legislation, srategies, barriers, adaptations, self-determination, empowerment, and advocacy will be examined and explored. Prerequisite: REC 125 or instructor permission.

Cr 3.

## REC 226 Lif etime Leisure Activities

Classroom sessions will cover the rules and techniques of a variety of recreational activities. Through participation, efficiency of movement and the muscle memory to perform skills will be developed.

Cr 3.

## REC 231 Arts and Crafts Programming and Leadership

Students will learn about the therapeutic benefits of art and craft activities and how to plan, adapt, organize, and lead programs and activities. The course will require students to participate in a variety of craft activities such as leatherwork, weaving, macramé, sand painting, and other appropriate projects. Prerequisite: REC 125 or instructor permission.

Cr 3.

## REC 232 Methods in Therapeutic Recreation Program Design

Using a systems approach to therapeutic recreation program development, students will learn how to develop group-oriented treatment and educational programs. Leisure assessment, documentation, and individualized reatment plan development will be introduced. Students will be required to meet together outside of class to work on group program development projects. Prerequisites: REC 121, REC 125 , majors only.

Cr 3.

## REC 233 Environmental Recreation

The roles of outdoor recreation activities, park systems and wilderness environments in modern society will be examined. Outdoor and environmental ethics as well as educational strategies will be studied and a variety of outdoor activities will be presented.

Cr 3.

## REC 241 Recreation Leadership

This course will provide students with the basic knowledge and methods necessary for effective leadership in recreation settings. Students will be required to paricipate in projects, presentations, and discussions which are aimed at helping them develop and analyze leadership skills in a variety of recreation program areas such as special events, expressive arts, passive recreation, outdoor recre-
ation, and sports. Prerequisites: therapeutic recreation major and REC 110 or instructor permission.

## REC 285 Perspectives on Animal-Assisted Therapy

This course explores the role of pets and other animals in contemporary society with a special emphasis on understanding the role animals may play in the treatment/rehabilitation of persons with a variety of physical and psychological disabilities. Lectures, discussions, guest speakers, and a variety of $\mathrm{A} / \mathrm{V}$ materials will be utilized to meet course objectives.

Cr 3.

## REC 294 Therapeutic Recreation Practice/ Pre-Internship

This course will prepare students for an extended internship experience. Students will complete all of the tasks necessary to apply for an internship placement. Serious study and discussion of topics such as professional conduct, ethics, safety, and risk management will be required. This course must be taken immediately prior to Intemship. Prerequisites: Recreation core courses and instructor's permission.

Cr 2.

## REC 295 Internship

Students work as therapeutic recreation assistants under the supervision of an appropriately certified therapeutic recreation leader in a university approved agency which provides therapeutic recreation services. A faculty member will work with the agency supervisor to coordinate the student's educational experiences. Students will be required to participate in some on campus classroom sessions to process their internship experiences. Prerequisite: REC 294 taken immediately prior to Intemship.

Сг 6.

## REC 300 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 attitudes and stereotypes, normal aging, activity intervention, and related areas. The course will examine recreation programs in community and institutional settings. Students will be expected to complete a series of on-site practical experiences. Prerequisite: REC 110 or instructor permission.

Cr 3.

## REC 314 Leisure Education and Counseling

 The intent of this course is for students to 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, and interests as they relate to their leisure behavior. Students will be expected to work on projects in small groups. Prerequisite: REC 232 or permission of the instructor.Сг 3.

## REC 372 Issues in Recreation and Leisure

The focus of this course is on the research and discussion of contemporary issues in recreation and leisure studies. Topics such as professionalism, legal issues, economic issues, service delivery, research trends, and resource availability will be covered. Prerequisite: REC 110 or instructor permission.

Cr 3.

## REC 382 Therapeutic Recreation Interventions and Protocols

This course examines therapeutic recreation services in a variety of habilitation and rehabilitation settings. Emphasis will be on individual treatment plan development, intervention strategies, and protocols used by therapeutic recreation specialists in a variety of treatment settings such as physical rehabilitation centers, nursing care facilities, group homes, and mental health hospitals. Students will be required to participate in a practicum experience at a reatment facility for a minimum of two hours per week. Prerequisites: REC 232, PSY 333, HRD 333 J and SWO 388. Health insurance is required of students enrolled in this course.

Cr 3.

## REC 398 Independent Study

This course is intended to provide therapeutic recreation majors with an opportunity to pursue a project independently. Students should select a faculty advisor and develop a course proposal with this person. A final written paper is required. Prerequisite: junior or senior standing.

Cr 3 .

## REC 494 Therapeutic Recreation Practice/ Pre-Internship

This course will prepare students for an extended internship experience. Students will complete all of the tasks necessary to secure an intemship placement. Serious study and discussion of topics such as professional conduct, ethics, safety, and risk management will be required. This course must be taken immediately prior to Intemship. Prerequisites: Recreation core courses and instructor's permission.

Cr 2.

## REC 495 Internship

Students are required to work a minimum of 490 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 faculty. This course is to be taken the senior year. Prerequisites: REC 494 and instructor's permission. Healthinsurance is required of students enrolled in this course. Cr 12.

## REC 498 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 apply the information learned during intemships to course assignments and discussions. Prerequisite: REC 495.

Cr 3.

## Department of Sports Medicine

The bachelor of science in sports medicine, with majors in athletic raining, health fitness, and exercise specialist, prepares students to work in health-related fields associated with active lifestyles. These innovative programs offer students the opportunity to gain clinical experience while using the most advanced sports medicine equipment available. Upon completion of the curriculum, the undergraduate athletic raining major will be eligible to challenge the Board of Certification (BOC) examination of the National Athletic Trainers' Association (NATA). The health fitness major will be eligible to challenge the Health Fimess Instructor certification examination administered under the auspices of the American College of Sports Medicine (ACSM). Also aligned with the ACSM, the exercise specialist major, upon completion of the curriculum, will be prepared to challenge the Exercise Specialist certification examination administered through the ACSM.

## Programs and Requirements

In addition to the requirements established for admission to the University, the Department of Sports Medicine requires the applicant to achieve a minimum score of 480 on the mathematics proficiency portion of the SAT. In order to be admitted to any of the majors within the Department, additional admissions criteria must be met. For specific admissions requirements for each major, please refer to the admissions section within each major in this catalog. Because all three majors entail supervised clinical experience, the sports medicine faculty reserves the right to limit enrollinent in these programs. In addition, because clinical experiences occur in a variety of settings in the southem Maine area, students must provide their own transportation to rural as well as urban areas. It is highly recommended that students purchase health and professional liability insurance.

Health Fitness Major

Each sports medicine laboratory and athletic training clinical course offering has a fee of $\$ 20$.

## Probation

Regardless of major, students' placement on probation lasts for a period of one semester. The following are justifications for a student's placement on probation.

1. Failure to maintain a minimum cumulative GPA of 2.25 for the health fitness or exercise specialist majors, or failure to maintain a 2.5 GPA for the athletic training major.
2. Receiving a grade lower than C in SPM-prefix required coursework.
3. Receiving a grade lower than C - in non-SPM-prefix required coursework.
4. Violation of academic integrity and/or code of ethics violation. A student who admits to or is found guilty of a violation of academic integrity (see USM Student Academic Integrity policy), the ACSM's or NATA's Code of Ethics may be suspended or dismissed from the University.
Failure to rectify the academic deficiency after a period of one semester will entail removal of the student from the major until the deficiency is rectified.

## Admission Requirements

The following criteria must be met in order for a student to be eligible for admission into the health fitness major:

1. maintain a cumulative GPA of 2.25 or better
2. have not received a grade lower than C in any required SPM-prefix course
3. have not received a grade lower than C-in any non-SPM required course
4. complete SPM 100 and SPM 102 with a minimum grade of C.

## Retention and Progression Requirements

Students will be retained within the health fitness major providing the following criteria are maintained throughout their undergraduate experience:

1. minimum cumulative GPA of 2.25
2. grade of $C$ or better in all required SPM-prefix courses
3. grade of C - or better in all required non-SPM-prefix courses

Students who receive a grade below C in a required SPM-prefix course (or lower than a C - in a non-SPM-prefix course) will be allowed to continue in the curriculum as long as the following occur:
a. they maintain a minimum cumulative GPA of 2.25
b. they repeat the course and earn a grade of C (or C-, whichever applies) or higher the next ime the course is offered
c. they do not receive another grade in a required course below C (or below C-, whichever applies) before the previous deficient grade is rectified.
Students who fail to meet the above criteria will be placed on probation until the deficient grade is rectified. A course may be repeated only once.

## Graduation Requirements

Students will graduate with a bachelor of science degree in sports medicine with a major in health fimess as long as the following are sa isfied:
a. cumulative GPA of 2.25
b. completion of all University Core curriculum requirements
c. completion of all sports medicine core required coursework
d. completion of all health fimess major coursework
e. completion of 125-126 credits
f. Successful completion of the clinical internship experience. Internship placement and eligibility information are specified in the program's Student Intemship Manual. This capstone experience will occur during the Summer Session immediately following the completion of all other coursework.

## Major Requirements

The major consists of 125-126 credit hours, including the University's Core curriculum.
University Core Curriculum Credits
Required (19-20 credit hours)
ENG $100 \quad$ College Writing (Core area C)
3
PSY 101 General Psychology (Core area J) 3

| THE 170 | Public Speaking (Core area F) | 3 |
| :---: | :---: | :---: |
| MAT 120 | Introduction to Statistics (Core area D) | 3 |
| PHY 101/102 | Introduction to Physics or | 4-5 |
| PHY 111 | Elements of Physics I (Corearea K) or |  |
| PHY 121/122 | General Physics I |  |
| SBU 165 | Consumer Studies (also included in business minor) (Core area J) | 3 |
| Electives (15 credit hours) |  |  |
| Skills of Analysis E | Elective (Core area E) | 3 |
| Fine Arts Elective | (Core area G) | 3 |
| Humanities | (Core areas H,I) | 6 |
| COR Elective |  | 3 |
| General Elective ( 6 cr | edit hours) | 6 |
| Sports Medicine Core Requirements (37 credit hours) |  |  |
| CHY 105/106 | Chemistry for Health Sciences and Laboratory | 6 |
| BIO 106 | Laboratory Biology I | 1.5 |
| BIO 111 | Human Anatomy and Physiology I | 3 |
| BIO 211 | Human Anatomy and Physiology II | 3 |
| BIO 212 | Practical Human Anatomy and Physiology | 1.5 |
| NFS 252 | Human Nutrition | 3 |
| REC 216 | Emergency Response | 3 |
| REC 219 | Lifetime Physical Fimess | 3 |
| SPM 100 | Introduction to Sports Medicine | 1 |
| SPM 102 | Prevention/Care of Sports Injuries | 2 |
| SPM 330 | Physiology of Exercise | 3 |
| SPM 331 | Physiology of Exercise Laboratory | 1 |
| SPM 381 | Kinesiology | 3 |
| SPM 430 | Exercise Testing/Assessment/Prescription | 3 |
| Health Fitness Major Requirements (30 credit hours) |  |  |
| NUR 280 | Holistic Health I | 3 |
| NUR 281 | Holistic Health II | 3 |
| NUR 356 | Concepts in Community Health | 3 |
| SPM 230 | Fitness Behavior Facilitation | 3 |
| SPM 350 | Health Promotion Programs | 3 |
| SPM 450 | Exercise for Special Populations | 3 |
| SPM 460 | Exercise Leadership | 3 |
| SPM 481 | Fitness Facility Management | 3 |
| SPM 495 | Clinical Intemship | 6 |
| Business Administration Minor Requirements (18 credit hours) |  |  |
| Required Courses: |  |  |
| SBU 165J | Consumer Studies (University Core course) |  |
| BUS 280 | Legal Environment of Business | 3 |
| BUS 340 | Managing Organizational Behavior | 3 |
| BUS 360 | Marketing | 3 |
| Select three of the following: |  |  |
| ACC 110 | Financial Accounting Information for Decision |  |
|  | Making | 3 |
| BUS 346 | Personnel and Human Resource Management | 3 |
| BUS 363 | Advertising | 3 |
| BUS 368 | Service Quality and Customer Satisfaction | 3 |
| Admission Requirements |  |  |
| The following criteria must be met in order for a student to be eligible for admission into the exercise specialist major: |  |  |
| 1. Cumulative GPA of 2.25 or better |  |  |
| 2. No grade lower than C in any required SPM-prefix course |  |  |
| 3. No grade lower than C-in any non-SPM required course |  |  |
| 4. Completion of SPM 100 and SPM 102 with a minimum grade of C. |  |  |

## Retention and Progression Requirements

Students will be retained within the exercise specialist major providing the following criteria are maintained tbroughout their undergraduate experience:

1. minimum cumulative GPA of 2.25
2. grade of C or better in all required SPM-prefix courses
3. grade of C - or better in all required non-SPM-prefix courses

Students who receive a grade below C in a required SPM-prefix course (or lower than a C- in a non-SPM-prefix course) will be allowed to continue in the curriculum as long as the following occur:
a. they maintain a minimum cumulative GPA of 2.25
b. they repeat the course and earn a grade of C (or C-, whichever applies) or higher the next time the course is offered
c. they do not receive another grade in a required course below C (or below C-, whichever applies) before the previous deficient grade is rectified.
Students who fail to meet the above criteria will be placed on probation until the deficient grade is rectified. A course may be repeated only once.

## Graduation Requirements

Students will graduate with a bachelor of science degree in sports medicine with a major in exercise specialist as long as the following are satisfied:

1. Minimum cumulative GPA of 2.25
2. Completion of all University Core curriculum requirements
3. Completion of all sports medicine core required coursework
4. Completion of all exercise specialist major coursework
5. Completion of 123-124 credits
6. Successful completion of the clinical internship experience. Internship placement and eligibility information are specified in the program's Student Internship Manual. This capstone experience will occur during the Summer Session immediately following the completion of all other coursework.

## Major Requirements

The major consists of 123-124 credit hours, including the University's Core curriculum.

| University Core Curriculum |  | Credits |
| :---: | :---: | :---: |
| Required (19-20 credit hours) |  |  |
| ENG 100 | College Writing (Core area C) | 3 |
| PSY 101 | General Psychology (Core area J) | 3 |
| THE 170 | Public Speaking (Core area F) | 3 |
| MAT 120 | Introduction to Statistics (Core area D) | 3 |
| PHY 101/102 | Introduction to Physics or | 4-5 |
| PHY 111 | Elements of Physics I (Core area K) or |  |
| PHY 121/122 | General Physics I |  |
| HRD 333 | Human Growth and Development (Core area J) | 3 |
| Electives (15 credit hours) |  |  |
| Skills of Analysis E | Elective (Core area E) | 3 |
| Fine Arts Elective | (Core area G) | 3 |
| Humanities | (Core areas H,I) | 6 |
| COR elective |  | 3 |
| General Elective (6 cr | edit hours) | 6 |
| Sports Medicine Core Requirements (37 credit hours) |  |  |
| CHY 105/106 | Chemistry for Health Sciences and Laboratory | 6 |
| BIO 106 | Laboratory Biology I | 1.5 |
| BIO 111 | Human Anatomy and Physiology I | 3 |
| BIO 211 | Human Anatomy and Physiology II | 3 |
| BIO 212 | Practical Human Anatomy and Physiology | 1.5 |
| NFS 252 | Human Nutrition | 3 |
| REC 216 | Emergency Response | 3 |
| REC 219 | Lifetime Physical Fitness | 3 |


| SPM 100 | Introduction to Sports Medicine | 1 |
| :---: | :---: | :---: |
| SPM 102 | Prevention/Care of Sports Injuries | 2 |
| SPM 330 | Physiology of Exercise | 3 |
| SPM 331 | Physiology of Exercise Laboratory | 1 |
| SPM 381 | Kinesiology | 3 |
| SPM 430 | Exercise Testing/Assessment/Prescription | 3 |
| Exercise Specialist Major Requirements (46 credit hours) |  |  |
| PSY 102 | General Psychology II | 3 |
| NUR 302 | Pharmacology | 3 |
| ENG 307 | Techmical Writing | 3 |
| BIO 345 | Pathophysiology | 3 |
| PSY 365 | Physiological Psychology | 3 |
| SPM * | Advanced Exercise Physiology | 3 |
| SPM * | Advanced Exercise Physiology Laboratory | 2 |
| SPM * | Exercise Specialist Practicum | 3 |
| SPM * | Exercise Biochemistry | 3 |
| SPM * | Exercise for Special Populations | 3 |
| SPM * | Exercise EKG | 3 |
| SPM * | Nutrition for Physical Performance | 3 |
| SPM * | Clinical Exercise Physiology | 3 |
| SPM * | Clinical Exercise Physiology Laboratory | 2 |
| SPM* | Clinical Internship | 6 |

## Athletic Training Major

## Admission Requirements

Athletic training accreditation requirements state that only a limited number of students can matriculate in the major at any one time. Thus, complying with the outlined criteria does not guarantee a student admission into the major. Please see the program director for additional information.

The following criteria must be met in order for a student to be eligible for admission into the athletic raining major:

1. Minimum cumulative GPA of 2.5
2. Completion of SPM 100, SPM 101, and SPM 102 with a minimum grade of C.
3. Completion of a minimum of 30 observational clinical hours under the direct supervision of a USM clinical instructor of athletic training. These supervised hours must comply with the guidelines as outlined by the NATABOC.
4. Two letters of recommendation, one of which should come from a University of Maine System faculty member.
5. Completion of a formal interview with the program director of athletic maining and the clinical instructors of athletic training.
6. Completion of the health requirements as outlined in the student handbook. Because athletic raining health care workers, as compared to the general population, are at a higher risk for certain illnesses, all students must meet certain health requirements prior to being admitted into the athletic training program. These requirements are listed in the Athletic Training Student Handbook. Student health records must be on file in the College of Nursing prior to entry into clinical course work. Health insurance is required of all students in this major.

## Retention and Progression Requirements

Students will be retained within the athletic training major providing the following criteria are maintained throughout their undergraduate experience:

1. minimum cumulative GPA of 2.5
2. grade of C or better in all required SPM-prefix courses
3. grade of C - or better in all required non-SPM-prefix courses

Students who receive a grade below C in a required SPM-prefix course (or lower than a C-in a non-SPM-prefix course) will be allowed to continue in the curriculum as long as the following occur:
a. they maintain a minimum cumulative GPA of 2.5
b. they repeat the course and earn a grade of C (or C-, whichever applies) or higher the next ime the course is offered
c. they do not receive another grade in a required course below C (or below C-, whichever applies) before the previous deficient grade is rectified.
Students who fail tomeet the above criteria will be placed on probation until the deficient grade is rectified. A course may be repeated only once.
4. Proof of successful progress toward the completion of 1,200 supervised clinical hours with a minimum of 200 clinical hours completed each academic semester. These clinical hours must comply with the guidelines as outlined by the NATA-BOC.
Students failing to fulfill any of the above requirements will be removed from the clinical portion of the athletic raining program until the deficiency is satisfactorily remedied.

## Graduation Requirements

Students will graduate with a bachelor of science degree in sports medicine with a major in athletic raining as long as the following are satisfied.

1. Minimum cumulative GPA of 2.5
2. Completion of all University Core curriculum requirements
3. Completion of all sports medicine core required coursework
4. Completion of all athletic training major coursework
5. Completion of $125-126$ credits
6. Proof of successful completion of 1,200 supervised clinical hours. These clinical hours must comply with the guidelines as outlined by the NATA-BOC.

## Major Requirements

The major consists of 125-126 credit hours, including the University's Core curriculum.

| University Core Curriculum | Credits |
| :---: | :---: |
| Required (19-20 credit hours) |  |
| ENG 100 College Writing (Core area C) | 3 |
| PSY 101 General Psychology (Core area J) | 3 |
| THE 170 Public Speaking (Core area F) | 3 |
| MAT 120 Introduction to Statistics (Core area D) | 3 |
| PHY 101/102 Introduction to Physics or | 4-5 |
| PHY 111 Elements of Physics I (Core area K) or |  |
| PHY 121/122 General Physics I |  |
| HRD 333 Human Growth and Development (Core area J) | 3 |
| Electives (15 credit hours) |  |
| Skills of Analysis Elective (Core area E) | 3 |
| Fine Arts Elective (Core area G) | 3 |
| Humanities (Core areas H,I) | 6 |
| COR elective | 3 |
| General Elective (3 credit hours) | 3 |


| Sports Medicine Core Requirements (37 credit hours) |  |  |
| :---: | :--- | :--- |
| CHY 105/106 | Chemistry for Health Sciences and Laboratory | 6 |
| BIO 106 | Laboratory Biology I | 1.5 |
| BIO 111 | Human Anatomy and Physiology I | 3 |
| BIO 211 | Human Anatomy and Physiology II | 3 |
| BIO 212 | Practical Human Anatomy and Physiology | 1.5 |
| NFS 252 | Human Nutrition | 3 |
| REC 216 | Emergency Response | 3 |
| REC 219 | Lifetime Physical Fitness | 3 |
| SPM 100 | Introduction to Sports Medicine | 1 |
| SPM 102 | Prevention/Care of Sports Injuries | 2 |
| SPM 330 | Physiology of Exercise | 3 |
| SPM 331 | Physiology of Exercise Laboratory | 1 |
| SPM 381 | Kinesiology | 3 |
| SPM 430 | Exercise Testing/Assessment/Prescription | 3 |


| Athletic Training Major Requirements (51 credit hours) |  |  |
| :--- | :--- | :--- |
| NUR 302 | Phannacology |  |
| PSY 366 | Drugs, Mind, and Behavior | 3 |
| BIO 345 | Pathophysiology | 3 |
| NUR 356 | Concepts in Community Health | 3 |
| SPM 101 | Prevention Practicum | 3 |
| SPM 210 | Introduction to Injury Assessment | 1 |
| SPM 265 | Therapeutic Modalities | 3 |
| SPM 310 | Evaluation: Lower Extremity | 4 |
| SPM 311 | Evaluation: Upper Extremity | 3 |
| SPM 340 | Therapeutic Exercise | 3 |
| SPM 352 | Nutrition for Physical Performance | 4 |
| SPM 440 | Sports Rehabilitation | 3 |
| SPM 480 | Organization and Administration of Athletic | 3 |
|  | Training | 3 |
| SPM 220 | Athletic Training Clinic I | 2 |
| SPM 221 | Athletic Training Clinic II | 2 |
| SPM 320 | Athletic Training Clinic III | 2 |
| SPM 321 | Athletic Training Clinic IV | 2 |
| SPM 420 | Athletic Training Clinic V | 2 |
| SPM 421 | Athletic Training Clinic VI | 2 |

Note: Many sports medicine courses are under development. For more information, please contact the Department of Sports Medicine Office

## SPM 100 Introduction to Sports Medicine

An overview of sports medicine professional associations including the NATA, ACSM, NSCA, and APTA. Legal and professional implications will be discussed. Mandatory course for all students interested in pursuing any of the majors within the sports medicine degree programs. Prerequisite: SPM student or permission of Department director. Cr 1.

## SPM 101 Prevention of Sports Injuries

## Practicum

Introduction to the clinical applications of the NATA Competency Checklist. Basic emergency medicine, taping/wrapping, protective/supportive padding and splinting techniques will be mastered. OSHA guidelines and blood-borne pathogen training. This is the initial practical course for students interested in applying for entrance into the athletic training major. Prerequisite: SPM student or permission of Department director.

Cr 1.

## SPM 102 Prevention and Recognition and Care of Physical Activity Injuries

Current methods of prevention, recognition, and management of physical activity and sports-related injuries. Environmental risk factors, physical conditioning principles and body mechanics related to sport injuries will be explored. Mandatory course for all students interested in pursuing any of the majors within the sports medicine degree programs. Prerequisite: SPM student or permission of Department director.

Cr 2.

## SPM 210 Introduction to Injury Assessment

Anintroduction in the recognition and assessment of physical activity and sports-related injuries which occur to major body parts. In addition, the follow-
ing topics are discussed: equipment fitting for the prevention of injuries; pre-participation physical examination; emergency medical procedures; skin conditions. Prerequisites: SPM 100, SPM 101, SPM 102, athletic training major.

Cr 3.

## SPM 220 Athletic Training Clinic I

Application of psychomotor shills related to the prevention, recognition, and treatment of orthopedic injuries. Completion of 200 clinical hours applying lanowledge and skills with USM's athletic teams. The first clinical course for students enrolled in the athletic raining major. Prerequisites: SPM 100, SPM 101, SPM 102, athletic training major.

$$
\text { Cr } 2 .
$$

## SPM 221 Athletic Training Clinic II

Psychomotor skill application of therapeutic modalities. Completion of 200 clinical hours applying knowledge and shills with USM's athletic teams. The second clinical course for students enrolled in the athletic training major. Prerequisites: SPM220, athletic training major.

Cr 2.

## SPM 230 Fitness Behavior Facilitation

A comprehensive study of the primary factors involved with facilitating the modification of behavior and lifestyle issues related to the components of health and fimess. Students will be exposed to practical issues surrounding behavior and lifestyle modification through in-class one-on-one and group interaction exercises and case study analysis. Prerequisites: PSY 101, SPM 100, SPM 102, health fitness major.

Cr 3.

## SPM 265 Therapeutic Modalities

An exploration of the physical principles, physi-
ological effects, indications, contraindications, safety precautions, and operating procedures of therapeutic modalities. An overview of the inflammatory and tissue healing processes are also discussed. 3 credit lec; 1 credit lab. Prerequisites: PHY course or concurrent, athletic training major. Cr 4.

## SPM 310 Evaluation of the Lower Extremity

This course covers techniques utilized to evaluate orthopedic conditions of the lower extremity, including the low back region. Surgical techniques ulilized to treat certain conditions will be discussed. Prerequisites: SPM 210, athletic training major.

Cr 3.

## SPM 311 Evaluation of the Upper Extremity

This course covers techniques utilized to evaluate orthopedic conditions of the upper extremity, including the head and neck region. Surgical techniques utilized to treat certain conditions will be discussed. Prerequisites: SPM 210, athletic training major. Cr 3.

## SPM 320 Athletic Training Clinic III

Application of lower extremity orthopedic evaluation skills. Completion of 200 clinical hours applying knowledge and skills at an off-campus football experience. The third clinical course for students enrolled in the athletic training major. Prerequisites: SPM 221, athletic training major. Cr 2.

## SPM 321 Athletic Training Clinic IV

Application of upper extremity orthopedic evaluation skills. Completion of 200 clinical hours applying lnowledge and skills at an off-campus non-raditional experience. The fourth clinical course for students enrolled in the athletic training major. Prerequisites: SPM 320, athletic training major. Cr 2.

## SPM 330 Physiology of Exercise

An investigation of the acute and chronic effects exercise incurs on the body. Muscle physiology, respiration, cardiac function, circulation, energy metabolism, and application to fitness training. Prerequisites: BIO 106, BIO 111, BIO 211, BIO 212, CHY 105/106, sports medicine student or health studies minor.

Cr 3.

## SPM 331 Physiology of Exercise Lab

Practical application of concepts discussed in SPM 331. Prerequisites: concurrentwith SPM330, sports medicine student.

## SPM 340 Therapeutic Exercise

A study of the basic components of a comprehensive therapeutic exercise program including functional anatomy, manual muscle testing, range of morion analysis, and the use of joint mobilizations. The physiological effects, safety precautions, indications, contraindications, and modes of resistance of standard therapeutic exercise programs will be discussed. 3 credit lec; 1 credit lab. Prerequisites: SPM 210, BIO 211, BIO 212, athletic training major.

Cr 4.

## SPM 381 Kinesiology

The study of human motion with the primary focus on applied anatomy. Basic neuromuscular and biomechanical principles are also addressed. Prerequisite: BIO 211, BIO 212, sports medicine student, health studies minor student.

Cr 3.

## SPM 430 Exercise Testing, Assessment, and Prescription

Application of various exercise testing functions including fitness assessment and exercise prescription. Prerequisites: sports medicine student, SPM 330, SPM 331.

Cr 3 .

## SPM 350 Health Promotion Programs*

SPM 352 Nutrition for Physical Performance*
SPM 420 Athletic Training Clinic $V^{*}$

## SPM 421 Athletic Training Clinic VI*

## SPM 440 Sports Rehabilitation*

## SPM 450 Exercise for Special Populations*

SPM 460 Exercise Leadership*
SPM 480 Organization and Administration of
Athletic Training*
SPM 481 Fitness Facility Management*

## SPM 495 Clinical Internship*

*Sports medicine courses under development

# Lewiston-Auburn College 

Dean: Betty D. Robinson, 51 Westminster Street, Lewiston, ME 04240
Chair: Hitchcock; Associate Professors: Black-Hamlin, Druker, Hitchcock, Johansen, Robinson, Schaible, Whitaker; Assistant Professors: Behling, Coste, Clark, Cleary, Harris, Moisan, Nealand, Raimon, White;Adjunct Faculty: Makas, Maltby-Askari, Minkoff

The Lewiston-Auburn College of the University of Southem 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 grow. The faculty at Lewiston-Auburn College believe that leaming is a shared experience between students and faculty. The College offers interdisciplinary leaming focusing on communication, teamwork, and student participation and leadership. Opportunities are available for internships, independent studies, and credit for prior learning.

## Transfer Policies

Lewiston-Auburn College works very closely with the University of Maine at Augusta (UMA), Central Maine Technical College (CMTC), Kennebec Valley Technical College (KVTC), and Central Maine Medical Center (CMMC) to enable students who have received associate degrees from these instutions to continue their education toward a baccalaureate degree from the University of Southern Maine. In most cases credits and often grades transfer directly into the baccalaureate programs. It is important for students to be aware of the transfer policy which applies to their particular situation.

1. Students Matriculated (accepted) into USM's baccalaureate programs. Students matriculated into Leadership and Otganizational Studies (LOS), Arts and Humanities (HUM), Natural andApplied Science (SCI), 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. RNStudies 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. Special Students (not matriculated). Students may register for any course 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.
4. Industrial Technology. 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 and CMTC courses onto USM transcripts.
The Lewiston-Auburn College offers: a B.A. degree in arts and humanities; a B.A. degree in natural and applied sciences; a B.A. degree in social and behavioral sciences; a B.S. degree in industrial technology (extended from USM's School of Applied Science); a B.S. degree in leadership and organizational studies; a B.S. degree in nursing for students holding an RN (extended from USM's College of Nursing); an MOT degree (master's in occupational therapy); and a master's degree in literacy education (extended from USM's College of Education and Human Development). Minorsare offered in educational studies (extended from USM College of Education and Human Development), and information systems (in collaboration with Central Maine Technical College). The College also offers an elementary and middle school teacher education program.

## Graduation Requirements

To be eligible for graduation with a baccalaureate degree and major from Lewiston-Auburn College, students must have successfully completed 120 credit hours including all Core and major requirements, at least 30 credit hours in 300 - to 400-level USM courses offered by Lewiston-Auburn College, and have obtained a minimum grade point average of 2.0 in the major.

## LAC 100 Introduction to Collegiate Studies

An introduction to college with special emphasis on the purposes of college, an introduction to study skills and time management, career and academic planning, and library utilization. The course will be thematic in nature, depending upon the particular expertise of the instructor.

Cr 3.

## LAC 101E Critical Thinking

This course aims to teach students how to think critically in order to improve their skills in writing, reading, listening, and making decisions. Students are taught the elements and standards of critical thinking and asked to apply them to a wide variety of oral and written material.

Cr 3

## LAC 103 Meeting the Computer

This course is designed to allow students to become comfortable with computers. Starting the computer, using the keyboard and mouse, formatting a diskette, and basic Windows skills will be covered.

Cr 1.

## LAC 107 E-Mail and the Internet

This course will give the student a great deal of practice using the Pegasus e-mail system. Learn to send and receive mail, attach documents, and set up address books. Students will also learn to use the Internet for research, learn the fastest ways to find and evaluate information, and learn to use various search engines when conducting on-line research projects.

Cr 1 .

## LAC 110 Writing Support

This course will cover writing more effectively by briefly reviewing students' existing knowledge base and then focusing on a discussion of how to convey meaning efficiently, clearly, and completely. Students bring their papers from other courses to class for revision. Prerequisite: ENG 100C. Cr 1.

## LAC 111 Microsoft Word

This is a portion of the LAC 150 course that is available for students who wish to learn word processing. Emphasis will be placed on creating, formatting, saving, and printing common documents for use in other classes. Students should have some familiarity with Windows 95 prior to taking this course.

Cr 1.

## LAC 112 Microsoft Excel

A problem-solving approach to using electronic spreadsheets will be followed throughout this course. Students will learn how to enter data, create formulas to analyze that data, and create graphs
to interpret what has been entered. A good course to take prior to taling financial management, economics, or accounting courses.

Cr 1 .

## LAC 113 Windows 95

Windows 95 is an operating system that allows the user to communicate with and use the computer. Windows 95 facilitates the use of other programs currently installed on the computer. Topics such as the fundamentals of using windows, working on and modifying the desktop, file, document and folder management will be covered during this course. No previous computer experience is needed.

Cr 1 .

## LAC 114 Power Point

This computer program allows users an electronic means of giving presentations to groups of people. Students will learn how to create electronic slides using written, graphic, and sound materials. The slides can then be formatted in several different ways: 35 mm slides, overhead transparencies, and handouts. Students who have to give presentations to classes or who are considering careers in teaching, marketing, or public relations fields should consider this course.

## LAC 115 Microsoft Access

Students will learn to use this computer database, which is used to keep track of lists of information. A simple database, such as a card file, stores information that can be used repeatedly. Users can sort, filter, and print many types of reports using the same information. Students should be familiar with computer uses and Windows 95 prior to taking this course.

Cr 1 .

## LAC 116 Web Pages

This course will allow studients to design their own pages for posting on the WorldWide Web. Uses of the Internet for instruction, design techniques, and critical evaluation of web pages will be emphasized throughout the course. HTML and Java script language will be introduced in the designing of pages.

Cr 1 .

## LAC 120 Survey of Occupational Therapy

This course, although not required, is intended to provide an overview of occupational therapy for people considering application to the post-baccalaureate entry-level master's program in occupational therapy. Occupational therapists and occupational therapy assistants will guest lecture to discuss their roles, the settings in which they work, and the opportunities available in the field. Cr 1.

## LAC 150 Microcomputers and Applications

An introductory lecture and laboratory course designed to introduce students to basic microcomputer concepts and their application to education, business, and home management. This course will cover Windows 95, e-mail, Internet searches, Microsoft Word 97, and Excel 97.

Cr 3.

## LAC 250 Solving Problems Using Spreadsheets and Electronic Presentations

This course will cover the use of spreadsheet programs to create templates and macros for use in business including the areas of accounting/finance, manufacturing/production, sales/marketing, and human resources. Additionally, the course will cover the making of electronic presentations in the areas of communications, business, education, and health. Using a presentation program, students will build a series of presentations to communicate effectively in their areas of concentration. Prerequisite: LAC 150

Cr 3.

## Minor in Information Systems (IS)

Lewiston-Auburn College offers one minor that can be substituted for the LOS concentration or taken separately as a minor by students in any degree program. The IS minor is offered in collaboration with Central Maine Technical College (CMTC) which provides a number of the required courses. Students must be admitted separately into the minor in order to enroll in these CMTC courses. The IS minor requires completion of the following LAC courses:

MAT 108 College Algebra
LAC 150 Microcomputers (with a grade of at least B)
LOS/LAC 310 Technology in Society
The following courses may be offered at CMTC:
LOS/LAC 317 Operating Systems
LOS/LAC 318 Database Management
LOS/LAC 319 Networks I
LOS/LAC 320 Networks II
LOS/LAC 321 Introduction to PC Repair
Also offered at CMTC as electives for this minor:
LOS/LAC 331 Advanced PC Repair
LOS/LAC 332 Integrated Software Packages
(See B.S. in Leadership and Organizational Studies for course descriptions.)

## Minor in Educational Studies

This minor is offered at Lewiston-Auburn College through USM's College of Education and Human Development and is open to all majors. The minor consists of 18 credits and highlights topics in the areas of human development, teaching as a career, learning, and schooling. For more information contact the Student Services Office at Lewiston-Auburn College, 753-6500, or the Admissions and Advising Office at the College of Education and Human Development, 780-5306.

## Teachers for Elementary and Middle Schools Program

The Teachers for Elementary and Middle Schools (TEAMS) program is an exciting new opportunity in undergraduate elementary teacher education. LAC: TEAMS is not a degree; rather, it is a three-phase program which includes coursework in an academic major leading to a bachelor's degree in a liberal arts field (arts and humanities, social and behavioral sciences, or natural and applied sciences) and a professional program of teacher preparation that results in certification to teach in the elementary school (K-8).

Students will work with the guidance of college and school-based faculty to develop successful teaching practices during each semester of this program. In addition to coursework on campus, students will participate in field experiences and seminars in local area elementary schools. During their first year, students study individual children, then progress to classroom teaching in a full-time, fullyear intemship during their final two semesters.

Because of the intensive integration of liberal arts coursework and professional studies with required field experiences, students should apply to the program as soon as possible. The length of time to complete this program will vary with each student's prior experiences and amount of coursework completed. In most cases,
first-year students will be able to enter directly into the program. Sophomores and first-semester juniors with relevant prior experiences with children and schools are also encouraged to apply for acceptance into the program. However, it should be noted that because of program requirements and the cycle of course offerings, first semester junior students may experience some delays in completing the program. Seniors should consider applying to the Extended Teacher Education Program (ETEP) at the Gorham campus.

LAC: TEAMS is a program consisting of three distinct phases. After completing almost all of the liberal arts (and major) coursework in Phase I, students will then begin the prerequisite TEAMS coursework and concurrent field experiences. At the conclusion of Phase II, students will undergo a comprehensive review process to determine their candidacy for the Leaming To Teach (LTT) coursework and culminating internships in Phase III that are required for state certification.

Students applying in their first year must have had at least a 3.0 grade point average in high school. Students with previous college credit must have at least a 2.5 grade point average. All students must meet USM proficiencies in mathematics and English. Evidence of experience in working with children is also required. Students applying to TEAMS must complete an "Application for Teacher Education." All applicants meeting the entrance requirements will be invited to the campus for an interview with appropriate faculty.

| Phase I. Prerequisite Liberal Arts Coursework |  |
| :--- | ---: |
| Work in academic major | $37-42 \mathrm{cr}$ |
| English 100 C | 3 cr |
| Core E | 3 cr |
| Core F or G | 6 cr. |
| Math ( 3 course sequence) | 9 cr. |
| Science (3 course sequence) | -12 cr |
|  | $70-75 \mathrm{cr}$. |

Note: Some Phase I \& II coursework can be concurrent.

| Phase II: Prerequisite Courses and Field Experiences |  |
| :--- | ---: |
| HRD 333J (Hum. Dev.) |  |
| CPI 110 | 3 cr. |
| CPI 111 | 2 cr |
| COR J/equivalent (Literacy) | 1 cr. |
| CPI 120 | 3 cr. |
| CPI 121 | 2 cr. |
| COR 135 HI (Amer. Studies) | 1 cr |
| COR HI Lab | 3 cr |
| CPI 210 | 3 cr. |
| CPI 220 | 1 cr. |
| CPI 221 | 2 cr. |
|  | 1 cr. |

Note: Successful students become candidates at this point.

| Phase III: Learning To Teach (LTT) Coursework and Internships |  |
| :--- | ---: |
| Hist./Phil. of Education | 3 cr. |
| LTT (Literacy) | 3 cr. |
| LTT (Math) | 3 cr. |
| CPI 320 | 2 cr |
| LTT (Sci) | 3 cr. |
| LTT (S.S.) | 3 cr. |
| CPI 410 | 2 cr |
| Intemship \& Seminar | 9 cr. |
| EDU 336 (Child. Lit.) | 3 cr. |
|  | 31 cr. |
|  |  |
| G Internship \& Seminar | 12 cr. |
| G SED 540 (Exceptionality) | 3 cr. |
|  | 15 cr. |


| Optional Related Graduate Coursework |  |
| :--- | ---: |
| G Schools and Society | 3 cr. |
| G Teaching w/Computers: Math \& Sci. | 3 cr. |
| G EDU 600 (Research Methods) | $-\frac{3 \mathrm{cr} .}{9 \mathrm{cr} .}$ |

## B. A. Degree in Arts and Humanities

This program is for students who like to read and write and are interested in American culture in all its diversity. An arts and humanities degree prepares students for careers as diverse as education, print and broadcast journalism, advertising, government and politics, and arts management, as well as for further study in a range of graduate programs and professional schools, (e.g., law). Courses examine a variety of contemporary and historical issues, and do so in ways that make the past more interesting and the present more understandable. A wide array of courses blend such fields as American and African-American literature, psychology, popular culture, gay and lesbian studies, history, photography, creative writing, critical theory, religion, evolutionary biology, and gender and ethnic studies. Classes feature small group work, class discussions, and written work designed to encourage critical thinking, communication, and leadership skills necessary to advance professionally and contribute meaningfully as a citizen in our pluralistic society.

Total degree credits to be earned: 120.
No more than two courses from outside the major may be used toward completion of the requirements for the major without permission of the faculty.

Students are responsible for completing USM's Core curriculum.
Prerequisite Courses ( 24 credits)
Art History and Appreciation I and II
Western Civilization, World History, or U.S. History 6
Foreign Language* 6
Introduction to Literature 3
Microcomputers and Applications 3
*A second year of a language is recommended.
Note: These courses may also be used to satisfy Core curriculum requirements.
Satisfactory completion of a 100 -level college writing course is a prerequisite to all courses in this major.
Program Requirements ( 28 credits)
General
HUM 135I/136I American Studies I and II 6
HUM $302 \begin{gathered}\text { Seminar: Live Performances, Exhibits } \\ \text { and Lectures }\end{gathered}$
HUM 380 Service Leaming Seminar 3
HUM 385 Internship 3
HUM 386 Internship Seminar 1
(refer to LOS, SBS, SCI 386 for description)
HUM 408 Texts and Meanings 3
Interdisciplinary Courses
Students must select 4 interdisciplinary courses. Courses may vary from year to year, buttypical offerings are listed below.

| HUM | 150 I | What is "Race?" |
| :--- | :--- | :--- |
| HUM | 223 H | Life and Literature after Darwin |
| HUM | 246 I | Viemam Era |
| HUM | 310 I | Franco-American Studies |
| HUM | 318 H | Photography and Poetry: Two Ways of Speaking |
| HUM | 330 I | Labor, Literature and the Arts |
| HUM | 332 | Religion in Culture and Politics |
| HUM | 342 | Voices of Minorities |
| HUM | 344 | Violence: Causes and Control |

## Electives

Eighteen credit hours must be satisfied by courses with prefixes of ENG, HUM, ART, MUS, PHI, HTY or by additional interdisciplinary courses. The remaining
credit hours may be selected from any courses offered at Lewiston-Aubum College or from other accredited institutions. LOS 300 Organizational Theory is strongly recommended.

## Concentrations

When choosing electives, students may wish to consider a program of teacher certification (K-8) or one of the following concentrations. Information on requirements for teacher certification is available through Lewiston-Auburn College advisers.

## Gender Studies

This concentration explores new thinking about how femininity and masculinity have been constructed and represented in U.S. culture.
\(\left.$$
\begin{array}{lll}\text { HUM } & 342 & \begin{array}{l}\text { Voices of Minorities/Contemporary Women of } \\
\text { Color in Fiction }\end{array} \\
\text { HUM } & 389 & \begin{array}{l}\text { Sexuality in Literature and Film } \\
\text { HUM }\end{array}
$$ <br>

Theories of Popular Culture\end{array}\right]\)| HUM | 344 | Violence: Causes and Control |
| :--- | :--- | :--- |
| HUM | 135 I | American Studies I |
| HUM | 136 I | American Studies II |
| HUM | 251 H | Masculinities in U.S. Literature and Culture |
| LOS | 316 | Men, Women, and Work |
| WST | 130 I | Introduction to Women's Studies |

## Media and Cultural Studies

This concentration focuses on multiculturalism and the power of the mass media to shape our attitudes and values.

| HUM | 260I | Theories of Popular Culture |
| :--- | :--- | :--- |
| HUM | 207 | Literary Joumalism |
| HUM | 105 F | Basic Photography |
| HUM | 318 H | Photography and Poetry: Two Ways of Speaking |
| HUM | 150 I | What is "Race?" |
| LOS | 323 | Campaigns, Elections, and Media |
| HUM | 342 | Voices of Minorities/Contemporary Women of <br>  <br> Color in Fiction |
| HUM | 135 I | American Studies I |
| HUM | 136 I | American Studies II |

## Religious Studies

This concentration offers students an opportunity to engage in an intelligent and informed discussion about the nature of religious howledge and values. It also explores religion as an avenue for finding personal meaning and affecting social change.

| HUM | 213 H | Metaphor in Literature, Religion, and Science |
| :--- | :--- | :--- |
| HUM | 223 H | Life and Literature after Darwin |
| HUM | 299 | Religions of the World |
| HUM | 135 I | American Studies I |
| HUM | 332 | Religion in Culture and Politics |
| HUM/SBS | 334 | Spirituality |

## HUM 105F Basic Photography

This course is an introduction to black and white photography, designed to help students gain understanding through "hands-on" photographic work. Lectures include classroom discussions concerning the history and aesthetics of photography, and techniques include camera and lens functions, exposure methods, basic black and white film processing, printmaking, print finishing, and presentation techniques.

Cr 3.

## HUM 135I American Studies I

Drawing on political and social history and imaginative literature, this course will study the diverse peoples, events, and ideas that helped shape and define the United States from its inception through the latter part of the nineteenth century. Cr 3.

## HUM 136I American Studies II

This course is a continuation of HUM 135I, covering the period extending from the late nineteenth century to modern times.

Cr 3 .

## HUM 150I What is "Race"?

The concept of race is one of the most contentious ideas of modem society. This course will examine the history and biology of race, and trace the development of the idea of race in American culture. Students will examine evolution to understand the diversity in the human species. They will integrate this information with historical attempts to define race so as to gain a better understanding of race and racial issues.

Cr 3.

## HUM 205 Creative Writing: Poetry

This course is designed to introduce students to the art and practice of writing poetry. Organized as a workshop, it features close examination of the student's own writing as well as the work of outstanding contemporary poets.

Cr 3.

## HUM 206 Creative Writing: Fiction

This course is designed to introduce students to the art and practice of writing fiction. Organized as a workshop, it features close examination of the student's own writing as well as the work of outstanding contemporary fiction writers.

Cr 3.

## HUM 207F Literary Journalism

This course explores the literary terrain between imaginame literature and journalism. We will study the fictional techniques employed by journalists in this school and examine the questions their work poses about the uneasy boundaries betweenfact and fiction.

Cr 3 .

## HUM 213H Metaphor in Literature, Religion,

 and ScienceA comparative study of literature, religion, and science, focusing on aims, methods and values, and on the nature of truth and creativity in each discipline. Readings in fiction, poetry, religion, and modern physical and biological science will provide a basis for discussion of the metaphoric nature of literary, religious, and scientific discourse. Our goal is to demonstrate that all three areas of human endeavor rely heavily on the metaphoric nature of language in their search for meaning and ruth. This team-taught course will consist primarily of careful reading of texts, small-group discussion, and position papers. No college science background is required.

Cr 3.

## HUM 223H 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. Cr 3.

## HUM 246I Vietnam Era

This course explores the origins, evolution, and outcome of United States political and military intervention in Vienam, which became a dominant and divisive issue in American politics in the 1960s and early 1970 s. The objective of this course is to develop a coherent understanding of what became one of the costliest conflicts in U.S. history. Cr 3.

## HUM 250 Song as Literature

This course is designed to introduce students to the role of the song in our cultural heritage as a fundamental literary genre and a remarkably democratic and influential art form. The course traces the evolution of the story song from the epic ballads of Europe and North America through the development of songs for religious, political, nationalistic and purely entertainment purposes.

Cr 3.

## HUM 251H Masculinities in U.S. Literature and Culture

This course begins with the notion that masculinity is as complex and variable a cultural category as femininity. Given this premise, we will examine literature and popular forms of mass media that take masculinity as a primary theme.

Cr 3.

## H UM 260 I Theories of Popular Culture

This course is designed to examine how various forms of social difference - including gender, race, class, and sexuality - are represented by the U.S. entertainment industry. We will study TV, films, and music as well as a selection of crivical and theoretical commentary.

Cr 3.

## HUM 302 Seminar: Live Performances, Exhibits, and Lectures

During the semester students will attend several live performances, exhibits, or lectures and discuss them in class.

Cr 3.

## H UM 305 Creative Writing Workshop

In this intensive weekend workshop, students discuss the work of a visiting writer and receive helpful criticism and instruction on their own efforts in poetry or short fiction. The course allows students an opportunity to improve their writing and also to become acquainted with some of our more promising writers.

Cr 1.

## H UM 310I Franco-American Studies

This course studies the history, culture, and literature of the Franco-Americans. Cr 3 .

## HUM 318H Photography and Poetry: Two Ways of Speaking

This course deals with two modes of creative expression: photography and poetry. Its purpose is to help students read intelligently and sensitively both photographs and poems and to assist them in exploring connections between the two types of expression.

Cr 3.

## HUM 320H African-American Literature and

 CultureThis course studies the history of eighteenth- and nineteenth-century African-American literature by examining transcriptions of oral folk productions, slave narratives, speeches, autobiography, essays, poetry, and prose fiction in order to trace the development of African-American literary culture. The social, political, and cultural contexts of the works will also be considered.

Cr 3.

## HUM $330 I$ Labor, Literature, and the Arts

This course explores the ways in which working people's lives have been depicted through fiction, poetry, visual arts, and/or music. It also examines the unique impact of labor unions, rural workers' organizations, and other labor support associations on the cultural life of North America. Cr 3.

## HUM 332 Religion in Culture and Politics

This course will look at one or more historic or contemporary issues or events in order to explore the connection between religion and the origin, progress and outcome of each issue or event under consideration.

Cr 3 .

## HUM/SBS 334 Spirituality

Spirituality, variously defined, is a central part of human experience, constuting important levels of consciousness and meaning, and enabling the individual to transcend specific histories and environmental influences. This course will investigate the experience and development of spirituality over the life span as portrayed in fiction, religion, and psychology.

Cr 3.

## HUM 342 Voices of Minorities

Through a study of literature, music, art, and film produced by minorities in the United States, students will explore the problems and concerns of these minority populations as well as their contributions to our culture.

## Cr 3.

## HUM 344 Violence: Causes and Control

This course studies violence and the possibilities of living peacefully as explored in psychological and sociological works, in fiction, drama, and poetry, and in writings on anthropology, social policy, and religion. The course reviews the causes of violent and aggressive behaviors and specific ap-
proaches to the prevention and control of these behaviors.

Cr 3.

## HUM 380 Service Learning Seminar

Students will participate in a selection of community service projects. In class, we will reflect upon these experiences and read related material on civic culture, communitarianism, and local activism.

Cr 3 .

## HUM 385 Internship

Cr 3.

## HUM 386 Internship Seminar

Internship seminar required for all students engaged in an intemship experience. A one-credit seminar that will meet for two hours every other week for the semester the student is enrolled for internship credit. The seminar will include planned discussion meetings on a focused management subject and assignments related to the student's internship. Speakers will be a part of the seminar and internship supervisors will be encouraged to attend class sessions.

Cr 1.

## HUM389 Sexuality in Literature and Film

This course will introduce students to issues of gender and sexuality as they are represented in selected literary and cultural productions. In particular, we will be concerned with work by or about sexual minorities. In addition to primary readings by Allison, Cliff, Winterson, Spanbauer, Woolf, and Baldwin, we will read secondary material on issues of identity and sexuality. Cr 3.

HUM 398 Independent Study $\quad \mathrm{Cr} 3$.

## HUM 400 Senior Seminar

A variety of topics relating to the arts and humanities is discussed. Students write an academic research paper or essays. Cr 3.

## HUM 408 Texts and Meanings

This course explores the unstable boundaries between writer, text, and reader. Its purpose is to provide students with the language and concepts needed to negotiate this contested territory. We will use various artistic genres as well as theoretical work to explore such controversial terms as "representation," "author," "interpretation," and "intenion." Cr 3.

## B.A. Degree in Natural and Applied Sciences

This program provides students with a liberal arts education emphasizing basic sciences. Students may develop a concentration focusing on the biology of human health and illness or one focusing on environmental issues.

The concentration in the biology of human health and illness is designed to provide students with a sufficient understanding of human biology to enable them to pursue careers in health education, to teach life sciences, to make wise health care decisions, to better communicate with health care providers, and/or to continue their education in health- and science-related fields, (e.g., immunology).

The environmental issues concentration provides students with a sufficient understanding of environmental issues to enable them to make wise decisions concerning the use of natural resources and the preservation of natural areas and species, to communicate with regional planners, to teach life sciences, and/or to continue their education in environmentally related fields.

Students must complete USM's Core curriculum.
Before taking 300-level courses, students must have completed a 100-level college writing course with a grade of at least $\mathbf{C}$.
Prerequisite Course ( 3 credit hours) Credits

Microcomputers and Applications 3
$\begin{array}{lll}\text { Major Requirements ( } 21 \text { credit hours) } \\ \text { CHY 101/102 } & \text { Chemisiry I with Lab }\end{array}$
CHY 103/104 Chemisry II with Lab 4

SCI 252 Medical Microbiology 4
SCI 309 Human Genetics 3
SCI 400 Senior Seminar 3
LAC 150 Microcomputers and Applications 3
Biology of lllness Concentration (23 credit hours)
HRD 333J Human Growth and Development
PSY 102 General Psychology II 3
SBS 335 Legal Issues Health/Human Services 3
SCI 170K/171K Human Anatomy and Physiology I with Lab 4
SCI 172/173 Human Anatomy and Physiology II with Lab 4
SCI $380 \quad$ Pathophysiology I 3
SCI 381 Pathophysiology II 3
$\begin{array}{llll}\text { Environmental Issues Concentration (19-24 credit hours) } \\ \text { BIO } & 105 \mathrm{~K} / 106 \mathrm{~K} & \text { Biological Principles I with Lab } & 4.5\end{array}$
BIO 107/108 Biological Principles II with Lab 4.5
or
BIO $231 \quad$ Botany and 4.5
SCI 235 Zoology 4
ESP 101 Fundamentals of Environmental Science 4
GEO Any Geography Course 3
BIO 331 Ecological Principles 3
SCI 365 Marine Biology 3

## Electives

Of the approximately 64-69 credit hours remaining, including the USM Core curriculum, at least 9 must be selected from the list below, with the remainder to be selected from courses listed below or offered by Lewiston-Auburn College or other accredited institutions. LOS 300 Organizational Theory and SCI 385 Internship are strongly recommended.

| ANT | 101 J | Anthropology: The Cultural View |
| :--- | :--- | :--- |
| ANT | 201 | Human Origins |
| HUM | 223 H | Life and Literature after Darwin |
| ITP | 320 | Occupational Safety and Health |
| LOS | 300 | Organizational Theory |
| NFS | 252 | Nutrition |
| NUR | 302 | Pharmacology |
| SBS | 302 | Eating Attitudes and Behaviors in Western Culture |
| SBS | 308 | Health, Illness and Society |
| SBS | 335 | Legal Issues in Health and Human Services |
| SBS | 338 | Health Care Policies |
| SBS | 343 | Substance Abuse |
| SCI | 340 | Applied Botany |
| SCI | 310 | Genetics Laboratory |
| SCI | 315 | Holistic Health/Alternative Healing |
| SCI | 320 | Human Embryology and Lab |
| SCI | 350 | Science Projects |
| SCI | 370 | Science Safety |
| SCI | 385 | Internship |


| SCI | 390 | Cellular Biology |
| :--- | :--- | :--- |
| SCI | 450 | Science in the Classroom |
|  |  | Geology |
|  |  | Physics |
|  |  | Additional Chemistry |

NOTE: Before enrolling in any of the 100-level courses listed below students must have completed ENG 005 (or be taking it concurrently) and MAT 009 or passed the English and Mathematics Placement Examinations, or equivalent.

## 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.

## BIO106K Laboratory Biology I

Laboratory experiences illustrating concepts and principles introduced in BIO 105 K . Must be taken concurrently with BIO 105 K or BIO 111 . 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 105 K and 106 K .

Cr 3.

## BIO 108 Laboratory Biology II

Laboratory experiences illustrating topics introduced in BIO 107. Must be taken concurrently with BIO 107.

Cr 1.5.

## ESP 101 Fundamentals of Environmental

 ScienceA lecture/laboratory course which surveys the impact of human activity on ecosystems, with specific consideration of land, water, and air pollution, resource utilization and degradation, and waste disposal. Majors only or by permission of the instructor. Cr 4.

## SCI 100K Natural Science Topics

This lecture and laboratory course centers on four major topics: the biosphere, food and nutrition, health and illness, and the new genetics. Through an integration of the natural sciences, the course applies basic concepts to an understanding of current issues. Social and ethical concerns are discussed. No prerequisites.

Cr 4.

## SCI 105 Basic Chemistry

This is a short course ( 16 hours) designed to present the basics of inorganic, organic and biochemistry to students who have never taken chemistry or did so many years ago. Topics include the metric system, atomic structure, bonding, compounds, chemical equations and reactions, ions, pH , functional groups, carbohydrates, proteins, lipids and nucleic acids. The course satisfies the chemistry prerequi-
site for biology, microbiology, and for anatomy and physiology. Prerequisite: MAT 009 or concurrent.

Сг 1 .

## SCI 170K Human Anatomy and Physiology I

This is the first course in a two-semester sequence in human anatomy and physiology. It introduces basic principles of physiology and anatomy through chemistry, cellular structure and function, genetics, and embryology. This course discusses several physiologic systems including the muscular, skeletal, and integumentary systems. Prerequisites: students should have an understanding of basic biology and chemistry from high school courses, GED, or successful completion of SCI 105 or SCI 100. SCI 170K must be taken concurrently with SCI 171K, the lab.

Cr 3.

## SCI 171K Human Anatomy and Physiology I Laboratory

Laboratory experiences illustraing topics introduced in SCI 170K. Must be taken concurrently with SCI 170K. Cr 1 .

## SCI 172 Human Anatomy and Physiology II

This is the second course in a two-semester sequence in human anatomy and physiology. Topics in this course will include the nervous system, sense organs, blood and circulatory system, immune function, respiratory system, digestion and metabolism, endocrine function, renal function, and electrolyte balance. Prerequisites: SCI 170K and SCI 171K. Must be taken concurrently with SCI 173, the lab.

Cr 3 .

## SCI 173 Human Anatomy and Physiology II Laboratory

Laboratory experiences illustrating topics introduced in SCI 172. Must be taken concurrently with SCI 172.

Cr 1 .

## SCI 252 Medical Microbiology

This lecture and laboratory course introduces basic microbiology and focuses on the viruses, bacteria, protozoans, and multi-cellular organisms which cause human diseases. It also discusses the immunesystem. Prerequisite: SCI 170K/SCI 171K.

Cr 4.

## SCI 340 Applied Botany

The growth, structure, reproduction, and physiology of plants will be studied, and the role of plants in human affairs will be discussed in this lecture and laboratory course. Prerequisites: SCI 170K/ SCI 171 K or a grade of B or higher in SCI 100K.Cr 4.

## SCI 365 Marine Biology

Marine biology is the study of the interactions among the living organisms in the earth's oceans. We will investigate the relationships between the different marine trophic levels including: bacteria, plankton, nekton, algae, invertebrates, and vertebrates. Where possible, local examples will be utilized to illustrate these points. Field experiences will be encouraged at all levels of investigation. Interactions with Maine's shellfish, finfish, and marine agronomic efforts will be emphasized with onsite field work a significant part of the lab experience. Prerequisite: SCI 100 K or SCI $170 \mathrm{~K} / \mathrm{SCI} 171 \mathrm{~K}$ or a biology course.

Cr 4.

## SCI 309 Human Genetics

This course examines the role of heredity in human growth, development, and behavior. Decision maling, ethical issues and societal responsibilities related to genetic disorders will be discussed. Prerequisites: SCI 100 K or $\operatorname{SCI} 170 \mathrm{~K} / \mathrm{SCI} 171 \mathrm{~K}$.

## SCI 310 Genetics Laboratory

The laboratory in human genetics is designed to provide practical experience in genetics in order to better understand the mechanism of heredity. SCI 309 must be taken concurrently.

Cr 1 .

## SCI 315 Complementary Therapies for Health Care

This course will introduce students to different descriptions of health and illness and encourage them to explore their own beliefs about healing. The concepts of healing and underlying complementary healing practices will be explored. This course will offer students a better understanding of options for promoling health and wholeness for themselves and for their families.

Cr 3.

## SCI 320 Human Embryology

This lecture and laboratory course discusses how the human embryo is formed and the development and growth of the fetus until birth. The embryology of other vertebrates will be studied for comparison. Prerequisite: grade of B or higher in SCI 100 K or SCI 170 K or equivalent.

Cr 3 .

## SCI 350 Science Projects

This course is an independent study under the direction of a faculty member. Students develop and complete a laboratory or library project Cr 1-3.

## SCI 370 Science Safety

This 16-hour course is designed to discuss and demonstrate methods of assuring health and safety in the science classroom and laboratory. Cr 1.

## SCI 380 Pathophysiology I

This course examines the biology of noninfectious illnesses. Emphasis will be placed on cellular biology, cancer, immunity, inflammation and the cardiac, pulmonary and renal systems. Prerequisites: microbiology, human anatomy, and physiology.

## SCI 381 Pathophysiology II

This course examines the biology of noninfectious illnesses. The nervous, endocrine, digestive, hematological, reproductive, muscular and skeletal systems will be studied. Prerequisites: microbiology, human anatomy, and physiology. SCI 380 is not a prerequisite.

Cr 3.

## SCI 385 Internship

Prerequisite: SCI 380/381.
Cr 3.

## SCI-386 Internship Seminar

Internship seminar required for all students engaged in an internship experience. A one-credit seminar that will meet for two hours every other week for the semester the student is enrolled for internship credit. The seminar will include planned discussion meetings on a focused management subject and assignments related to the student's internship. Speakers will be a part of the seminar and internship supervisors will be encouraged to attend class sessions.

Cr 1.

## SCI 390 Cellular Biology

This course examines the structure and function of cells and cellular organelles in the context of their chemistry, metabolism, and reproduction. Prerequisites: SCI 170K/SCI 171K, one year chemistry.

Cr 3.

## SCI 400 Senior Seminar

A variety of health-related issues will be discussed. Students will be required to write a formal academic research paper. Prerequisites: two SCI courses above 200 .

Cr 3 .

## SCI 450 Science in the Classroom

This integrated lecture and laboratory course is designed for elementary teachers, summer camp counselors, parents, and others who wish to interest children in science. The course discusses the history of science teaching, science reform movements, and the development of science lesson plans. It provides knowledge of basic science and gives examples of inexpensive experiments which children can perform. Emphasis is placed on integrating science with the arts, math, humanities, and with social sciences. Maine State Deparment of Education, Division of Certification and Placement, accepts this course as an elementary science methods course. Prerequisites: two science courses.

Cr 3 .
SCI 460 Teaching Science in Secondary School This course discusses methods of teaching science in grades 7-12. Topics include methods, cooperative learning, lesson plans, safety, interdisciplinary teaching, and othertopics. The Department of Education of the state of Maine, Division of Certification and Placement, has approved this course as a secondary science methods course. Prerequisites: six science courses.

Cr 3 .

## B.A. Degree in Social and Behavioral Science

This baccalaureate program provides students with an interdisciplinary approach to understanding human behavior. After completing the USM Core requirements, including basic courses in the social sciences, students will select a combination of courses which balance in-depth study of principles of human development with exposure to topics with direct relevance to careers in human services and helping professions. As in other programs in the College, students also complete an internship in order to apply their knowledge to local and contemporary situations.

Before taking 300-level courses in this major, students must have completed a 100 -level college writing course with at least a grade of C. No more than two courses from outside the major may be used toward completion of the requirements for the major without permission of the faculty.

Prerequisite Courses ( 15 credits) to be taken before 300-level courses
Introduction to Sociology
Introduction to Psychology I \& II
Cultural Anthropology
Microcomputers and Applications
Note: These courses may also be used to satisfy Core curriculum requirements.
Requirements for the Major ( 25 credits)

| SBS | 300 | Deviance and Social Control |
| :--- | :--- | :--- |
| SBS | 328 D | Staristics |
| SBS | 329 | Research Methods |
| SBS | 333 J | Human Growth and Development |
| SBS | 370 E | Ethics and The Organization |
| SBS | 385 | Internship |
| SBS | 386 | Internship Seminar |
| SBS | 400 | Senior Seminar |
| SBS | 430 | Applied Social Policy |
| Electives (18 credits) |  |  |
| Students will complete at least six of the following courses, selecting a mini- |  |  |
| m of two courses from each category: |  |  | mum of two courses from each category:

Fundamentals
SBS 305 Child Development
SBS 306 Adolescence
SBS 307 Midlife and Adult Development
SBS 309 Human Genetics
SBS 311 Personality and Psychopathology
SBS 340 The Family
SBS 342 Gerontology
SBS 360 Culture, Behavior and Personality
SBS $390 \quad$ Brain and Behavior
Topics
SBS 150I What is "Race"?
SBS 301 Abnormal Psychology
SBS 302 Eating Attitudes and Behaviors in Western Culture
SBS $308 \quad$ Health, Illness and Society
SBS 312 Foundations in Criminology
SBS 316 Men, Women, and Work
SBS 334 Spirituality
SBS 335 Legal Issues in Health and Human Services
SBS 338 Health Care Policies
SBS 343 Substance Abuse
SBS 344 Violence: Causes and Control
SBS 350 Deviations of Childhood
SBS 411 Counseling and Psychotherapy with Adults
SBS 435 Children, Policy, and Law
SBS 436 Risk, Public Policy, and Society
Concentration in Counseling ( 18 credits in lieu of electives above)
Students will complete 18 credit hours by selecting at least 6 of the following courses, a minimum of two courses from each category:

## Fundamentals

SBS 305 Child Development


#### Abstract

| SBS | 306 | Adolescence |
| :--- | :--- | :--- |
| SBS | 307 | Midlife and Adult Development |
| SBS | 311 | Personality and Psychopathology |
| SBS | 360 | Culture, Behavior and Personality |
| Topics |  |  |
| SBS | 301 | Abnormal Psychology |
| SBS | 308 | Health, Ilness and Society |
| SBS | 343 | Substance Abuse |
| SBS | 350 | Deviations of Childhood |
| SBS | 411 | Counseling and Psychotherapy with Adults |

The Internship (SBS 385) must be completed in a counseling/clinical setting, approved by a faculty advisor.

The remaining electives may be selected from courses listed above or from other courses offered by Lewiston-Auburn College or by other accredited institutions. Selection of courses from the fields of anthropology, criminology, economics, political science, psychology, sociology, and social work is recommended. Students may also work with their advisor to plan their own program focusing on future career or graduate school plans.


## SBS 150I What is "Race"?

The concept of race is one of the most contentious ideas of modern society. This course will examine the history and biology of race, and trace the development of the idea of race in American culture. Students will examine evolution to understand diversity in the human species. They will integrate this information with historical attempts to define race so as to gain a better understanding of race and racial issues.

Cr 3.

## SBS300 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 Abnornnal Psychology

An introduction to the etiology and classification of maladaptive behavior. The psychological, sociological, and biological bases formental illness will be discussed.

$$
\mathrm{Cr} 3 .
$$

## SBS 302 Eating Attitudes and Behaviors in Western Culture

This course examines diet, food, and nuvition issues in Western culture. Students explore how eating attitudes and behaviors influence, and are shaped by, culture. Discussion includes health and fitness, media representations, the diet industry, body image, obesity, and eating disorders. Students gain insights into their own eating behaviors and athitudes as well as those of today's Western culture.

Cr 3.

## SBS 305 Child Development

This course examines the development and behavior of children from conception through middle childhood, and introduces topics in adolescence. Theoretical frameworks and research upon which current knowledge in child development is based will be considered, as well as applications to contemporary topics in child welfare and education. Prerequisite: HRD 333J recommended. Cr 3.

## SBS306Adolescence

An overview of the psychological and social dimensions of adolescent development, including consideration of gender and group differences in the experience of the physical, cognitive, and social ransformations of adolescence. Cr 3.

## SBS 307 Midlife and Adult Development

A consideration of major physical, personality, and social processes experienced by adults in midlife in our society. Stage models of adult development will be critically examined, as will such topics as the effects of changing societal contexts on midlife. Course material will be applied to portrayals of midlife in folk tales and fiction.

Cr 3.

## SBS 308 Health, Illness and Society

A survey of the psychological, sociological, and cultural dimensions of health and illness. Consideration will be given to contemporary health issues such as stress, the sickrole, health promotion, mindbody connections, and the relationship between socioeconomic factors and health.

Cr 3.

## SBS 309 Human Genetics

This course will examine the role of heredity in human growth, development and behavior. Decision making, ethical issues and societal responsibilities related to genetic disorders will be discussed.

$$
\text { Cr } 3
$$

## SBS 310 Human Genetics Lab

This laboratory course will provide students with practical experience to supplement SBS 309.Cr 1.

## SBS 311 Personality and Psychopathology

This course examines the historical, biological, sociological, and psychological bases of the development of personality and mental health. Differing theoretical frameworks and current research will be discussed. Particular attention will be given to cultural factors.

Cr 3.

## SBS 312 Foundations in Criminology

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.

## SBS 316* Men, Women, and Work

Examines historical perspectives on work, the nature and meaning of work for men and women, similarities and differences between men and women that affect work, and the impact of work on men and women. Students will read from work in psychology, sociology, literature (fiction, drama, poetry), and management and organizational behavior.

Cr 3.

## SBS 328D* Statistics

Introduction to and application of descriptive statistics, sampling and significance testing, correlation and regression analysis. Evaluation methods will be explored. Statistical packages available on computers will be used. Emphasis will be on the interpretation and analysis of statistical decision making. Prerequisite: MAT 010 or equivalent.

Cr 3.

American health care system. Critical issues confronting the consumption, delivery, and financing of health care will be considered. Health care systems in other countries and around the UnitedStates will be examined.

Cr 3.

## SBS 340 The Family

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 relaionships.

Cr 3.

## SBS 342 Gerontology

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.Cr 3 .

## SBS 343 Substance Abuse

This course considers patterns of use of drugs, the bases of their effects and associated harms, and the history of and current options for prevention and intervention efforts. Emphasis is on the role of society and public policy in influencing our thinking and behavior conceming substance use and abuse.

Cr 3.

## SBS 344* Violence: Causes and Control

This course studies violence and the possibilities of living peacefully as explored in psychological and sociological works, in fiction, drama, and poetry, andin writings on anthropology, social policy, and religion. The course reviews the causes of violent and aggressive behaviors and specific approaches to the prevention and control of these behaviors.

Cr 3.

## SBS 350 Introduction to Deviations of Childhood

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.

Cr 3.

## SBS 360 Culture, Behavior and Personality

Anexamination of interactions between culture, behavior, and personality through the life span. Crosscultural variations and commonalities in child rearing practices, emotional expression and gender roles are among topics to be considered. Varied theoretical models of the relationship between individual development and culture will be reviewed. Prerequisites: PSY 102 and ANT 101J. Cr 3.

## SBS 370E* Ethics and the Organization

Explores the ethical dimensions of private- and pub-lic-sector decision making. Draws on concepts and theories from ethics and other disciplines, especially the social sciences, and applies them to ethical issues and dilemmas faced by individuals and organizations.

Cr 3.

## SBS 385 Internship

Cr 3 . A study of conceptual and empirical foundations of psychological counseling. Alternative models of counseling will be explored in relation to theories of personality development and functioning. Focus will be on counseling approaches in community mental health areas such as child abuse, substance abuse, suicide prevention and crisis intervention. Prerequisite: SBS $311 . \quad$ Cr 3.

## SBS 430 Applied Social Policy

A review of contemporary social policy altematives and an examination of the macro- and micro-level social policy making processes. Students complete an applied social policy project which might take the form of a policy paper, a grant proposal or written legislative testimony for a community agency. Prerequisite: junior standing or permission of the instructor.

Cr 3.

## SBS 435* Children, Policy, and Law

This course explores the interface of legal policy related issues and problems in childhood. The relationship among legal, public policy, and psychological concepts will be framed withinf amily relaionships, legal decision making, and the judicial and legislative allocation of power between parents and the state. Topics will include the state of knowledge about outcomes for children's emo ional health and development related to the risks and protections that legal intervention brings. Cr 3.

## SBS 436* Risk, Public Policy, and Society

This course considers the variety of ways in which risks, especially risks to the environment and to health, are measured, perceived, communicated, and acted upon in our society. Perspectives will be drawn from health fields, natural sciences, and political science, as well as from the social sciences.

Cr 3.
*These courses are cross-listed with the corresponding LOS, HUM, or SCI courses.

## B.S. Degree in Leadership and Organizational Studies

The baccalaureate degree in leadership and organizaional studies (LOS) combines a liberal arts program with the study of how organizationsoperate and how leadership functions. It emphasizes the critical need to understand and work with people, the dynamics of change, the interdisciplinary nature of organizational operations, and the practical application of theories and leadership concepts. Drawing on faculty from diverse backgrounds, leadership and organizational studies is designed to prepare students for work in the nonprofit, public, or private sectors.

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 LOS major will introduce students to the theory and practice of organizational behavior and leadership with emphasis on writing, problem solving, critical thinking, key quantitative skills, and team functioning.

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 Leaming Assessment sponsored by USM, or through waiver by the instructor of the course.

Before taling 300-level courses in this major, students must have completed a $100-l e v e l$ college writing course with at least a grade of C . No more than two courses from outside the major may be used toward completion of the requirements for the major without permission of the faculty.

| Prerequisites |  |  |
| :--- | :--- | :--- |
| LAC | 150 | Microcomputer Applications |
| ACC | 110 | Financial Accounting for Decision Making |
| Requirements for the | Major |  |
| LOS Core (25 credits) |  |  |
| LOS | 300 | Organizational Theory |
| LOS | 304 | Organizational Budgeting |
| LOS | 328 D | Statistics |
| LOS | 340 | Organizational Change and Development |
| LOS | 370 E | Ethics and the Organization |
| LOS | 385 | Internship |
| LOS | 386 | Internship Seminar |
| LOS | 400 | Senior Seminar |
| LOS | 410 | Interpersonal Behavior in Organizations |
| LAC | 112 | Microsoft Excel- Spreadsheets |

Students who plan to attend graduate school or pursue careers in consulling or human resource administration should also enroll in LOS 329 Research Methods.

## Individual Concentrations ( 18 credits)

While taking the LOS Core, each student will work closely with a faculty advisor to identify six LOS electives ( 18 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.

When choosing electives, students may wish to consider the following concentration or minor areas:

Organizational Development

| LOS | 310 | Technology in Society |
| :--- | :--- | :--- |
| LOS | 312 | Human Resource Administration |
| LOS | 314 | Employee Relations |
| LOS | $316^{*}$ | Men, Women and Work |
| LOS | 350 | Leadership |
| LOS | 386 | Field Project in Organizational Studies |

Information Systems (available as a minor)
This concentration/minor is offered in collaboration with Central Maine Technical College (CMTC) and requires the completion of the following courses:

MAT 108 College Algebra
LOS 310 Technology in Society
The following courses are offered at CMTC:

| LOS | 317 | Operating Systems |
| :--- | :--- | :--- |
| LOS | 318 | Database Management |
| LOS | 319 | Networks I |
| LOS | 320 | Networks II |
| LOS | 321 | Introduction to PC Repair |
| Electives |  |  |
| LOS | 331 |  |
| LOS | 332 | Idvanced PC Repair |
| Integrated Software Packages |  |  |


| Public Affairs |  |  |
| :---: | :---: | :---: |
| LOS | 310 | Technology in Society |
| LOS | 322 | Public Affairs |
| LOS | 323 | Campaigns, Elections, and the Media |
| LOS | 325 | State and Local Govemment |
| LOS | 338* | Health Care Policies |
| LOS | 386 | Field Project in Organizational Studies |
| LOS | 436* | Risk, Public Policy, and Society |
| Human Services |  |  |
| LOS | 310 | Technology in Society |
| LOS | 325J | State and Local Govermment |
| LOS | 335* | Legal Issues in Health and Human Services |
| LOS | 338* | Health Care Policies |
| LOS | 386 | Field Project in Organizational Studies |
| LOS | 430* | Applied Social Policy |
| Govemment, Policy, and the Law |  |  |
| LOS | 322 | Public Affairs |
| LOS | 325J | State and Local Government |
| LOS | 350 | Leadership |
| LOS | 371 | Social and Political Theory |
| LOS | 372 | Political Economy |
| LOS | 373 | Managing Non-Profits |
| LOS | 433 | Constitutional Law |
| COR | 136I | American Studies II |
| LOS | 316* | Men, Women, and Work |
| LOS | 323 | Campaigns, Elections, and the Media |
| HUM | 330I | Labor, Literature, and the Arts |
| Employee Health and Wellness |  |  |
| LOS | 301 | Workers' Compensation |
| LOS | 436* | Risk, Public Policy, and Society |
| ITP | 320 | Occupational Safety and Health |
| REC | 219 | Lifetime Physical Fitness and Wellness |
| SCI | 170K | Human Anatomy and Physiology I |
| Optional |  |  |
| SCI | 172 | Human Anatomy and Physiology II |
| SBS | 301 | Abnormal Psychology |
| SBS | 343 | Substance Abuse |
| LOS | 338* | Health Care Policies |
| LOS | 312 | Human Resource Management |
| HRD | 333J | Human Growth and Development |

* These courses are cross-listed with the corresponding SBS or HUM courses.

LOS 300 Organizational Theory
Provides an overview of modem management methods. Current managerial problems are analyzed using structural, human resource, cultural, and political frameworks and the case method. Issues include leadership, organizational design, planning, change, decision making, communication, and control. A good course for students interested in how organizations work.

## LOS 301 Workers' Compensation

This course discusses workers' compensation laws. Cr 3.

## LOS 303 Career and Life Management for Women

Using workbook materials students will prepare an educational plan, a job plan, and short- and longterm career plans. There will be presentations from
community activists, personal representatives from business and industry, educational advisors, speakers from the health field, and financial advisors to help guide class participants with their career and life plan.

Cr 3.

## LOS 304 Organizational Budgeting

Assesses the theory and practices of financial management in different forms of public and private organizations. Emphasizes the relationship between financial decision making and organizational policy and strategy. Topics covered will include: fund accounting principles, financial forecasting, the use of spreadsheets, and budgeting. Prerequisite: MOS 300, ACC 110, and LAC 112.

Cr3.
LOS/LAC 310 Technology in Society
This course examines the impact of technology and management information systems on the organiza-
tion and the lives of the people within the organization, both at work and at home, using an interdisciplinary approach. Materials may include sociology, psychology, management of information systems, history, literature, and health, among others.

Cr 3.

## LOS 312 Human Resource Management

Focuses on the procedures and processes associated with the management of human resources within organizations. Topics include recruitment, staff development, job analysis, personnel systems, and training.

Cr 3.

## LOS 314 Employee Relations

Provides an understanding of the trends in legal, social, and economic aspects of United States la-bor-management relations. Topics include a historical overview of labor law, grievance procedures, the negotiation process, equal opportunity, and personnel rules. Includes case studies and simulated bargaining and arbitration exercises.

Cr 3.

## LOS 315 Training and Development

The goal of thiscourse is to expose students to major concepts in organizational development and to give them experience with a set of training tools which may be used in the workplace. Through simulations and diagnostic exercises on case studies, students will explore the process of development and ways to assess and develop their training skills. In order to help improve their training style students will be given many opportunities to fine-tune their technique through both oral and written exercises.

Cr 3.

## LOS/SBS 316 Men, Women, and Work

Examines historical perspectives on work, the nature and meaning of work for men and women, similarities and differences between men and women that affect work, andtheimpact of work on men and women. Students will read from work in psychology, sociology, literature (fiction, drama, poetry), and management and organizational behavior.

Cr 3.

## LOS/LAC 317 Operating Systems

This course will introduce students to operating systems compatible with IBM personal computers. It is intended to familiarize students with the major features, functions, and tools available to install, implement, maintain, and roubleshoot operating systems. The course is designed to build competencies and familiarities with application aspects of operating systems and to take full advantage of their usefulness.

Cr 3.

## LOS/LAC 318 Database Management

This course is intended to introduce skills and build proficiency in database management. It is taught on IBM-compatible computers using a DOS/Windows operating system. It is designed to help students develop competencies in a variety of data-
base processing functions. Students will become proficient in setting up databases, managing data, creating reports, using report enhancements, and manipulating data.

Cr 3 .

## LOS/LAC 319 Networks I

This course is an introduction to the installation, maintenance, and repair of personal computer networks. It provides students with an elementary understanding of network systems including communication components, LAN protocols, standards (de facto/de juri), system architecture, network software, and the fundamentals of network installation and repair.

Cr 3.

## LOS/LAC 320 Networks II

This advanced course addresses the installation, maintenance, and repair of personal computer networks. It provides students with an advanced understanding of network systems including software configuration, wroubleshooting, security, tools, design strategies, and employee training. Cr 3.

## LOS/LAC 321 Introduction to Personal Computer Repair

This course is an introduction to the installation, maintenance, and repair of personal computers and related equipment. It provides students with an elementary understanding of PC environments including system components, peripherals, operating systems, component/card interface, and the fundamentals of repair.

Cr 3.

## LOS 322 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.

LOS 323 Campaigns, Elections, and the Media Explores the implications of political campaigns in American politics. Topics include management of campaigns, candidate recruitment, positive and negative advertising, political consultants, political parties and interest groups, effects of media coverage, campaign financing, and impact of campaigns and elections on public policy. Special consideration will be given to current campaigns.

Cr 3.

## LOS 325J State and Local Government

Introduction to the structure, roles, and processes of administration in state and local govemment. The state of Maine is a special focus of the course.

Cr 3.

## LOS 328D* Statistics

Introduction to and application of descriptive statistics, sampling and significance testing, correlation and regression analysis. Evaluation methods will be explored. Statistical packages available on computers will be used. Emphasis will be on the
interpretation and analysis of statistical decision making. Prerequisite: MAT 010 or equivalent.

Cr 3.

## LOS 329 Research Methods

An introduction to quantitaive and qualitative research methods which can be used in organizational planning and decision making and in the social and behavioral sciences. The course will cover topic areas related to the application of appropriate methods of inquiry and includes completion of an applied project. Strongly recommended for students going on to graduate school, careers in consulting, or human resource management. Prerequisite: LOS 328D

Cr 3.

## LOS/LAC 331 Advanced Personal Computer Repair

This is an advanced course in personal computer installation, maintenance, and repair. It provides students with an in-depth study of PC system components, peripherals, and hardware interfaces and will emphasize problem solving, analysis, connectivity, and cabling difficulties.

Cr 3.

## LOS/LAC 332 Integrated Software Packages

This is a course in the use of integrated software packages for report, document, presentation, and information development activilies. A variety of instructional activities will stress file and data integration and explore intra- and inter-package communications. Integration of word processing, spreadsheet, database, and graphics software will be featured using linking and other tools. Students will be expected to produce documents, spreadsheets, database reports and presentations which will take full advantage of inter-operability, communication, translating, linking, and sharing functions.

Cr 3.

## LOS 333 Constitutional Law

Course provides introduction to fundamental legal principles set forth in the Constitution and a basic history of their evolution. Cr 3.

## LOS 335* Legal Issues in Health and Human <br> Services

Examines current legal issues affecting the management and delivery of health and human services including the protection of the rights of both clients and workers.

Cr 3.

## LOS 338* Health Care Policies

This course provides a comprehensive introduction to health care policy and the organization of the American health care system. Critical issues confronting the consumption, delivery, and financing of health care will be considered. Health care systems in other countries and around the United States will be examined.

$$
\text { Cr } 3 .
$$

## LOS 340 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: LOS 300 or permission of instructor.

Cr 3.

## LOS 350 Leadership

This course examines the theory, research, techniques, and problems of leadership in organizations. Organizational culture is studied with emphasis on the leader's role in influencing and decision making. An experiential design is used along with traditional classroom techniques to help students reflect upon their personal leadership styles and approve their approaches to leading and managing others in diverse organizational settings. Cr 3 .

## LOS 370E* Ethics and the Organization

Explores the ethical dimensions of private- and pub-lic-sector decision making. Draws on concepts and theories from ethics and other disciplines, especially the social sciences, and applies them to ethical issues and dilemmas faced by individuals and organizations.

Cr 3 .

## LOS 371 Social and Political Theory

An examination of historical and contemporary thinling on a variety of political and social philosophies.

Cr 3.

## LOS 372 Political Economy

Course examines various perspectives on the U.S. economic system in relation to the political sphere.

Cr 3 .

## LOS 373 Managing Nonprofits

Examines issues such as marketing, fundraising, boards of directors, and human relations issues in nonprofit settings.

Cr 3.

## LOS 385 Internship in Leadership and Organizational Studies

Prerequisites: LOS 300 and two 300/400-levelLOS courses.

Cr 3.

## LOS 386 Internship Seminar

Internship seminarrequired for all students engaged in an internship experience. A one-credit seminar that will meet for two hours every other week for the semester the student is enrolled for internship credit. The seminar will include planned discussion meetings on a focused management subject and assignments related to the student's internship. Speakers will be a part of the seminar and internship supervisors will be encouraged to attend class sessions. Cr 1 .

## LOS 387 Organizational Consulting: Internal and External

Students will work in a team to apply organizational concepts and theories to a real-life organizatonal situation. Prerequisite: permission of instructor.

Сг 3.

## LOS 398 Independent Study

Prerequisites: LOS 300 or junior standing and permission of instructor.

## LOS399 Special Topics

Topics offered will cover current special issues in organizations and/or the study of organizations through alternative methods. Prerequisites: LOS 300 or permission of the instructor.

Cr 3.

## LOS 400* Senior Seminar

The goal of this seminar is to allow students to integrate their previous coursework as they design and complete a capstone research and writing project. Students are asked to identify their own topic, information sources, and learning objectives with assistance from the instructor and their assigned student work group. Each student must demonstrate self-directed learning and the ability to write a formal paper. Prerequisite: senior standing or permission of the instructor.

Cr 3.

## LOS 410 Interpersonal Behavior in Organizations

Focuses on understanding individual, interpersonal, and group behavior in organizations with an emphasis on learning the knowledge and skills needed
for success in organizations. Covers such topics as perception, personality, individual differences, motivation, communication, managing groups, leadership, power, and managing conflict. Prerequisite: LOS 300 or permission of instructor. Cr 3.

## LOS 430* Applied Social Policy

A review of contemporary social policy alternatives and an examination of the macro- and micro-level social policymaking processes. Students complete an applied social policy project which might take the form of a policy paper, a grant proposal or written legislative testimony for a community agency. Prerequisite: junior standing or permission of the instructor.

Сr 3.

## LOS 436* Risk, Public Policy, and Society

This course considers the variety of ways in which risks, especially risks to the environment and to health, are measured, perceived, communicated, and acted upon in our society. Perspectives will be drawn from health fields, natural sciences, and political science, as well as from the social sciences. Cr 3.
*These courses are cross-listed with the corresponding SBS or HUM courses.

## Master's Degree in Occupational Therapy (MOT)

Occupational therapy is a health and rehabilitation profession that uses meaningful occupation as treatment to help people of all ages perform the skills they need to live as independently as possible. Occuparional therapists evaluate and treat people with varying degrees of physical and psychological impairment. The specific disability may be the result of a birth defect, illness, injury, or the aging process. Emphasis is placed on activities of daily living related to work, self-care, and leisure.

A master's degree in occupational therapy is offered for people who have an undergraduate degree in a field other than occupational therapy. It is recommended that students who are interested in applying for admission to this graduate program complete an undergraduate major in either social and behavioral sciences or natural and applied science. Regardless of major, students interested in applying to the MOT program must complete the prerequisites listed below. Prerequisite courses must be passed with a grade of at least B. In addition, all science prerequisite courses must have been taken within six years prior to the fall semester for which the student is applying. Completing the prerequisites does not guarantee admission to the occupational therapy master's program.

## Undergraduate Occupational Therapy Prerequisites

|  | Credits |
| :--- | :---: |
| Math Competency |  |
| College-level Algebra |  |
| Introduction to Statistics (such as MAT 120D or SBS 328D) | 6 |
| College-level English <br> (at least three credits must focus on writing; HUM 135I or HUM | 6 |
| 136I may be substituted for a writing course) | 3 |
| Introduction to Sociology <br> (or an upper level sociology or SBS course) | 3 |
| Abnormal Psychology | 3 |
| Human Growth and Development (lifespan course) | 3 |


#### Abstract

Introduction to Physics and Lab 4 Human Anatomy and Physiology I with Lab $\quad \because \quad 4$ Human Anatomy and Physiology II with Lab 4 Microcomputers 3 For additional information conceming the application process and requirements consult the graduate catalog or the program secretary.

The master's in occupational therapy is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4270 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA's telephone number is (301) 652-AOTA. Graduates of the program will be eligible to sit for the national certification examination for the occupational therapist adminstered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT certification examination.


## B.S. in Industrial Technology

Option II of the B.S. degree in industrial technology is extended from USM's School of Applied Science to Lewiston-Aubum College. For more information, contact Roger Philippon at Lewiston-Aubum College (207-753-6560) or Fred Walker at the School of Applied Science (207-780-5440). This program links very closely with academic programs at Central Maine Technical College. Students must complete their technical requirements at Central Maine Technical College or other institution, or they may receive credit for technical experience and raining.

## B.S. in Nursing

Students who are RNs are able to complete the B.S.N. degree at LewistonAuburn College. For more information about this RN Studies program, contact Brenda Webster in the College of Nursing (207-780-4802) or Sallie Nealand at Lewiston-Auburn College (207-753-6589).

# Division of Academic Support 

Executive Director: John W. Bay<br>Director, Learning Assistance: Robert E. Lemelin; Coordinator, The Learning Center: Frank K. Camer; Director, First Year Alternative Experience: Toni Passerman; Coordinator for Academic Support Services for Students with Disabilities: Joyce Branaman

Developmental courses provide students with instruction to help them achieve proficiency in writing (ENG 009), in mathematics (MAT 009), and in critical reading skills (RDG 009). The Learning Center offers tutoring in writing, math, study skills, and word processing. The Academic Support for Students with Disabilities Office works with students to foster alternative learning strategies. First Year Alternative Experience integrates developmental coursework, tutoring, and academic counseling for a select group of students. University Seminar (FRS100) assists students with the ransition into higher education. The course helps provide a strong foundation on which to build an academic career. A variation of this course (FRS 101, FRS 102) is required of all students in the First Year Alternative Experience.

## ENG 009A Developmental Writing

This course is designed to help students who need to develop proficiency to enter ENG 100C, 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.

## ABU 119 Business Communication

This course introduces students to business communication strategies and provides practice in the application of those strategies using the case method. Students compose business letters, reports, andemployment writing. Prerequisite: ENG 100C. Cr 3.
to help assure success in college. The course exposes students to practical skills, including learning strategies, research, and critical thinking. Required of all students in the First Year Alternative Experience.

Cr 3.

## FRS 102 Introduction to the Academic Experience II

By applying the skills and strategies acquired in FRS 101, this course expands upon critical thinking, reading, and writing skills by exposing students to a breadth of readings from the humanities and social sciences. Required of all students in the First Year Alternative Experience. Prerequisite: FRS 101. Cr 3.

## DBS 122 Career Development

Designed to assist students in developing a career plan and to investigate the work world in terms of career goals. Experiences include inventory-awareness exercises, career exploration with field visitations, and preparation with résumé construction and interview procedures.

Cr 1.

## FRS 100 University Seminar

This course is designed to enhance a student's academic success by providing an introduction to the many facets of the University. Selected topics include critical reading and writing, critical thinking, enhancing study and communication skills. The class format allows for a great deal of faculty/student interaction.

Cr 3.

## FRS 101 Introduction to the Academic Experience I

This course provides students with academic tools

## MAT 009 Developmental Mathematics

A review of fundamental topics of arithmeric needed for a study of algebra. Topics include fractions, decimals and integers; ratios and proportions; peicent; exponents, average and square roots; and solving word problems and equations. This course is taken on a pass/fail basis only. Credit earned in MAT 009 does not apply or accumulate toward any degree program at the University of Southern Maine.

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\mathrm{Cr} 3
$$

## RDG 009 Critical Reading Skills

Provides opportunities for students to develop the critical reading skills needed at the college level. Students must demonstrate mastery at the end of the course. This course is taken on a pass/fail basis. Credit earned in RDG 009 does not apply to or accumulate for any degree program at the University of Southern Maine.

Cr 3.

## Graduate Programs

Office of Graduate Studies and Research, 39 Exeter St., Portland, 780-4386
The University of Southern Maine offers master's degrees in the areas listed here. The programs are described in detail in the graduate catalog.

Applied Immunology<br>American and New England Studies<br>Business Administration<br>Community Planning and Development<br>Computer Science<br>Health Policy and Management<br>Manufacturing Management<br>Nursing<br>Occupational Therapy<br>Public Policy and Management<br>Education<br>Adult Education<br>Counseling<br>Educational Leadership<br>Extended Teacher Education Program (ETEP)<br>Industrial Education<br>Literacy Education<br>School Psychology<br>Special Education

Certificates of Advanced Study are offered in education and nursing.

## Edmund S. Muskie School of Public Service

Dean: Barton Wechsler<br>Coordinator of Student Affairs: Carlene R. Goldman<br>Professors: Barringer, Clary, Colgan, Lapping, Thompson, Wechsler; Associate<br>Professors: Bernotavicz, Coburn, Goettel, Hitchcock, LaPlante; Assistant Professors: Bolda, Hartley, Howard, Kilbreth, Lambert, Lynn

The Edmund S. Muskie School of Public Service is a non-partisan education, research, and public service organization dedicated to producing leaders, knowledge, and new ways to use lenowledge; and to bettering the life of our people and our nation. The School combines the significant research capabilities of four nationally recognized applied research centers with the graduate programs in public policy and management, health policy and management, and community planning and development.

The School has grown in both size and reputation since it was founded in 1990-faculty and staff now number over 175, and research awards in 1997 amounted to over $\$ 12$ million. The Muskie School is nationally distinguished for its scholarship and the quality of its graduates, and sought after as a source of knowledge on issues of local, regional, state, and national importance.

What makes the School successful is its practical, innovative approach to issues; its active efforts to span traditional boundaries among university, government, and nonprofit organizations; and its success in bridging University departments and disciplines in the search for creative solutions.

The School actively seeks to assure a diverse and representatitve faculty and student body consistent with its public service, educational, and professional responsibilities. The School has a special commitment to Maine's historical minori-ies--Franco-Americans and Native Americans.

The Muskie School offers master's degrees in public policy and management (with joint degrees with the School of Law), health policy and management, and community planning and development. These programs educate students for leadership roles in govemment and the private and nonprofit sectors through interdisciplinary, problem-focused education. A combination of classroom and applied field experiences imparts a broad understanding of the challenges of democratic governance, and develops competencies in policy planning and analysis, and organizational and management skills.

## School of Law

Dean: Colleen A. Khoury<br>Professors: Cluchey, Delogu, Friedman, Gregory, Howard, Khoury, Lang, Mullane, Potter, Rieser, Rogoff, Wanderer, Ward, Wells, Zarr, Zillman; Associate Professors: Gould, Lupica, Wriggins; Professor Emeritus: Godfrey

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 programis 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 uponentry to an exacting profession.

The School averages 90-96 students per class, of whom approximately 50 percent are women; the number of students in the School is about 270, 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 17 full-ime 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 Associaion of American Law Schools.

Established at Portland in 1961, the Law School is an administrative unit of the University of Southern Maine, but has responsibilities to the statewide University system. The School is located in a building, accessible for handicapped students, that provides facilities for classroom and seminar discussion, library research, moot court participation, clinical practice, legal publications, and student activities.

## Center for Teaching

Established in 1993, the Center for Teaching provides professional development opportunities and resources for faculty who strive for teaching excellence. Center programs are developed by a director working with an advisory board and draw on the expertise of faculty at USM. In addition, the Center publishes a newsletter with ideas for enhancing teaching effectiveness.

## Office of Sponsored Programs

Pre-award Services<br>Grantsmanship Center

Post-award Services
TheOffice of Sponsored Programs (OSP) is responsible for encouraging externally funded initiatives in support of program-related activities of academic, research, and administrative units; and serves as the major resource to faculty and staff who wish to pursue such projects. The Office maintains information on and promotes an awareness of funding opportunities, assists in refining project ideas and matching them with a potential sponsor's priorities and requirements, and helps in the preparation of financial and administrative sections of grant applications.

The Office of Sponsored Programs also maintains a collection of foundation annual reports and a variety of supplementary materials useful to grantseekers. The materials consist of: Annual Register of Grant Support; Directory of Research Grants; Foundation Directory; FederalGrants and Contracts Weekly; Grant Advisor; Federal Assistance Monitor; and various federal govemment publications. OSP also maintains a subscription to an on-line search engine via the Community of Science that can be invaluable in accessing funding sources. Please call for information on using COS.

The collection is located in the Law School Building, Room 628, on the Portland campus (telephone: 780-4411, FAX: 780-4417, e-mail: lrollins@usm. maine.edu). A small satellite collection is located in Bailey Hall, Room 301 on the Gorham campus. The Gorham collection is a collaborative effort with the College of Education and Human Development under the direction of Professor Libby Cohen (telephone: 780-5044, FAX: 780-5315, e-mail: lcohen@usm.maine.edu). The hours for the Gorham collection are posted outside the door, or call for an appointment.

The OSP also provides fiscal management assistance and administrative support to principal investigators and project directors after an award is received. This includesreview and approval of all award documents, preparation and submission of financial reports, requests for reimbursement, budget revisions, amendments, etc. These post-award services are a collaborative effort on the part of the OSP staff, the investigators, and the directors. These services begin with receipt of an award and continues through the termination date, ending with a final program report prepared by the investigators or directors, and a final financial report prepared by the OSP staff.

## University of Southern Maine Alumni Association

The University of Southem Maine Alumni Association numbers more than 32,000 members representing alumni of seven predecessor institutions (Gorham Normal School, Gorham State Teachers College, Portland Junior College, Portland University, University of Maine in Portland, Gorham State College, University of Maine at Portland-Gorham) and graduates of the University of Southem Maine, including Lewiston-Aubum College. The Association is governed by a 25 -member board of directors that includes a student representative. A Student Advisory Council also provides support to the board of directors and the director of Alumni Relations regarding matters that affect future alumni.
The Alumni Association serves the alumni of the University of Southem Maine and its predecessor institutions, its current and future students, and the University community. It promotes the University's future through an admission ambassador program, chapter outreach, legislative advocacy activities, and fund raising committees, and serves in partnership as a resource for the University administration. The Alumni Association promotes increased educational aspirations within the community at large and a sense of fellowship among its members. Students are encouraged to visit thehistoric Deering farmhouse, which now serves as the Alumni House on the Portland campus and get acquainted with the people and programs of the Alumni Association before graduation.

## World Affairs Council of Maine

Program Director: Theo Dunfey; Administrative Director: Barbara Ganly

Located on the USM Portland campus, the World Affairs Council of Maine is an independent nonprofit, non-partisan organization which offers free membership to all students. The Council provides opportunities to learn about internamonal affairs from distinguished speakers and to interact with business leaders, the professional community, and others interested in what's going on in the world. Student intermships and volunteer involvement are also offered. For further information or to register for free membership, call 780-4551.

# Administration of the University of Southern Maine 

Administrative Organization as of July 1, 1998
President: Richard L. Pattenaude, 705 Law Building, Portland, tel: 780-4480
Provost and Vice President for Academic Affairs: Mark B. Lapping, 711 Law Building, Portland, tel: 780-4485
Chief Financial Officer: Samuel G. Andrews, 723 Law Building, Portland, tel: 780-4484
Vice President for Enrollment Management: Rosa S. Redonnett, 732 Law Building, Portland, tel: 780-4035
Vice President for Student Development: Judith S. Ryan, 732 Law Building, Portland, tel: 780-4035
Vice President for University Advancement: Vincent Pellegrino, 721 Law Building, Portland, tel: 780-4708
Executive Assistant to the President: Robert J. Goettel, 709 Law Building, Portland, tel: 780-4482

## Administrative Offices Serving Students

Academic Support, Division of John W. Bay, executive director
Admissions
Robert LaVerriere, director
Advising Services
Susan R. Campbell, director
Applied Science, School of
Brian C. Hodgkin, dean
ARAMARK
Brian Wiacek, director
Arts \& Sciences, College of
Stephen Worchel, dean
Athletics
Al Bean, director
Bookstores
Cynthia S. Quinn, director
Business, School of
John M. Burt, dean
Career Services and Cooperative Education
Lawrence Bliss, director
Child Care Services
Helene Gerstein-Sky, director
Continuing Education, Center for
Leigh G. Mundhenk, co-director
Susan S. Nevins, co-director
Counseling Services
Ira Hymoff, director
Education and Human Development, College of Richard E. Barnes, dean
Educational Media Services
Ronald W. Levere, director
Extended Academic Programs
Terry B. Foster, director

Facilities Management
David J. Early, director
Financial Aid, Student
Keith DuBois, director
Gorham Student Life and Resident Student Services
Joseph M. Austin, director
Graduate Studies and Research
Richard Maiman, director
International Programs, Office of
Domenica T. Cipollone, director
Law, University of Maine School of
Colleen A. Khoury, dean
Law Library, University of Maine School of Law
William W. Wells, director
Lewiston-Auburn College
Betty D. Robinson, dean
Libraries
Stephen C. Bloom, director
Multicultural Programming
Rebecca Sockbeson, director
Muskie School of Public Service
Barton Wechsler, dean
Nursing, College of
Marianne W. Rodgers, interim dean
Pluralism and Equal Opportunity
Sue Ellen Bordwell, executive director
Police Department
Lisa Beecher, chief
Portland Student Life
Helen Gorgas-Goulding, director
Registrar's Office
John F. Keysor, registrar

Student Billing
Virginia Johnson, bursar
Student Judicial Affairs
Carl N. Hill, director
Student Leadership and Involvement
Craig Hutchinson, director
Summer Session
John G. LaBrie, director

## EMERITI

Allen, Bruce A. (1970-1997) Gorham State College, B.S., 1960, M.S., 1967; Boston University, Ed.D., 1973; Associate Professor Emeritus of Mathematics Education
Armentrout, Charles E. (1960-1997) University of Maine, B.A., 1955; Wesleyan University, M.A., 1958; Columbia University, M.S., 1970; Associate Professor Emeritus of Physics
Ayers, George H. (1959-1991) University of Maine, B.A., 1951; The Ohio State University, M.A., 1959; Associate Professor Emeritus of Geosciences
Berry, Arthur O. (1955-1989) Gorham State College, B.S., 1950; Pennsylvania State University, Ed.M., 1954; University of Connecticut, Ph.D., 1967; Professor Emeritus of Industrial Education Bigelow, Gordon S. (1971-1986) Brown University, A.B., 1954; University of Maine, M.Ed., 1962; Brigham Young University, A.M., 1966, Ph.D., 1967; Dean of Educational Services Emeritus
Bowder, Jerry L. (1960-1997) University of Washington, B.A., 1952;Lewis and Clark College, M.M., 1956; Eastman School of Music, Ph.D., 1960; Professor Emeritus of Music
Callender, Willard D., Jr. (1972-1997) Bates College, B.A., 1958; University of Connecticut, M.A., 1960, Ph. D., 1967; Professor Emeritus of Adult Education
Carper, Thomas R. (1967-1997) Harvard University,A.B., 1958; New York University, M.A., 1967; Boston University, Ph.D., 1973; Professor Emeritus of English
Carter, Richard H. (1964-1994) Gorham State College, B.S., 1954; University of Maine, Ed.M., 1964; Boston University, C.A.S., 1971; Associate Professor Emeritus of Technology
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
Costello, Melissa H. (1953-1990) Gorham State College, B.S., 1952; University of Maine, Ed.M., 1957, C.A.S., 1960; Professor Emerita of Education
Costello, Richard A. (1953-1990) University of Alabama, B.S., 1952; University of Illinois, M.S., 1953; Springfield College, D.P.E., 1965; Director Emeritus of Intercollegiate Athletics
Crochet, Monique Y. (1970-1996) University of Paris, Sorbonne, Licenced’Anglais, 1959; Diplome

Telecommunications
Dennis Dunham, director
Testing and Assessment, Office of
Judith L. Johnson, director
University Extension and Public Service
William G. Mortensen, execulive director
University Health Services
Jane Coolidge Young, director
Women's Center
Andrea Thompson McCall, director
d'Études supérieures and C.A.P.E.S., 1960; Doctorat de l'Université de Paris, 1969; Professor Emerita of French
Dickey, Edna F. (1946-1973) University of New Hampshire, B.A., 1933, M.A., 1936; Associate Professor Emerita of History
Dietrich, Craig (1968-1997) University of Chicago, A.B., 1961, Ph.D., 1970; Professor Emeritus of History
Durgin, Frank A., Jr. (1964-1997) Tufts University, B.A., 1949; University of Toulouse, France, License en Droit, 1954; Docteur en Droit, 1956; Professor Emeritus of Economics
Farrar, John N. (1966-1991) University of Maine, B.A., 1951, M.Ed., 1958, C.A.S., 1962; Assistant Director of Advising and Career Services Emeritus
Faulkner,Howard M. (1970-1997) Massachusetts State College of Fitchburg, B.S., 1957; Northeastern University, M.Ed., 1960; Associate Professor Emeritus of Technology
Findlay, Robert W. (1967-1994) Boston University, B.S., 1955, M.B.A., 1964; Professor Emeritus of Accounting
Giguere, Madeleine D. (1967-1990) College of New Rochelle, B.A., 1947; Fordham University, M.A., 1950; Columbia University, M. Phil., 1973; Professor Emerita of Sociology
Godfrey, Edward S. (1962-1976; 1985-89) Harvard College, A.B., 1934; Columbia Law School, J.D., 1939; Dean and Professor of Law Emeritus
Goodwin York, Jeanette L. (1955-1981) Sargent College, B.S., 1944; Springfield College, Ed.M., 1955; Associate Professor Emerita of Physical Education and Dance
Greenwood, Helen L. (1969-1995) Northeastern University, B.S., 1958; University of New Hampshire, M.S., 1960; University of Connecticut, Ph.D., 1969; Dean and Associate Professor of Natural and Applied Sciences Emerita
Hanna, John G. (1963-1984) Trinity College, 1963; Harvard University, M.A., 1946; Boston University, Ph.D., 1958; Professor Emeritus of English
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

Hunt, H. Draper III (1965-1997) Harvard University, B.A., 1957; Columbia University, M.A., 1960, Ph.D., 1968; Professor Emeritus of History Kern, Abraham K. (1959-1977) Bowdoin College, A.B., 1936; University of Maine, M.Ed., 1956; Professor Emeritus of Biology
Kerr, Elizabeth F. (1957-1974) Marygrove College, B.S., 1939; Columbia University, A.M., 1946, Ed.D., 1956; Professor Emerita of Education
Kreisler, Joseph D. (1972-1988) Oklahoma University, B.A., 1947; Columbia University, M.A., 1949, M.S.W., 1959; Associate Professor Emeritus of Social Work
McKeil, Richard L. (1966-1995) University of Maine, B.A., 1959, M.A., 1965; Professor Emeritus of Business Administration
McMahon, Robert C. (1969-1997) Editor, Center for Business and Economic Research; University of Washington, B.A., 1959, M.A., 1964; Lehigh University, Ph.D., 1970; Associate Professor Emeritus of Economics
Miller, Robert N. (1946-1977) Colby College, A.B., 1936; Professor Emeritus of Geology

Mitchell, John (1947-1977) Fitchburg State College, B.S., 1939; University of Minnesota, M.A., 1947; Pennsylvania State University, Ed.D., 1954; Professor Emerita of Industrial Arts
Monsen, S. Henry (1969-1996)FloridaState University, B.A., 1957; University of California at Los Angeles, M.A., 1959; University of Texas, Ph.D., 1967; Professor Emeritus of Sociology
Moore, Dorothy D. (1968-1995) University of Maine, B.S., 1966, M.Ed., 1968, Ed.D., 1978; Associate Professor Emerita of Education
Neuberger, Harold T. (1957-1991) Iowa-Wesleyan College, B.S., 1952; University of New Mexico, M.S., 1953; Boston University, E.D., 1964; Professor Emerita of Science Education
Normandeau, Jeanne G. (1968-1997) Boston College, B.S., 1964, M.S., 1967; Boston University, Ed.D., 1988; Associate Professor Emerita of Nursing
Peabody, Mildred (1952-1973) Gorham State College, B.S., 1939; Boston University, Ed.M., 1952; Associate Professor Emerita of Education
Peirce, John A. (1965-1984) University of Maine, B.S., 1962; University of Virginia, M.A., 1965, Ph.D., 1971; Professor Emeritus of Political Science
Rogers, Paul C. (1965-1992) College of the Holy Cross, B.N.S., 1945; Boston University, M.A., 1948; Professor Emeritus of Mathematics
Romanyshyn, John M. (1953-1981) University of Oklahoma, B.A., 1942; University of Chicago, M.A., 1952; Professor Emeritus of Social Welfare Saldanha, Estelita L. (1966-1985) University of Lisbon, B.A., 1943; University of Nebraska, B.S., 1946, M.A., 1947; Comell University, Ph.D., 1950; Professor Emeritus of Psychology
Sawtelle, Gwen D. (1938-43;53) University of Minnesota, B.S., George Peabody College for Teachers, M.S., 1939; Associate Professor Emerita of Arts

Smith, Alan G. (1967-1992) Mount Allison University (New Brunswick), B.S., 1949; University of New Brunswick, M.S., 1951; University of Maine, Ph.D., 1966; Professor Emeritus of Chemistry
Smith, Charles F. (1969-1993) Westfield State College, B.S., 1960; University of Massachusetts, M.S., 1963, Ed.D., 1969; Associate Professor Emeritus of Educational Administration
Southworth, RobertS. (1963-1994) Boston University, B.A., 1951, Ed.M., 1958, Ed.D., 1965; Professor Emeritus of Educational Psychology
Steinman, Richard (1966-1987) University of Missouri, B.A., 1949; Columbia University, M.S., 1952; Brandeis University, Ph.D., 1968; Professor Emeritus of Social Work
Sottery, Theodore W. (1956-1988) Dartmouth, B.N.S., 1949; University of Maine, M.S., 1956, Ph.D., 1966; Professor Emeritus of Chemistry
Sullivan, James V. (1959-1991) University of Maine, B.S.Ed., 1951; University of Delaware, M.Ed., 1954; Boston University, Ed.D., 1971; Professor Emeritus of Health, PhysicalEducation and Recreation
Ventresco, Fiorello B. (1966-1997); Boston University, A.B., 1959; University of Michigan, M.A., 1961; Associate Professor Emeritus of History
Whitten, Maurice M. (1955-1983) Colby College, A.B., 1945; Columbia University, M.A., 1949; The Ohio State University, Ph.D., 1971; Professor Emeritus of Chemistry
Witherill, Robert D. (1966-1983) Colby College, A.B., 1947; University of Maine, M.A., 1953, M.Ed., 1962; Associate Professor Emeritus of Economics
Wood, EstherE. (1930-1972) Colby College, A.B., 1926; Radcliffe College, M.A., 1929; Associate Professor Emerita of Social Sciences
York, RobertM. (1962-1984) Bates College,A.B., 1937; Clark University, M.A., 1938, Ph.D., 1941; Professor Emeritus of History
Young, Anne P. (1965-1984) Boston University, B.S., 1943, M.A., 1944; University of Chicago, Ph.D., 1951; Professor Emerita of History

## FACULTY \& STAFF

Abrams, Richard H. (1979) Associate Professor of English; McGill University, B.A., 1964; University of Pennsylvania, M.A., 1965; University of New York, Ph.D., 1968
Agan, R. David (1996) Director, Upward Bound Program; Dartmouth College, B.A., 1969; Reed College, M.A.T., 1971; St. Louis University, B.S.N., 1975; University of Southem Maine, M.S.N., 1986 Agger, Marc (1992) Health Care Manager and Research Analyst, Muskie School; Clark University, B.A., 1987; Boston University, M.P.H., 1990 Aicher, Peter J. (1993) Associate Professor of Classics; Colgate University, A.B., 1977; University of North Carolina, M.A., 1981, Ph.D., 1986
Aiello, Frederic (1983) Associate Professor of Business Administraion, Northeastem University, B.S., B.A., 1971, M.B.A., 1974

Albee, Parker B., Jr. (1966) Professor of History; Darmouth College, A.B., 1961; Duke University, M.A., 1964, Ph.D., 1968

Aldrich Tina (1994) Coordinator, Portland Student Recreation; Keene State College, B.S., 1991
Allen, Gregg N. (1998) Purchasing and Accounts Payable Manager, Business Services; University of Maine, B.S., 1986, M.Ed., 1997
Allen, Peter S. (1983) Fitness Manager, Lifeline; Springfield College, B.S., 1982
Altman, William (1995) Director, MaineAHCPR, Muskie School; Cornell University, B.A., 1977; Yale University, M.P.H., 1984
Amoroso, Henry C. (1982) Associate Professor of Education; St. Michael's College, B.A., 1966; Goucher College, M.Ed., 1966; University of Wisconsin, Ph.D., 1978
Anderson, Andrew L. (1975) Associate Professor of Technology; University of Wisconsin at Platteville, B.S., 1973, M.S., 1975; IowaState University, Ph.D., 1983
Anderson, Douglas K. (1994) Assistant Professor of Sociology; Brigham Young University, B.S., 1987; University of Wisconsin-Madison, M.S., 1989, Ph.D., 1994
Andrews, Bruce H. (1974) Professor of Business Administration and Co-Director/Senior Research Associate, Center for Business and Economic Research, School of Business; University of Connecticut, B.A., 1967; Polytechnic University, M.S., 1969, Ph.D., 1980
Andrews, Jane F. (1989) Director of Student Affairs and Administration, College of Education and Human Development; University of Hawaii, B.A., 1970; Framingham State College, M.Ed., 1971
Andrews, Samuel G. (1966) Chief Financial Officer; Associate Professor of Business Administration; Babson College, B.S., 1964; University of Maine, M.S., 1966
Anspach, Donald F. (1970) Associate Professor of Sociology; Franklin and MarshallCollege, A.B., 1964; Western Reserve University, M.A., 1966; Case Western Reserve University, Ph.D., 1970
Artz, Nancy (1989) Associate Professor of Business Administration; The Pennsylvania State University, B.S., 1979; Northwestern University, M.M., 1982, Ph.D., 1989
Ashley, Kathleen M. (1978) Professor of English; Duke University, B.A., 1969, M.A., 1970, Ph.D., 1973
Atkinson, Robert (1987) Associate Professor of Education/Human Resource Development; Long Island University, B.A., 1967; SUNY, Cooperstown, M.A., 1969; University of New Hampshire, M.A., 1981; University of Pennsylvania, Ph.D., 1985
Austin, Joseph M. (1981) Director of Gorham Student Life and Resident Student Services; University of Maine, B.A., 1976, M.Ed., 1981
Austin, Nancy (1987) Assistant Professor of Education; State University of New York at Buffalo, B.S., 1968; Columbia University, M.A., 1974, Ed.D., 1984

Austin, Nancy L. (1986) Associate Director, Telecommunications; University of Maine, B.S., 1977
Bampton, Matthew (1992) Associate Professor of Geography; Portsmouth Polytechnic, England, B.A., 1984; Clark University, M.A., 1990, Ph.D., 1991
Banach, Gloria (1997) Adoptive and Foster Parent Trainer II, Muskie School; University of Rhode Island, B.A., 1968
Bannon, Sharon L. (1987) Coordinator of Student Affairs andAcademic Counselor, School of Business; Bethany College, B.A., 1979; University of Southern Maine, M.S., 1996
Barber-Thibeault, Linda (1989) Head Teacher, Child Care Services; Université Laval, Canada, B.A., 1980

Barbour, David N. (1998) Acting Associate Director, Facilities Management; University of Maine, B.S., 1968; University of Southern Maine, M.B.A., 1979
Barnes, Amy (1995) Managing Editor/Web Coordinator, Publications and Marketing, University Advancement; Michigan State University, B.A., 1988 Barnes, Richard E. (1989) Dean of the College of Education and Human Development and Associate Professor of Educational Administration; Carleton College, B.A., 1964; Harvard University, M.A.T., 1969, Ed.D., 1979

Baron, Catherine A. (1976) Administrative Director, Muskie School; University of Southern Maine, A.S., 1989

Barrett, Lisabeth W. (1992) Coordinator of Photography and Design, Publications \& Marketing, Portland School of Art, B.F.A., 1988
Barringer, Richard E. (1988) Professor of Public Policy and Management; Harvard University, A.B., 1959; University of Massachusetts, M.A., 1963; Massachusetts Institute of Technology, Ph.D., 1968 Bartley, Dolores L. (1994) Child Welfare Training Specialist; University of Maine, B.A., 1984
Bay, John W. (1965) Executive Director, Division of Academic Support, and Associate Professor of Economics; Saint Ambrose University, B.A., 1961; Boston College, M.A., 1964, Ph.D., 1966
Bayley-Smith, Beverly J. (1981) Administrative Manager, Marine Law Institute, School of Law; Plus Gray School of Business, A.B., 1971
Bazinet, Gregory P. (1979) Director of Educational Staff Development and Services, Applied Science External Programs; University of Southern Maine, B.S., 1977, M.S., 1981

Bean, Albert (1983)Director of Athletics; University of Southern Maine, B.S. 1977, M.S.Ed., 1992
Beaney, Jeffrey A. (1997) Ice Arena Manager and Men's Hockey Coach; New England College, B.A., 1982
Beard, Patricia L. (1991) Research Associate IV; Wesleyan University, B.A., 1982; Boston University, M.S.W., 1985
Beaudry, Jeffrey (1995) Assistant Professor of Education; University of Washington, B.A., 1973; University of Illinois at the Medical Center, M.H.P.E., 1981; University of Illinois at Chicago Ph.D., 1987

Beecher, Lisa M. (1998) Chief, USM Police Department; Southern Maine Technical College, A.A.S., 1975; University of Southern Maine, B.A., 1980
Beetel, Victoria (1997) Adoptive and Foster Parent Trainer II, Muskie School; Bucks County Community College, A.A., 1975; Lock Haven State Teachers College, B.S., 1977
Behling, Jonathan P. (1997) Assistant Professor of Natural and Applied Science; University of Wis-consin-River Falls, B.S., 1978; University of Ne-braska-Lincoln, M.S., 1980; University of Wiscon-sin-Madison, Ph.D., 1987
Beirne, Piers (1982) Professor of Criminology and Legal Studies; Essex University (England), B.A., 1971; Durham University (England), Ph.D., 1975 Belsan, Teresa (1990) Admissions/Academic Counselor, College of Education and Human Development; University of Massachusetts at Amherst, B.A., 1985; University of Southern Maine, M.S., 1997
Benedict, Dianne (1984) Associate Professor of English; Goddard College, B.A., 1976, M.F.A., 1979
Benson, Mary Ann (1982) Assistant Director of Career Services; SUNY at Cortland, B.A., 1973; SUNY at Plattsburgh, M.S., 1976
Bernacchio, Charles P. (1985) Research Associate I, Muskie School;Boston University, B.S., 1971; Boston College, M.Ed., 1980
Bernard, Anne (1978) Research Publications Manager, Muskie School, University of SouthernMaine, B.F.A., 1989

Bernotavicz, Freda (1985) Director, Institute of Public Sector Innovation, Muskie School and AdjunctAssociate Professor of Public Policy and Management; Notingham University (England), B.A., 1963; Syracuse University, M.S., 1966
Berry, Debora (1987) Financial Assistant, Muskie
School; Hesston College A.B.A., 1979
Berry, Marthina (1981) Assistant Executive Director, Financial Resources; University of Southern Maine, A.S., 1997
Bertini, Kristine A. (1995) Coordinator, Center for Employee Assistance and Development, Human Resources; Worcester State College, B.S., 1977; University of California, M.S., 1983; Antioch University, Ph.D., 1995
Bertram, Benjamin (1997) Assistant Professor of English; University of California-Santa Cruz, B.A., 1989, M.A., 1994; University of Califomia-San Diego, Ph.D., 1997
Bibber, Joyce K. (1967) Professor of History; Westbrook Junior College, A.A., 1956; Barnard College, B.A., 1958; Stanford University, M.A., 1962, Ph.D., 1969
Bierce, Jr., Bruce E. (1987) Computer Programmer /Analyst, Student Information Research Services; University of Maine at Augusta, A.A., 1983; University of Maine, B.A., 1987, M.B.A., 1992
Billings, David (1992), Manager, Bookstore, Lewiston-Auburn College; University of Maine, B.A., 1977

Bird, Donna Clarice (1993) Research Associate II, Muskie School and Adjunct Instructor of Sociology; Brown University, A.B., 1972; Union College, M.S., 1977; Goddard College, M.A., 1985; University of Connecticut, M.A., 1991
Bishop, M. Denise (1995) Instructor of School Psychology; Acadia University, B.A., 1985; Boston College, M.A., 1988; University of Southern Maine, M.S., 1993
Bishop, Pamela (1994) Admissions Counselor; University of Southern Maine, B.A., 1994
Bjelic, Dusan (1990) Associate Professor of Criminology; University of Belgrade, B.A., 1976, M.A., 1981; Boston University, Ph.D., 1989
Black Hamlin, Roxie (1997) Director of Occupaional Therapy Program and Associate Professor; Boston University, B.S., 1968; University of Southem Maine, M.S., 1989
Blanchard, Dale (1995) Project Manager, Software Evaluation Center, College of Education and Human Development; University of Maine at Farmington, B.S., 1974; University of Southern Maine, M.S., 1989
Blazek, Jerry (1986) Director of Labor Relations and Human Resource Information Systems; Ohio University, B.A. 1972, M.A., 1977
Blinick, Kathie L. (1980) Director, Office for Prior Learning Assessment; University of Mississippi, B.A., 1969; University of New Hampshire, M.A., 1986; Memphis State University, M.Ed., 1975, Ed.D., 1980
Bliss, Lawrence (1989) Director of Career Services and Cooperative Education; University of California, B.A., 1968, M.Admin., 1970
Bloom, Stephen C. (1997) Director of the University of Southern Maine Library; University of Vermont, B.S., 1964, M.A., 1975; Columbia University, M.S.L.S., 1980
Boden, John C. (1981) Associate Professor of Music; Northwestern University, B.M., 1974; University of Missouri at Kansas City Conservatory, M.M., 1981

Bolda, Elise (1996) Assistant Research Professor and Research Associate II, Muskie School; University of Vermont, B.A. 1974; University of North Carolina, M.S.P.H., 1986, Ph.D. 1995
Bonner, Robert (1997) Assistant Professor of History; Princeton University, A.B. 1989; Yale University, M.A., 1994, Ph.D., 1997
Booth, Maureen (1988) Director, Managed Care Initiatives, Muskie School; St. Peter's College, B.S., 1971; Comell University, M.A., 1974
Boothe, Bob (1993) Assistant Professor of Computer Science; University of Califomia San Diego, B.S., 1985; University of Califomia Berkeley, M.S., 1989, Ph.D., 1993
Bordwell, Sue Ellen (1988) Executive Director of Campus Pluralism and Equal Opportunity; Keuka College, B.A., 1967; Wayne State University, M.S.W., 1971

Bouchard, Kathleen H. (1969) Director of Human Resources Services; Western Michigan University, B.A., 1966; Indiana University, M.S., 1969

Boucher,Linda (1996) Financial Assistant, Muskie School
Bouzrara, Nancy E. (1996) Assistant Professor of French; Moorhead State University, B.S., 1979; University of Minnesota, M.S., 1983; University of Michigan, Ph.D., 1992
Brady, E. Michael (1984) Professor, Department of Human Resource Development, College of Education and Human Development and Senior ResearchAssociate, MuskieInstitute; St. Mary's Seminary \& University, A.B., 1971; The University of Connecticut, M.S.W., 1977; St. Mary's Seminary \& University, M. Div., 1980; The University of Connecticut, Ph.D., 1982
Branaman, Joyce E. (1991) Coordinator for Academic Support Services for Students with Disabiliies; Anderson University, B.A., 1966; Ball State University, M.A., 1972
Bratesman, Stuart (1998) Policy Analyst, Muskie School; Dartmouth College, B.A., 1997; Duke University, M.A., 1995
Braziel, Lawrence (1977) Director of Management Information Services; Southwest Missouri State University, B.S., 1966; Florida State University, M.A., 1974

Briggs, David A. (1984) Associate Professor of Computer Science; Swarthmore College, B.A., 1975; University of Massachusetts at Amherst, M.S., 1984, Ph.D., 1988

Brocker, Carol (1997) Adoptive and Foster Family Training Coordinator, Muskie School; Nassau Community College, A.A.S., 1972; Long Island University, B.S., 1975; New York University, M.A., 1982
Brod, Harry (1994)Assistant Professor of Philosophy; New York University, B.A., 1972; University of Califomia, San Diego, M.A., 1975, Ph.D., 1981 Broida, John P. (1985) Associate Professor of Psychology; University of Colorado at Boulder, B.S., 1973; Western Ilinois at Macomb, M.S., 1976; State University of New York at Albany, Ph.D., 1984
Brooke, William (1997) Systems Administrator, Muskie School; Wentworth Institute, A.S., 1973; Lowell Technological Institute, B.S., 1979; Thomas College, M.B.A., 1985
Brooks, Edward (1996) Telecommunications System Technical Specialist II, Telecommunications
Brooks, Franklin L., Jr. (1993) Child Welfare Training Specialist, Muskie Institute of Public Affairs, University of Southem Maine, B.A., 1985; Rhode Island College, M.S.W., 1988
Brown, Alan (1983) Assistant Director, Gorham Bookstore
Brown, Margaret (1988) Executive Director of Major Gifts, University Advancement; Kalamazoo College, B.A., 1968
Brown, Scott W. (1987) Professor of Psychology; Goddard College, B.A., 1974; University of Maine, Ph.D., 1984
Brown-Denico, Bonny (1998) Lecturer in Physical Education, Head Softball and Field Hockey Coach; University of Southern Maine, B.S., 1991, M.Ed., 1998

Broyles, India L. (1986) Associate Professor of Education; Georgia College, B.S., 1968, M.Ed., 1975; University of Georgia, Ed.D., 1983
Brubaker, Melinda (1997) Coordinator of Training Projects, Muskie School; Califomia State University, B.S., 1972
Buch, Camille (1983) Assistant Director of Publications and Marketing; Central Washington University, B.A., 1977, M.A., 1982
Burbank, James A. II (1997) Senior Business Counselor/Assistant to the State Director, Maine Small Business Development Centers, School of Business; Williams College, B.A., 1950
Burdin, Johannah E. (1996) Assistant Director/ Counselor, Upward Bound Program; Bowdoin College, A.B., 1992
Burk, George (1985) Associate Professor of Art; Indiana University, B.A., 1961, M.F.A., 1963
Bursey, Tricia (1998) Computer Trainer II, Muskie School; University of Maine, B.S., 1994; New Hampshire College, M.S., 1998
Burson, Janet Z. (1978) Associate Dean and Associate Professor, College of Nursing; Syracuse University, B.S., 1964; Oregon State University, M.S., 1975; Vanderbilt University, Ed.D., 1990

Burt, John M. (1995) Dean of the School of Business and Professor of Business Administration; Wesleyan University, B.A., 1965; Camegie Institute of Technology, M.S., 1967; Carnegie-Mellon University, Ph.D., 1969
Burtchell, Veda (1972) Coordinator of Space and Scheduling
Burtt, David R., Jr. (1995) Training Specialist, Muskie School; University of Southern Maine, B.A., 1986; FranklinPierce Law Center, J.D., 1989 Burwell, Brian R. (1989) Business Counselor, Maine Small Business Development Centers, School of Business; Amherst College, B.A., 1966; University of Chicago, M.B.A., 1968
Cabelka, Todd M. (1995) Assistant to the Provost; University of Wisconsin at Madison, B.A., 1984; Marquette University Law School, J.D., 1988
Caffentzis, Constantine G. (1987) Associate Professor of Philosophy and Honors Program; City College of the University of New York, B.A., 1966; Princeton University, Ph.D., 1978
Caggiula, Paula M. (1995) Computer Operations Coordinator, Lewiston-Auburn College; University of Maine at Augusta, A.S., 1993, A.S., 1994, B.S., 1997
Callan, Kate (1992) Assistant Director of Admissions; University of Southern Maine, B.A., 1989
Cameron, Ardis (1988) Director and Associate Professor of American and New England Studies; Westem College for Women, Miami University, B.A., 1970; Stetson University, M.A., 1973; Boston College, Ph.D., 1986
Cameron, Julia M. (1983) Senior Executive Director of Publications and Marketing, University Advancement; Bates College, B.A., 1972
Campbell, Polly (1995) Coordinator, Cross-Disciplinary Training Project, Muskie School; State University of New York, Upstate Medical Center,
A.D., 1969; St. Joseph's College, B.A., 1976; University of Southem Maine, B.S., 1979
Campbell, Richard R. (1973) Executive Director for Financial Resources; University of Southern Maine, B.S., 1974, M.B.A., 1990
Campbell, Susan R. (1977) Director of Advising Services; Ball State University, B.S., 1975; University of Southem Maine, M.S., 1980; University of Massachusetts at Amherst, Ed.D., 1994
Capelluti, Joseph (1988) Professor of Education; University of Maine, B.S., 1970; University of Southem Maine, M.S., 1972; Virginia Polytechnic Institute, Ed.D., 1975
Card, Richard H. (1994) Associate Professor of Education; Bowdoin College, B.A., 1970; University of Maine, M.S.Ed., 1975; George Peabody College of Vanderbilt University, Ed.D., 1985
Carner, Frank K. (1970) Associate Professor of English and Coordinator, The Learning Center; Temple University, B.S., 1964, M.A., 1967; University of Toronto, Ph.D., 1976
Carroll, Lorrayne A. (1998) Assistant Professor of English; University of Southern Maine, A.B., 1986; Johns Hoplins University, M.A., 1989, Ph.D., 1996
Casey, Karen (1987) Assistant to the President
Cash, Alice B. (1988) Program Operations Manager, School of Business; University of Southern Maine, B.S., 1997
Cassidy, Donna M. (1987) Associate Professor of Art and American and New England Studies; University of Lowell, B.A., 1979; Boston University, M.A., 1982, Ph.D., 1988

Caswell, Robert S. (1980) Executive Director of Media, Community, and Legislative Relations; University of Southern Maine, B.A.,1974
Catalano, Norma (1994) Assistant Director of FinancialAid; University of Massachusetts at Lowell, B.A., 1977; University of Maryland at College Park, M.Ed., 1989

Caton-Lemos, Laurie (1998) Instructor in Nursing, College of Nursing; University of Southem Maine, B.S., 1979, M.S., 1988
Cerjan, Martin (1994) Deputy Law Librarian; University of Michigan, B.A., 1975; University of NorthCarolina, J.D., 1988, M.S.L.S., 1990
Chabot, Maurice J. (1965) Associate Professor of Mathematics; University of Maine, B.A., 1961; Bowdoin College, M.A., 1965
Chapkis, Wendy L. (1996) Assistant Professor of Sociology and Women's Studies; University of California at Santa Cruz, B.A., 1977, M.A., 1989; University of California, Ph.D., 1995
Childs, Janis C. (1994) Assistant Professor of Nursing and Director of Leaming Resources, College of Nursing; University of Delaware, B.S.N., 1971, M.S.N., 1980; George Mason University, Ph.D., 1993
Chipman, Carol K. (1980) Cooperative Education Counselor/Job Developer; University of Southem Maine, B.A., 1976, M.S., 1989
Chorzepa, Janina (1998) Policy Analyst, Muskie School; Central Connecticut State University, B.A.,

1991; University of Southem Maine, M.S., 1998
Cipollone, Domenica T. (1977) Director of International Programs; University of Cincinnati, B.A., 1969; University of the Americas (Mexico), M.A., 1974
Claggett, E. Taylor, Jr. (1998) Associate Professor of Finance; University of Southwestem Louisiana, B.S., 1969; University of West Florida, M.B.A., 1972; University of Houston, Ph.D., 1979 Clarey, Ann E. (1985) Coordinator of Educational Technologies and Off-Campus Programs, Center for Extended Academic Programs; University of Southem Maine, B.A., 1985, M.S., 1996
Clarey, Richard J. (1979) Associate Professor of Management; Bowdoin College, B.A., 1961; Dartmouth College, M.B.A., 1963; Comell University, Ph.D., 1968
Clark, Lisa L. (1996) Instructor: University of New Hampshire, B.S., 1980
Clary, Bruce B. (1987) Professor of Public Policy and Management; University of California at Santa Barbara, B.A., 1968; University of Southern California, M.A., 1970, Ph.D., 1974
Cleary, Rosemary J. (1998) Assistant Professor of Social and Behavioral Sciences; Loyal University, B.A., 1975, M.A., 1978; University of Dallas, Ph.D., 1990
Cluchey, David P. (1979) Professor of Law; Yale University, B.A., 1968; State University of New York, M.A., 1970; HarvardLaw School, J.D., 1973 Coakley, Robert W. (1984) Associate Professor of Physics; The Ohio State University, B.S., 1965; Dartmouth College,M.A., 1968; University of Vermont, Ph.D., 1974
Coburn, Andrew F. (1981) Associate Dean, Muskie School, Director, Institute for Health Policy, and Associate Research Professor of Health Policy and Management; Brown University, A.B., 1972; Harvard Graduate School of Education, Ed.M., 1975; Brandeis University, Ph.D., 1981
Cohen, Libby G. (1980) Professor of Special Education; University of Connecticut, B.A., 1967; Russell Sage College, M.S., 1971; Boston University, Ed.D., 1977
Cole, Glen (1997) Coordinator of MACWIS Information Support Specialists, Muskie School
Cole, Lucinda (1989) Associate Professor of English; Auburn University, B.A., 1980; Louisiana State University, M.A., 1987, Ph.D., 1990
Cole, Phillip A. (1957) Professor of History; Boston University, B.S., 1954, M.A., 1955, Ph.D., 1963 Cole, Ronald F. (1963) Professor of Music; Bowdoin College, B.A., 1961; Easman School of Music, M.A., 1963; Indiana University,Ph.D.,1975 Colgan, Charles S. (1989) Professor of Public Policy and Management; Colby College, B.A., 1971; University of Maine, Ph.D., 1992
Colgan, Sharon (1998) Administrative Manager, Health Policy Institute, Muskie School; Colby College, B.A., 1972; University of South Carolina, M.L.I.S., 1997

Collins, Mary I. (1976) Human Resource Development Consultant/Instructor, College of Educa-
tion and Human Development; Boston University, B.A., 1963; University of Colorado, M.S., 1968 Colombo, Mary (1988) Research Assistant II, Muskie School; Connecticut College, B.A., 1959 Colucci, Nicholas D., Jr. (1969) Associate Professor of Education; Gorham State College, B.S., 1963; University of Connecticut, M.A., 1964, Ph.D., 1969 Como-Kepler, Deborah (1997) Staff Psychologist, Counseling Center; New York University, B.S., 1979, M.A., 1989; Antioch New England Graduate School, Psy.D., 1997
Conforti, Joseph A. (1987) Professor of American and New England Studies; Springfield College, B.S., 1967; Brown University, A.M., 1972, Ph.D., 1975
Conrad, David (1997) MACWIS Computer Trainer II, Muskie School; North Park College, B.A., 1988; Depaul University, M.A., 1992

Conway, Jeremiah P. (1978) Associate Professor of Philosophy; Fordham University, B.A., 1970; Yale University, M.Phil., 1974, Ph.D., 1978
Coogan, William H., III (1972) Associate Professor of Political Science; Boston College, B.A., 1963; Rutgers University, M.A., 1964; University of North Carolina, Ph.D., 1971; University of Maine School of Law, J.D., 1988
Cooper, Janice (1997) MACWIS Project Manager, Muskie School; Brown University, B.A., 1967; American University, M.A., 1970; Catholic University, M.S.W., 1992
Corkery, Ellen M. (1966) Assistant to the Executive Director of University Extension and Public Service; Husson College, A.B.A., 1966; University of Southern Maine, B.A., 1983, M.S., 1987
Corson, Doane B. (1966) Assistant Director, Facilities Management; Southern Maine Vocational Technical Institute, 1958
Coste, Tara Grey (1997) Assistant Professor of Leadership and Organizational Studies; Michigan Technological University, B.S., 1988, M.S., 1993, Ph.D., 1996
Costigan, Daniel (1996)Lecturer and Men's Basketball Coach; University of Maine, B.S., 1985; University of New England, M.S., 1997
Cousins, Alice (1985) Head Teacher, Child Care Services; University of Southern Maine, B.S., 1971
Cowart, Wayne (1989) Professor of Linguistics; Florida State University, B.A., 1967; Queens College, City University of New York, M.A., 1975; Graduate School, City University of New York, Ph.D.,1983
Crader, Diana C. (1987) Associate Professor of Anthropology; University of Califomia, Berkeley, B.A., 1971, M.A., 1974, Ph.D., 1981

Crichton, Jennifer E. (1994) Business Manager, Resident Student Services; University of Southern Maine, A.B., 1979, B.S., 1981, M.S., 1995
Crooker, Leland E. (1992) Engineering Manager, Facilities Management; University of Maine, B.S., 1962
Crosby, Marilyn C. (1970) Associate Director of Clinical Services (Gorham) andLab Director, Student Health Services; Clara Mass Hospital, R.N.,

1960; University of Southern Maine, B.S.N., 1978 Croteau, Karen A. (1998) Assistant Professor of Sports Medicine, College of Nursing; Bridgewater State College, B.S., 1983; McNeese State University, M.Ed., 1989; Boston University, Ed.D., 1998 Curry, James A. (1985) Associate Professor of Education; Whitworth College, B.A., 1969; University of Georgia, M.Ed., 1973, Ed.D., 1985
Curtis, Bernadette (1969) Training/Development Program Specialist, Division of Human Resources; University of Southern Maine, A.A., 1987, B.S., 1988
Curtis, Laurie (1997) Financial Aid Counselor, Office of Student Financial Aid; University of Southern Maine, A.A., 1997
Cyr, James L. (1987) Network Technical Manager, University Computing Technologies; University of Maine, B.A., 1983
Dabbous, Omar (1998) Research Programmer, Muskie School; Monastir Medical School, M.D., 1988; Tours Medical School, U.D., 1993; University of Massachusetts, M.P.H., 1996
Daeris, Deborah L. (1987) Associate Director, Admissions; University of New Hampshire, B.A., 1972; Springfield College, M.Ed., 1975
Davis, Carol Lynn (1982) Associate Professor of Education; University of Maine, B.A., 1968, M.S., 1977, Ph.D., 1983
Davis, Charles F. (1992) State Director, Maine Small Business Development Centers and Co-Director, Center for Business and Economic Research, School of Business; Bowdoin College, A.B., 1953; Harvard University, M.B.A., 1957
Davis, Dave D. (1988) Professor of Anthropology; University of New Orleans, B.A., 1972; Yale University, M.Phil., 1974, Ph.D., 1975
Davis, Richard (1996) Microcomputer Specialist, University Computing Technologies
Dean, Allyson (1990) Program and Financial Manager, Child Care Services; University of New Hampshire, B.S., 1990
Dean, Kevin J. (1991) Coordinator and Manager, Gorham Child Care Services; University of New Hampshire, B.S., 1990
Deatrick, Deborah A. (1988) Research Associate II, Muskie School; University of Michigan, B.S., 1971, M.S.P.H., 1977
Delogu, Orlando E. (1966) Professor of Law; University of Utah, B.S., 1960; University of Wisconsin, M.S., 1963, J.D.,1966
Deprez, Luisa S. (1976) Associate Professor of Social Welfare; Keuka College, B.A., 1970; Rutgers University, M.S.W., 1971; Brandeis University, Ph.D., 1995
Deraspe, Jennifer (1989) Athletics Trainer/Assistant Equipment Manager; Plymouth State College, B.S., 1987; Indiana State University, M.S., 1989
diBenedetto, Lucia A. (1970) Associate Professor of French; Emmanuel College, B.A., 1963; Middlebury College, M.A., 1965; New York University, Ph.D., 1975
Diebold, Dorriane (1997)Human Resource Management Specialist, Muskie School; University of

Maine, B.A., 1987, University of Southern Maine, M.A., 1996

Dionne-Richards, Cathy (1988) Assistant Director of Post-Award Services, Office of Sponsored Programs; University of Maine at PresqueIsle, B.S., 1989; University of Maine, M.B.A., 1996
DiPaolo, Dianna (1985) LAN Manager; Andover College, A.A.S., 1975; Westbrook College, A.A., 1980
Dipietrantonio, Julie (1989) Program Manager, Child Care Services; University of Southem Maine, B.S., 1979

Doane, Carol (1998) Instructor in Nursing, College of Nursing; University of Maine, B.S., 1966; University of Southern Maine, M.S., 1992
Donahue, Michael (1997) Director of External Linkages and Parmerships, School of Business; University of Miami, B.A., 1965; Vermont College of Norwich University, M.A., 1991
Dorsey, Carmen (1995) BFI Training Specialist, Muskie School; Wellesley College, B.A., 1968; University of Maine School of Law, J.D., 1989
Dostie, Elizabeth M. (1987) Associate Director of Advising Services and Coordinator of New Student Programs; University of Southern Maine, B.S., 1987, M.S., 1993
Downing, Thomas J. (1978) Director, Lifeline Center for Fitness, Recreation and Rehabilitation; University of New Hampshire, B.S., 1973; Husson College, M.S., 1989
Drew, David (1972) Instructor in Physical Education; Springfield College, B.S., 1967, M.Ed., 1971 Druker, Marvin J. (1987) Associate Professor and Associate Dean of Public Affairs; University of Michigan, B.A., 1966; University of Wisconsin, M.A., 1968, Ph.D., 1974

DuBois, Keith P. (1994) Director of Financial Aid; University of Maine at Fort Kent, B.A., 1982; University of Maine, M.P.A., 1990
Duboise, S. Monroe (1997) Assistant Professor of Applied Immunology, University of Texas-Austin, B.A., 1973, M.A., 1977; Yale University, Ph.D., 1994
Dugal, Bert (1997) MACWIS Computer Trainer II, Muskie School; New Hampshire College, B.S., 1989, M.B.A., 1993
Dunham, Dennis (1987) Director, Telecommunications; University of Southern Maine, B.S., 1994 Dustin, Jon(1995) Network Specialist, University Computing Technologies; University of Maine, B.A., 1992

Dutram, Kay (1997) Coordinator, Nutrition Education Project, Muskie School
Eagan, Eileen M. (1987) Associate Professor of History; D'Youville College, B.A., 1968; University of Wisconsin, M.A., 1970; Temple University, Ph.D., 1979
Earle, Kathleen A. (1996) Assistant Professor of Social Work; State University of New York (Albany), B.A., M.S.W., 1976; Rockefeller College of the State University of New York, Ph.D., 1996
Early, David J. (1989) Director, Facilities Management and Adjunct Assistant Professor of Tech-
nology; Northeastern University, B.S., 1973; Rensselaer Polytechnic Institute, M.S., 1976
Eastman, Joel W. (1970) Professor of History; University of Maine, B.A., 1962, M.A., 1965; University of Florida, Ph.D., 1973
Ebersten, Susan (1991) Director, Maine DHSTI, Muskie School; University of Maine, B.A., 1974 Edgecomb, Karen (1996) MACWIS Liaison, Muskie School; University of Maine, B.A., 1974
Edney, Matthew H. (1995) Associate Professor of Cartography and Geography; University College London, B.S., 1983; University of Wisconsin at Madison, M.S., 1985, Ph.D., 1990
Edwards, Pamela (1987) Academic Counselor/ Manager, CAS Advising; University of Southern Maine, B.S., 1993
Elgersman, Maureen G. (1997) Assistant Professor of History and Faculty Scholar for USM Afri-can-American Archives; Redeemer College, Ontario, B.C.S., 1991; Clark University, M.A., 1993, Ph.D., 1997
Elliott, Elizabeth K. (1995) Coordinator of Admissions and Assistant Professor, College of Nursing; Barnard College, A.B., 1973; Columbia University School of Nursing, B.S., 1976; Simmons College, M.S., 1981
Ellis, Julie R. (1991) Associate Professor of Electrical Engineering; Georgia Ins itute of Technology, B.S.E.E., 1980, M.S.E., 1982; Duke University, Ph.D., 1993
Elzenga, M. Eve (1994) Director of Corporate and Foundation Relations, University Advancement; Fashion Institute of Technology, A.A.S., 1973; SUNY Geneseo, B.A., 1976, M.L.S., 1979
El-Taha, Muhammad A. (1987) Professor of Mathematics; Haigazian College, (Lebanon), B.S., 1978; American University of Beirut, M.S., 1980; North Carolina State University, Ph.D., 1986
Entwistle, John A. (1989) Center Director-Counselor and Assistant to the State Director, Maine Small Business Development Centers, School of Business; University of Maine, B.A., 1979; University of Southem Maine, M.B.A., 1989
Estes, Robert A., Sr. (1966) Professor of Mathematics; Bowdoin College, A.B., 1958; University of Kansas, M.A., 1961; University of Michigan, Ph.D., 1970
Evans, Linda J. (1993) Assistant Project Coordinator, Workplace Literacy Project; Vanier College, B.S., 1979; McGill University, M.S., 1985; University of Southern Maine, M.S., 1993
Eyler, Carolyn (1997) Director of Exhibitions and Programs, Art Gallery; Virginia Commonwealth University, B.F.A.,1986; Bard College, M.A., 1997 Faherty, Vincent E. (1988) Professor of Social Work; St. Joseph's College and Seminary, B.A., 1960; Fordham University, M.S.W., 1970; University of Utah, D.S.W., 1976; University of Geneva, M.B.A., 1984

Fahey, Margaret A. (1983) Director of Student Academic Affairs and Administration, College of Arts and Sciences; Boston College, A.B., 1975; Tufts University, M.Ed., 1981

Fall, Marijane E. (1995) Associate Professor of Human Resource Development; Nasson College, B.S., 1963; University of Southern Maine, M.Ed., 1986; University of Maine, Ed.D., 1991
Faksh, Mahmud A. (1987) Professor of Political Science; American University of Beirut, B.A., 1965; Oklahoma State University, M.A., 1967; University of Connecticut, Ph.D., 1973
Farwell, Christopher P. (1994) Coordinator of Student Activities and Anderson Community Living Program, Resident Student Services; University of Maine at Farnington, B.S., 1994
Feiner, Susan F. (1995) Associate Professor of Economics and Women's Studies; Evergreen State College, B.A., 1975; University of Massachusetts, Ph.D., 1981
Fenner, Stephen A. (1991) Associate Professor of Computer Science; Harvard University, B.A., 1983; University of Chicago, M.S., 1988, Ph.D., 1991
Fifield, Gary B. (1987) Assistant Athletic Director, Lecturer in Physical Education, Women's Basketball Coach and Manager of Summer Sports Camps; University of Vermont, B.S., 1974, M.Ed., 1983
Fisher, Irving D. (1967) Professor of Political Science; University of Connecticut, B.A., 1946; Columbia University, M.A., 1953, Ph.D., 1976
Fishkind, Donniell E. (1998) Assistant Professor of Mathematics; Ner Israel Rabbinical College, B.T.L., 1989; University of Maryland, B.S., 1991, M.S., 1993; Johns Hopkins University,M.S., 1995, Ph.D., 1998
Fithian, Bruce (1984) Professor of Music; New England Conservatory, B.M., 1970; Southampton University (England), B.M., 1972; Brandeis University, M.F.A., 1975
Fitts, Charles R. (1991) Associate Professor of Geosciences; Colby College, B.A., 1976; Cornell University, M.S., 1979; University of Minnesota, M.S., 1985, Ph.D., 1990

Fitzherbert, Casandra B. (1984) Associate Head of Access Services; University of Maine at Presque Isle, B.A., 1982; University of Rhode Island, M.L.I.S., 1993

Flagg, Robert C. (1987) Associate Professor of Mathematics, University of Maine, M.A., 1979; SUNY, Buffalo, M.A., 1982, Ph.D., 1984
Flaherty, Edward J. (1985) Lecturer in Physical Education and Baseball Coach; University of Maine, B.S., 1976; University of Southern Maine, M.S., 1981

Flotten, Edward (1998) Classified and Compensation Specialist, Human Resources; University of Southern Maine, B.A., 1991; Mlinois State University, M.S., 1993
Forest, Lee (1989) Facilities Operation Manager, Custodial/Housekeeping \& Recycling Services Foster, Carolyn N. (1966) Associate Professor of Mathematics; Douglass College (Rutgers), A.B., 1958; Purdue University, M.S., 1961; Bowdoin College, A.M., 1966
Foster, Terry B. (1995) Director, Center for Extended Academic Programs; Transylvania Univer-
sity, B.A., 1963; Lexington Theological Seminary, M.Div., 1966; Indiana University, M.S., 1984; Ed.D., 1992
Fouchereaux, Jean T. (1994) Associate Professor of French; Baccalaureat La Rochelle, France, 1967; Université de Poitier, France, Licence 'es Lettres, 1970; University of Iowa, M.A., 1972, Ph.D., 1979 Fournier, Margaret A. (1976) Associate Professor, College of Nursing; Fitchburg State College, B.S.N., 1972; Boston University, M.S.N., 1976

Fralich, Julie (1981-84, 1989) Director of LongTerm Care Initiatives; Hampshire College, B.A., 1974; Boston University, M.B.A., 1978
Franklin, Patt R. (1970) Professor of Art; Pratt Institute, B.F.A., 1962; Tulane University of Louisiana, M.F.A., 1970
Freebury, Artha L. (1986) Research Assistant IV, Muskie School; Montana State University, B.S., 1970; University of Connecticut, M.S.W., 1972
Friedman, Carolyn C. (1992) Research Associate II, Muskie Institute of Public Affairs; University of New Hampshire, B.A., 1964; University of Rhode Island, M.A., 1976
Friedman, James M. (1980) Professor of Law; Brown University, A.B., 1971; University of Chicago, J.D., 1974
Fullam, David C. (1970) Associate Professor of Sociology; Colby College, B.A., 1960; University of New Hampshire, M.A., 1965, M.A., 1969
Gainey, Louis F., Jr. (1976) Professor of Biology; Florida State University, B.S., 1969, M.S., 1972, Ph.D., 1976
Gallant, Roy A. (1980) Planetarium Director; Bowdoin College, B.A., 1948; Columbia University, M.S., 1949
Galletta, Matthew (1997) MACWIS Computer Trainer II, Muskie School; University of Maine at Farmington, B.S., 1990
Gardner, Denise (1996) Assistant Director, Admissions; University of Maine, B.S., 1989
Gatchell, Judythe (1997) Nurition Network Project Specialist, Muskie School; University of Maine, B.A., 1972; University of New Hampshire, B.S., 1980; University of Maine, M.S., 1985

Gauditz, Barbara E. (1987) Assistant Dean, School of Law; Hunter College, B.A., 1972; University of Maine School of Law, J.D., 1987
Gaughan, Mariah E. (1995) Job Developer, Cooperative Education; Niagara University, B.A., 1991; State University of New York (Buffalo), M.S., 1993
Gavin, William J. (1968) Professor of Philosophy; Fordham University, B.A., 1965, M.A., 1967, Ph.D., 1970
Gayton, William F. (1974) Professor of Psychology; Springfield College, B.S., 1963; University of Maine, M.A., 1965, Ph.D., 1968
George, Samantha (1984) Coordinator, Brooks Student Center; Leicester Junior College, A.A., 1971
Gerstein-Sky, Helene (1989) Director, Child Care Services; University of Rochester, B.S., 1956; Temple University, M.Ed., 1967

Giroux, Gayle (1992) Staff Associate, Financial Aid; Northem Maine Technical College, A.S., 1979 Gish, Nancy K. (1979) Professor of English; Westem Michigan University, B.A., 1964; University of Michigan, M.A., 1965, Ph.D., 1973
Glantz, Larry L. (1986) Director, Center for Disability Policy, Muskie School; Temple University, B.A., 1974; Bryn Mawr College, M.L.S.P., 1974, M.S.W., 1974

Goettel, Robert J. (1981) Adjunct Associate Professor of Public Policy and Management; Executive Assistant to the President; State University, Fredonia, New York, B.A., 1955; Columbia University, M.A., 1963, Ed.D., 1970
Goff, Marc A. (1994) Network Specialist, University Computing Technologies
Golan, Lawrence (1990) Associate Professor of Music; Indiana University, B.M., 1988, M.M., 1989; New England Conservatory, Ph.D., 1994
Gold, JoelI. (1973) Professor of Business Administration; Pace University, B.B.A., 1968; Bernard Baruch College, M.B.A., 1972; University of Southern Maine, M.S., 1982; Florida State University, Ph.D., 1990
Goldman, Carlene (1989) Coordinator of Student Affairs, Public Policy and Management Program; University of Southern Maine, B.A., 1984, M.S., 1992
Goldsberry, Lee (1987) Associate Professor of Education; Purdue University, B.A., 1969; Governors State University, M.A., 1975; University of Illinois, Ed.D., 1980
Goldstein, Nance (1987) Associate Professor of Economics; Tufts University, B.A., 1972; University of London, M.Sc., 1979; Thames Polytechnic University, Ph.D., 1988
Goodrich, Susan N. (1994) Media Production Specialist; University of Southern Maine, B.A., 1971; Boston University, M.Ed., 1976
Gordon, Nancy R. (1989) Associate Professor of Chemistry; Mt. Holyoke College, A.B., 1968; Boston University, Ph.D., 1973
Gorgas-Goulding, Helen (1985) Director, Portland Student Life; Wilkes University, B.A., 1982; Ohio University, M.Ed., 1990
Gould, L. Scott (1998) Associate Professor of Law; Stanford University, B.A., 1966; University of Northern Colorado, M.A., 1974; University of Idaho College of Law, J.D., 1983
Grange, Joseph (1970) Professor of Philosophy; St. Joseph's College, B.A., 1961; Fordham University, M.A., 1965, Ph.D., 1970
Grant, Kim T. (1990) Assistant Professor of Art; University of Virginia, B.A., 1984; University of Essex, England, M.A. 1987; University of TexasAustin, Ph.D., 1995
Gray, Linda (1990) Family Planning Nurse Practitioner, Student Health Services; Lasell Junior College, A.A., 1971; University of Southem Maine, B.S.N., 1974

Greeulaw, Evelyn (1988) Director of Library and Media Services, Lewiston-Aubum College; University of Southern Maine, B.A., 1975; Simmons College, M.S.L.S., 1976

Gregory, David D. (1972) Professor, School of Law; Duke University, B.A., 1964; University of Maine, LL.B., 1968; Harvard University, LL.M., 1972
Gressani, Tina (1998) Computer and Database Specialist I, Muskie School; Dutchess Community College, A.S., 1984; Cornell University, B.S., 1986
Griffen, Eileen (1997) Policy Analyst II, Muskie School; Bowdoin College, A.B., 1984; Northeastem University School of Law, J.D., 1991
Grover, Richard A. (1988) Associate Professor of Business Administration; University of Connecticut, B.S., 1976; The Ohio State University, M.S., 1980, Ph.D., 1984
Groves, Katherine (1997) Director of Casco Bay Estuary Project, University of New Hampshire, B.S., 1983; Antioch College New England, M.S., 1989
Guay, Merle D. (1969) Professor of Mathematics; Tufts University, B.S., 1958; University of Maine, M.A., 1960; MichiganState University, Ph.D., 1967 Guisinger, Penny (1997) Evaluation Specialist, Muskie School; State University of New York, B.A., 1991; University of Southern Maine, M.A., 1997
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) Director, Graduate Program in Statistics, and Associate Professor of Mathematics, University of Delhi (India), B.A., 1970, M.S., 1972, Ph.D., 1977; Colorado State University, Ph.D., 1987
Gutmann, Jean E. (1977) Professor of Accounting; State University of New York at Albany, B.S., 1971; University of Maineat Orono, M.B.A., 1974 Guvench, Mustafa G. (1989) Professor of Electrical Engineering; Middle East Technical University, Ankara, Turkey, B.S.E.E., 1968, M.S.E.E., 1970; Case Western Reserve University, M.S., 1975, Ph.D., 1975
Haley, Diane (1998) Evaluation Specialist, Muskie School; University of New Hampshire, B.A., 1987; Columbia University, M.P.H., 1990
Hall, Karen (1997) Writing Laboratory Coordinator, Lewiston-Auburn College; University of New Hampshire, B.A., 1989; University of Alaska, M.F.A., 1994

Hamilton, Michael S. (1985) Associate Professor of Political Science; Colorado State University, B.A., 1974, M.A., 1977, Ph.D., 1984

Hamilton, Nathan D. (1987) Associate Professor of Archaeology; University of Southern Maine, B.A., 1977; University of Pittsburgh, Ph.D., 1985

Hansen, Sharon D. (1986) Program Coordinator, Center for Con inuing Education; University of Southern Maine, B.A., 1982
Harriman, Nancy E. (1995) Associate Professor and Director of Teacher Education; University of Maine at Farmington, B.S., 1975; University of Northem Colorado, M.A., 1980; Pennsylvania State University, Ph.D., 1986

Harris, David E. (1995) Assistant Professor of Natural and Applied Science; Salem State College, B.S., 1975; University of Vermont, Ph.D., 1990

Harris, E. Scott (1992) Associate Professor of Music; Indiana University, B.M., 1980, M.M., 1987
Hart, Karen (1971) Manager of Payroll Services Hartley, David (1994) Director of Rural Health and Assistant Research Professor of Health Policy and Management; University of Minnesota, B.S., 1972, M.H.A., 1986, Ph.D., 1993
Hartung, Catherine B. (1987) Media Production Specialist; State University of Arts and Science at Geneseo, B.A., 1980
Harvell, Johnathan E. (1997) Technology Manager, University of Maine at Farmington, B.S., 1988
Hastings-Tolsma, MarieT. (1992) Associate Professor of Nursing, College of Nursing; College of St. Teresa, B.S., 1975; Catholic University of America, M.S.N., 1977; New York University, Ph.D., 1992
Hayden, Carol (1990) Research Assistant III, Muskie School; West Virginia Wesleyan College, B.A., 1959; University of Southem Maine, M.S., 1987
Hayes, Victoria (1993) Physician, Student Health Services; The Ohio State University School of Medicine, M.D., 1990
Healy, Phyllis F. (1980) Associate Professor and Chair of Graduate Program, College of Nursing; Hunter College, B.S.N., 1971; University of California, M.S.N., 1972; University of Texas at Austin, Ph.D., 1990
Healy, Tara (1996) Assistant Professor of Social Work; Kalamazoo College, B.A., 1972; Simmons College, M.S.W., 1981, Ph.D., 1996
Hearns, Joseph F. (1970) Associate Professor of Psychology; Boston College, B.S., 1964; University of Massachusetts, M.S., 1966, Ph.D., 1967
Heasley, Joseph (1997) MACWIS Computer Trainer II, Muskie School; Case Westem Reserve University, B.A., 1974; Boston University, M.S.W., 1984
Heath, John R. (1976) Professor of Computer Science; University of Maine, B.A., 1968, M.A., 1970; University of Minnesota, M.S., 1976, Ph.D., 1982 Helms, Carl H. (1979) Director of Software; Pacific Lutheran University, B.S., 1962; Washington State University, M.A., 1964
Hendry, Caroline L. (1974) Production Coordinator, USM Television; University of Southem Maine, B.A., 1983
Hersey, Heather (1991) Academic Counselor/ Coordinator of Gorham Advising; Eastern Washington University, B.A., 1985; Springfield College, M.Ed., 1990

Hester, Barbara (1996) Director of Alumni Relations; University of Southern Maine, B.A., 1983
Hewett, Pamela (1994) Professional Nurse, Student Health Services; University of Massachusetts, B.S.N., 1990

Hewitt, Duncan A. (1976) Associate Professor of Art; Colby College, B.A., 1971; University of Pennsylvania, M.F.A., 1975

Higgins, Anita (1972) Information Systems Coordinator, Facilities Management
Higgins, George M. (1971) Executive Director of Business Services; University of Maine at Portland, B.S., 1971

Higgins, Justin (1997) Telecommunications Technical Specialist, Telecommunications
Hill, Carl N. (1987) Director, Student Judicial Affairs; University of Maine, B.S., 1966, M.Ed., 1971
Hillard, Michael (1987) Associate Professor of Economics; University of Massachusetts, B.A., 1980, Ph.D., 1988
Hinckley, Lois (1990) Associate Professor of Classics; Wellesley College, B.A., 1963; University of North Carolina-Chapel Hill, Ph.D., 1972
Hitchcock, Jan L. (1989) Associate Professor of Social and Behavioral Sciences; and Adjunct Associate Professor of Public Policy and Management; Pitzer College, B.A., 1977; Harvard University, M.A., 1982, Ph.D., 1984

Hodges, Franklin D. (1966) Associate Professor of Geography; Farmington State College, B.A., 1961; Clark University, M.A., 1966
Hodgkin, Brian C. (1976) Dean, School of Applied Science and Associate Professor of Electrical Engineering; University of Maine, B.S., 1963, B.S., 1964; Johns Hopkins University, Ph.D., 1969
Hogue, Elizabeth M. (1994) Evening Research and Instructional Services Librarian; San Jose State University, B.A., 1985, M.L.S., 1986
Holden, Christine (1984) Associate Professor of History; Swarthmore College, B.A., 1965; University of Illinois-Urbana, M.A., 1966, Ph.D., 1976
Holman, Robyn (1993) Arts Coordinator, Lewiston-Aubum College; University of Southem Maine, B.A., 1983
Hornstein, John (1990) Research Associate II, Muskie School; Colby College, B.A., 1973; Tufts University, M.Ed., 1976
Houlihan, John J. (1975) Professor of Business Law; Holy Cross College, A.B., 1969; Harvard Law School, J.D., 1972
House, Priscilla (1998) Adoptive/Foster Family Training Specialist; Cedar Crest College, B.A., 1973; Smith College, M.S.W., 1994
Houser, StephenA.R. (1991) Computer Programmer, University Computing Technologies; University of Southem Maine, B.S., 1993, M.S., 1996
Howard, Albert A. (1970) Head of Cataloging Services; Brown University, A.B., 1951; University of Kentucky, M.L.S., 1955
Howard, H. Cabaune (1997) Assistant Professor of Law and Public Policy; Comell University, B.A., 1964; Georgetown University Law Center, J.D., 1970
Howard, Jason A. (1998) Laboratory/Microcomputer Operations Manager, Department of Technology; University of Southem Maine, B.S., 1997
Howe, Elaine (1978) Coordinator, Gorham Career Center, Career Services and Cooperative Educa-

## ion

Hoyt, Diane (1975) Assistant Registrar; University of Southern Maine, B.A., 1975

Hughes, Carolyn C. (1968) Head of Serial Services; University of Maine, B.A., 1968, M.L.S., 1974
Huntley, Betty (1992) Staff Associate in Alumni Relations, University Advancement; University of Southern Maine, A.A., 1997
Hutchinson, Craig (1988) Special Assistant to the Vice President for Student Development; University of Maine, B.S., 1978, M.P.A., 1980
Hutt, Michelle J. (1991) Assistant Professor of Psychology; University of Massachusetts, B.A., 1980; State University of New York, Plattsburgh, M.S., 1986; Comell University, Ph.D., 1991

Hymoff, Ira H. (1972) Director of Counseling Center; Colby College, B.A., 1965; University of Maine, Ph.D., 1970
Ingalls, Catherine P. (1994) Coordinator of Finance and Administration, DHSTI, Muskie School; New Hampshire College, B.S., 1992
Irish, Joel W. (1971) Associate Professor of Mathematics; Colby College, B.A., 1967; University of New Hampshire, M.S., 1969, Ph.D., 1975
Irwin, Stephanie (1996) Assistant Director, Student Financial Aid; University of Southem Maine, B.A., 1979

Ives, Nathaniel E. (1994) Television Studio \& Technical Manager, USM Television; University of Southern Maine, B.S., 1994
Jackson, Steven R. (1996) Assistant Professor of Accounting; University of Montana, B.S., 1973; Arizona State University, Ph.D., 1993
Jagolinzer, Philip (1966) Professor of Accounting; Clark University, A.B., 1958; University of Rhode Island, M.S., 1960; University of Arizona, Ph.D., 1978
Jankowski, Mariusz (1990) Associate Professor of Electrical Engineering; The City College of New York, B.E.E., 1980, M.E.E., 1982; City University of New York, Ph.D., 1989
Jensen, John B. (1994) Assistant Professor of Business Administration; University of Southern Maine, B.S., 1983, M.B.A., 1990; University of South Carolina, Ph.D., 1994
Johansen, Carol K. (1995) Associate Professor of Management and Organizational Studies; University of Oregon, B.S., 1975, M.S., 1978, Ph.D., 1985
Johnson, Deborah F. (1992) Associate Professor of Psychology; Hofstra University, B.A., 1971; University of London, M.Sc., 1975; University of New Hampshire, M.A., 1979, Ph.D., 1986
Johnson, Gary J. (1989) Associate Professor of History; Texas Tech University, B.A., 1969; University of Michigan, A.M., 1978, Ph.D., 1984
Johnson, Judith L. (1986) Director, Testing and Assessment; University of Maine, B.A., 1982; University of Southern Maine, M.S., 1986; Boston College, Ph.D., 1996
Johnson, Rosemary (1987) Associate Professor, College of Nursing; McGill University, B.N., 1972; University of Rochester, M.S., 1976; University of Colorado, Ph.D., 1987
Johnson, SheilaA. (1968) Head of Reference Services; Boston College, B.S., 1967; University of Maine, M.L.S., 1975

Johnson, Virginia (1989) Bursar, Office of Student Billing
Jolda, Gregory (1995) Computer Specialist II, Muskie School; Northeastern University, B.S.E.E., 1970; Air Force Institute of Technology, M.S.E.E., 1977
Jones, Susan (1986) Associate Director, Center for Real Estate Education, School of Business; Bradford College, A.A., 1960
Jordan, P. Len (1980) Rehabilitation Manager, Lifeline
Jordan, Theresa (1984) Administrative Manager, Facilities Management; University of Southern Maine, B.F.A., B.S., 1993
Juenemann, M. Thomas (1998) Director, Institute for Family-Owned Business; United States Naval Academy, B.S., 1965; University of Maine, M.B.A., 1971

Juniewicz, Thelma R. (1994) Coordinator of Support of Science Project, College of Education and Human Development; University of Southern Maine, B.S., 1971, M.Ed., 1977; Universityof New Hampshire, M.Ed., 1987
Kading, Charles S. (1978) Professor of Theatre; California State University, B.A., 1973; University of Washington, M.A., 1975; Califomia State Uni-versity-Fullerton, M.F.A., 1982
Kargul, Laura (1989) Associate Professor of Music; University of Michigan, B.M., 1978, M.M., 1980, D.M.A., 1985
Karraker, David (1985) Director of Organizational Planning and Development, Muskie School; University of Wisconsin, B.S., 1961
Kartez, Jack D. (1995) Director and Professor of Environmental Science and Policy; Middlebury College, B.A., 1974; University of Oregon, Master's of Urban Planning, 1976; University of North Carolina, Ph.D., 1990
Kaschub, Michele (1997) Assistant Professor of Music; University of Southern Maine, B.S., 1990; University of Maine, M.M., 1994; Northwestern University, Ph.D., 1998
Kasper, Mary Kay (1992) Assistant Director of Community Development; Jefferson Community College, A.A., 1979; Clinton Community College, A.S., 1982; University of Maine, B.S., 1985, M.Ed., 1989
Katsekas, Bette (1993) Assistant Professor of Counselor Education; University of New Hampshire, B.A., 1974, M.Ed., 1975; University of Maine, Ed.D., 1980
Keef, Ardith (1979) Associate Professor of Music; Eastman School of Music, B.M., 1972, M.M., 1974
Keith, Anne B. (1990) Associate Professor of Nursing, College of Nursing; Radcliffe College, B.A., 1962; Harvard University, M.S., 1971, M.P.H., 1983; D.P.H., 1991
Keith, Robert G. (1994) Systems Development Specialist; Amherst College, B.A., 1962; Harvard University, M.A., 1965, Ph.D., 1970; Boston University, M.B.A., 1987
Kellogg, EdwardZip (1985) Reference Librarian;

Gettysburg College, B.A., 1979; Southem Connecticut State University, M.L.S., 1980
Kennedy, Harris W. (1985) Assistant Head of Reference Services; Gordon College, B.A., 1963; Boston University, M.A., 1966; Columbia University, M.L.S., 1971
Kenniston, Kim (1996) Resident Director, Resident Student Services
Kent, Assunta (1994) Assistant Professor of Theatre; University of Illinois, B.S., 1976; University of Colorado, M.A., 1985; Northwestem University, Ph.D., 1994
Kerrigan, Jean F. (1977) Assistant Director of Advising; University of Southern Maine, B.A., 1977, M.S.Ed., 1988
Keysor, John F. (1974) Registrar; University of Wisconsin, B.S., 1962, M.S., 1966
Khoury, Colleen (1985) Dean, University of Maine School of Law; Colby College, B.A., 1964; Illinois Institute of Technology/Chicago-Kent College of Law, J.D., 1975
Kilbreth, Elizabeth H. (1984) Assistant Research Professor of Health Policy and Management, Senior Research Associate and Director, Division of Health Services Research, Muskie School; Radcliffe College, B.A., 1973; Johns Hopkins University, M.H.S., 1979; Brandeis University, Ph.D., 1996
Killen, Matthew J. (1991) Technical Services Manager, University Computing Technologies
Kilroy, William (1991) Associate Professor of Theatre; University of Rhode Island, B.F.A., 1981; University of Illinois, M.F.A., 1985
Kimball, Walter (1988) Associate Professor of Education; Centre College, B.A., 1975; University of Kentucky, M.S., 1978; The Ohio State University, Ph.D., 1983
King, Susan A.G. (1984) Testing and Assessment Specialist, Office of Student Testing and Assessment; University of Southern Maine, B.A., 1984, M.S., 1990

Kinne, Christenia A. (1987) Wardrobe Manager, Theatre; Whitman College, B.A., 1972
Kinsella, John M. (1987) Associate Professor of Spanish and Portuguese; University of Birmingham, B.A., 1971; University of Liverpool, Ph.D., 1975
Kirk, Albert S. III (1977) Associate Professor of Technology; Occupaional Safety and Health Coordinator; Florida College, A.A., 1961; University of Tampa, B.S., 1963; Northern Illinois University, M.S., 1967; Murray State University, SCT, 1980

Kirk, Eva (1998) Adoptive and Foster Parent Trainer II, Muskie School
Kirlen, Susan (1993) Head Teacher, Child Care Services; University of Maine at Farmington, B.S., 1979; University of Maine, M.Ed., 1981
Kissen, Rita M. (1990) Associate Professor of Education; Comell University, B.A., 1964,M.A., 1965; University of Massachusetts, Ph.D., 1986
Kivatisky, Russell J. (1974) Assistant Professor of Communication; State University of New York, Brockport, B.S., 1970, M.A., 1971; Bowling Green State University, Ph.D., 1974

Kivela, Carri Nix (1992) Associate Director of Clinical Services (Portland), Student Health Services; University of Vermont, B.S.N., 1985; University of Rochester, M.S.N., 1989
Klooster, Willem W. (1998) Assistant Professor of History; University of Groningen, B.A., 1983, M.A., 1987; University of Leiden, Ph.D., 1995

Klotz, Deborah (1990) Head Teacher, Child Care Services; Keene State College, B.S., 1986; University of Massachusetts, B.S., 1989
Klvana, Tomas P. (1997) Assistant Professor of Joumalism; Charles University, Prague, Czechoslovakia, M.A., 1992; University of Minnesota, Ph.D., 1997
Knight, Thomas J. (1989) Associate Professor of Biology; Dominican College, B.S., 1971; Rutgers University, M.S., 1976, Ph.D., 1982
Kratzer, Richard O. (1971) Professor of Mathematics; Fort Hays Kansas State College, B.A., 1957; Kansas State College of Pittsburg, M.A., 1964; New York University, Ph.D., 1971
Kuenz, Jane (1995)Assistant Professor of English; Spring Hill College, B.A., 1983; University of Alabama, M.F.A., 1987; Duke University, M.A., 1991, Ph.D., 1995
Kuzma, Lynn M. (1998) Assistant Professor of Political Science; The Ohio State University, M.A., 1990, Ph.D., 1995
LaBelle, Sheera (1989) Professional Nurse, Student Health Services; University of Minnesota, B.S.N., 1977

LaBrie, John G. (1993) Director of Summer Session; University of Maine atFort Kent, B.S., 1991; St. Michael's College, M.S., 1998
LaCasse, JohnA. (1993) Faculty Associate in Public Policy and Management; Bowdoin College, A.B., 1963; Columbia University, M.S., 1969, D.E.S., 1984

LaCombe, Walter (1990) Facilities Operation Manager, Mechanical Trades (Gorham)
Lahti, Michael (1997) Coordinator, School-Based MH Centers, Muskie School; Boston University, B.A., 1983; Kean College, M.Ed., 1987; University of Maine, M.P.A., 1996
Lambert, David (1986) Research Associate III, Muskie School and Assistant Research Professor of Health Policy and Management; Tulane University, B.A., 1972; Indiana University, M.A., 1974; Brandeis University, Ph.D., 1986
Lamont, Valarie C. (1987) Director, Center for Real Estate Education and Center for Affordable Housing and Land Use Studies, Co-Director, Center for Entrepreneurship and Small Business, and Co-Director, MBA Program, School of Business; University of Maine, B.A., 1968; University of Illinois, M.A., 1969, Ph.D., 1974
Lamontagne, Carol (1984) Staff Associate, Professional Development Center, College of Education and Human Development
Landeen, Ruth (1994) Adoptive/Foster Parent Trainer II
Lang, Michael (1983) Professor, School of Law; Harvard University, A.B., 1972; University of Pennsylvania, J.D., 1975

Langley-Turnbaugh, Samantha J.(1996) Assistant Professor of Environmental Science and Policy; University of Maine, B.S., 1987; University of New Hampshire, M.S., 1992; University of WisconsinMadison, Ph.D., 1995
LaPlante, Josephine M. (1985) Associate Professor of Public Policy and Management; Syracuse University, B.A., 1973, M.A., 1983, Ph.D., 1984
Lapping, Joyce K. (1996) Academic Counselor/ Coordinator of Peer Advising; State University of New York (New Paltz), B.A., 1968; Hunter College (City College of New York), M.A., 1971
Lapping, Mark B. (1994) Provost and Vice President for Academic Affairs and Professor of Public Policy and Management; State University of New York, New Paltz, B.S., 1967; Emory University, Ph.D., 1972
Larlee, Mary F. (1996) Laboratory Coordinator, University of Southern Maine, B.A., 1996
Larson, Deborah H. (1997) Assistant Professor of Adult Education; Waynesburg College, B.A., 1984; Cornell University, M.S., 1996, Ph.D., 1997 LaSala, Gerald J., Jr., (1987) Associate Professorof Physics; Yale University, B.A., 1970; Rutgers University, M.S., 1978; Dartmouth College, Ph.D., 1983
Lasky, Kathryn (1987) Associate Professor of Communication; Murray State University, B.S., 1974,M.A., 1977; Indiana University, Ph.D., 1988 LaVerriere, Robert (1998) Director of Admissions; Old Dominion University, B.A., 1974; The College of William and Mary, M.Ed., 1994
Laz, Cheryl(1991)Associate Professor of Sociology; Hartwick College, B.A., 1984; State University of New York, M.A., 1987, Ph.D., 1991
Lazar, Bonnie (1975) Associate Professor of Social Welfare; State University of New York atBuffalo,B.A., 1970;Boston University, M.S.S.S., 1972
Leeman, Robert (1984) Facilities Operation Manager, Mechanical Trades (Portland); University of Southern Maine, B.S., 1991
Leighton, AI (1988) Research Assistant II, Muskie School
Lemelin, Robert (1977) Director, Leaming Assistance; Southern Connecticut State University, B.S., 1959; University of Maryland, M.A., 1963, Ph.D., 1967
Levere, Ronald W. (1976) Director, Educational Media Services; State University of New York, B.S., 1965; University of Connecticut, M.A., 1976
Littel, Eric (1997) Staff Programmer Associate, Management Information Systems
Locke, Phyllis R. (1968) Serials Reference Librarian; University of Toronto, B.A., 1951; University of Maine, M.L.S., 1968, M.A., 1987
Lockridge, Rebecca B. (1984) Associate Professor of Communication; Indiana University, A.B., 1960; Connecticut State College, Cerificate, 1962; TheOhioState University, M.A., 1983, Ph.D., 1989 Lockrow, Kathleen (1996) Model Office Support Assistant, Muskie School; Mt. Wachusetts Community College, A.B.A., 1983

Long, Diana E. (1989) Professor of History; Smith College, B.A., 1959; Yale University, M.A., 1960, Ph.D., 1966
Louden, Robert B. (1982) Professor of Philosophy; University of Califormia at Santa Cruz, B.A., 1975; University of Chicago, M.A., 1976, Ph.D., 1981
Lovett, Bonnie B. (1994) Adoptive/Foster Parent Trainer II
Liick, Carlos L. (1995) Assistant Professor of Electrical Engineering; University of Sao Paulo (Brazil), B.S., 1988; University of Southern Califomia, M.S., 1992, Ph.D., 1995

Lumbert, Lanier D. (1978) Head of Access Services; University of Maine, B.A., 1971; University of Denver, M.A., 1974
Lupica, Lois R. (1994) Associate Professor of Law; Cornell University, B.S., 1981; Boston University School of Law, J.D., 1986
Lush, Cathy (1996) Computer Trainer, Muskie School; Community College of the Air Force, A.S., 1985; University of Central Oklahoma, B.A., 1988 Lynn, Dahlia Bradshaw (1996) Assistant Professor of Public Policy and Management; Ohio University,B.S., 1973; Indiana University, M.S., 1977; Florida International University, Ph.D., 1996
Lyons, Charles M. (1973) Professor of Education; St. Francis Xavier University, B.A., 1966; University of Hartford, M.Ed., 1970; Boston University, Ed.D., 1978
Lyons, George C. (1984) Director, Professional Development Center, College of Education and Human Development; St. Francis Xavier University, B.A., 1955; University of Maine, Portland, M.Ed., 1968

MacDonald,StephenA. (1970) Associate Professor of Mathematics; Gorham State College, B.S., 1963; University of Maine, M.A., 1964; Case Western Reserve University, Ph.D., 1972
MacDonald, Thomas (1984) Associate Professor of Business Administration, University of Southern Maine, B.A., 1973, M.S., 1979, B.A., 1981
MacLeod, Bruce (1986) Associate Professor of Computer Science; Bowdoin College, A.B., 1979; Rensselaer Polytechnic Institute, M.S., 1981; University of Massachussetts, M.S., 1985, Ph.D., 1989 MacPherson, Kathleen I. (1974) Professor, College of Nursing; Boston University, B.S., 1963, M.A., 1965, M.S., 1974; Brandeis University, Ph.D., 1986
Maher, Christine R. (1997) Assistant Professor of Biology; Miami University, B.S., 1984; University of Idaho, M.S., 1986; University of Cali-fomia-Davis, M.S., 1990, Ph.D., 1992
Maher, Rachel (1989) Head Teacher, Child Care Services; University of Maine, B.S., 1988
Maiman, Richard J. (1971) Professor of Political Science and Associate Provost for Graduate Studies and Research; Lake Forest College, B.A., 1967; Brown University, Ph.D., 1972
Mainville, Waldeck E., Jr. (1965) Professor of Mathematics; University of Maine, B.S., 1960; Bowdoin College, A.M., 1964; Bowling Green

State University, Sp.Ed., 1965; Michigan State University, Ph.D., 1972
Makas, Elaine (1994) Adjunct Associate Professor of Social and Behavioral Sciences; Bates College, B.A., 1967; George Washington University, M.Phil., 1984, Ph.D., 1989

Mallon, Janis C. (1988) Associate Director, Counseling Center; Brooklyn College, CUNY, B.S., 1976; SUNY Buffalo, Ph.D., 1989
Maltby-Askari, Ellen (1996) Instructor of Natural and Applied Sciences; Connecticut College, B.A., 1964; Northeastern University, M.S., 1969, Ph.D., 1973
Mamgain, Vaishali (1997) Assistant Professor of Economics; L.S.R. College, Delhi University,B.A., 1988; Jawaharlal Nehru University, M.A., 1990; University of North Carolina, Ph.D., 1997
Manny, Carter (1986) Associate Professor of Business Law; Harvard, A.B., 1971; Boston University, J.D., 1975

Marasco, Rose (1986) Associate Professor of Art; Syracuse University, B.F.A., 1971; Goddard College, M.A., 1981; Visual Studies Workshop (SUNY), Buffalo, M.F.A., 1991
Marcus, Donna (1996) DHSTI Manager, Muskie
School; University of Maine at Farmington, B.S., 1989
Marsden, Diane (1996) Resident Director, Resident Student Services
Marsh, Jayne D.B. (1991) Research Associate I, Muskie School; University of Vermont, B.S., 1987; University of Southern Maine, M.S., 1989, M.A., 1991
Marshall, John A. (1996) Assistant Professor of Technology; Trenton State College, B.A., 1977; Texas A\&M University, M.A., 1978, Ph.D., 1984
Martin, Elizabeth (1998) Public Welfare Training Specialist II, Muskie School; Plymouth State College, B.S., 1971; University of New Hampshire, M.P.A., 1984

Martin, Joyce (1980) Assistant Director, Professional Development Center, College of Education and HumanDevelopment; Simmons College, B.A., 1965; New York University, M.A., 1973
Martin, Peter J. (1980) Professor of Music; Northern Ilinois University, B.A., 1971; Wichita State University, M.M.E., 1973; Northwestern University, Ph.D., 1983
Martz, Nancy B. (1993) Project Director, Workplace Literacy Project; Oberlin College, B.A., 1983; Florida International University, M.S., 1990
Mauney, Karen (1988) Computer and Database Specialist, Muskie School; Duke University, B.A., 1979
Max, Stanley M. (1990) Associate Editor, Maine Business Indicators, Center for Business and Economic Research, and Lecturer in Mathematics; University of Rhode Island, B.A., 1972, M.A., 1976, M.L.S., 1977; State University of New York at Albany, Ph.D., 1980; University of Southerm Maine, M.B.A., 1993, B.A., 1996

Mazurkiewicz, Michael, Jr. (1969) Professor of Biology; Rutgers University, B.S., 1961, M.S.,

1964; University of Connecticut, Ph.D., 1970
McCall, AndreaT. (1994) Director, Women's Center; Rollins College, B.A., 1974; Colgate Rochester Divinity School, M.Div., 1979
McCullough, William T. (1978) Associate Professor and Chairperson of Therapeutic Recreation, College of Nursing; Southern Connecticut State College, B.S., 1971, M.S., 1977; Boston University, Ed.D., 1986
McDaniel, Dana (1990) Associate Professor of Linguistics; SUNY Binghamton, B.A., 1980; CUNY, Ph.D., 1986
McDermott, Michael (1989) Electronic Research and Information Services Librarian; University of Hawaii, B.A., 1987; Simmons College, M.S., 1988 McGorrill, Carol (1991) Executive Director of AnnualFund, University Advancement; Bowdoin College, B.A., 1985
McGrath, Francis C. III (1985) Associate Professor of English; Dartmouth College, B.A., 1964; University of Texas at Austin, Ph.D., 1973
McGuire, Catherine A. (1984) Director of Computer and Data Base, Muskie School; University of Southem Maine, B.A., 1983
McIlwain, W. Daryl (1980) Data Systems Manager, University of Southern Maine, A.S., 1979
McMullen, Faith (1979) Family Resources Coordinator, Muskie School; University of Maine, B.S., 1968
McWilliams, Susan (1996) Assistant Professor of Sociology; Wesleyan University, B.A., 1986; University of Washington, M.A.,1989, Ph.D., 1997 Medley, Joseph E. (1983) Associate Professor of Economics; State University of New York-Albany, B.A., 1973; University of Massachusetts, Amherst, M.A., 1976, Ph.D., 1981

Messerschmidt, James (1986) Professor of Criminology; Portland State University, B.S., 1973; San Diego State University, M.S., 1976; University of Stockholm (Sweden), Ph.D., 1979
Meyer, Linda (1980) Associate Professor, Therapeutic Recreation Programs, College of Nursing; Bridgewater State College, B.S., 1969; University of Connecticut, M.A., 1973, Ph.D., 1976
Miller, Lynne (1987) Professor of Educational Administration/Instuctional Leadership; University of Pennsylvania, B.A., 1967; Harvard University, M.A.T., 1970; University of Massachusetts, Ed.D., 1975
Moisan, Mary Anne (1997) Assistant Professor of Occupational Therapy; University of Vermont, B.S., 1984; Colorado State University, M.S., 1990

Moody, Kimberly A. (1994) Assistant Professor of Nursing, College of Nursing; University of Southern Maine, B.S., 1982; Boston University, M.S.N., 1983; University of Washington, Ph.D., 1994
Moore, Edward T. (1980) Library Circulation Associate, University Library; St. Anselm College, B.A., 1974

Moore, Jarene (1997) Mental Health Training Specialist, Muskie School
Moore, William H. (1971) Associate Professor of

Technology; Gorham State College, B.S., 1969; University of Southern Maine, M.Ed., 1970; University of Tennessee, Ed.D., 1979
Morin, Elizabeth A. (1989) Manager of Conference and Meeting Services; University of Southern Maine, B.A., 1984
Morrill, David (1970) Associate Professor of Education; Moorehead State College, B.S., 1967; Texas A \& M University, M.Ed., 1968, Ed.D., 1970
Morrill, Jamie (1998) Coordinator of Professional Development, Muskie School; University of Maine, A.A., 1973; University of Southern Maine, B.S., 1975
Mortensen, William G. (1965) Executive Director of University Extension and Public Service; University of Maine, B.S., 1961, M.S., 1966
Mosher, Tricia (1991) Co-Director, Child Welfare Training Institute, Muskie School; Wesleyan University, B.A., 1982; Boston University, M.S.W., 1985
Mullane, Michael W. (1987) Professor of Law and Director, Cumberland Legal Aid Clinic; University of Notre Dame, B.A., 1964; Nore Dame Law School, J.D., 1972
Mullen, Kathy Ann (1983) Assistant Director of Financial Aid; University of Southern Maine, B.A., 1981
Mullen, Renee B. (1997) Assistant Professor of Biology; Wake Forest University, B.A., 1985; University of Colorado, Ph.D., 1995
Mullett, Michael J. (1994) Assistant Director, Resident Student Services; University of Southern Maine, B.S., 1994
Mundhenk, Leigh G. (1998) Co-Director, Center for Coninuing Education; Duke University, B.S., 1972; University of Pennsylvania, M.S., 1987; Temple University, Ph.D., 1997
Munger, Jeanne L. (1994) Assistant Professor of Marketing; The OhioState University, B.S., 1979, M.B.A., 1982, Ph.D., 1992

Murphy, Julien (1984) Professor of Philosophy and Associate Dean, College of Arts and Sciences; Northern Illinois University, B.A., 1977; DePaul University, M.A., 1980, Ph.D., 1982
Murphy, Stephen T. (1995) Professor of Counselor Education; Holy Cross College, B.A., 1966; State University of New York at Buffalo, Plı.D., 1973
Najarian, Haig H. (1966) Professor of Biology; University of Massachusetts, B.S., 1948; Boston University, M.A., 1949; University of Michigan, Ph.D., 1953
Nalli, Gino (1998) Maine Net Director, Muskie School; Binghamton University, B.A., 1972; Yale University, M.P.H., 1976
Nannay, Robert W. (1972) Associate Professor of Technology Education; Trenton State College, B.A., 1964, M.A., 1967; University of Maryland, Ed.D., 1970
Nealand, Sallie C. (1980) Assistant Professor of Nursing, Lewiston-Auburn College; Mt. Holyoke College, A.B., 1961; University of Delaware, B.S.N., 1973; University of Pennsylvania, M.S.N.,

1979; Peabody College, Vanderbilt University, Ed.D., 1992
Nelson, Jenny (1976) Recreation Specialist/ Manager, Sullivan Gym
Nelson, Mary P. (1995) Director of Development and Alumni Relations, School of Law; Smith College, B.A., 1965; University of Southern Maine, M.А., 1988

Neugebauer, Lee (1996) Reference/Document Law Librarian, School of Law; Smith College, B.A., 1987; American University, J.D., 1990; University of Washington, M.L.S., 1995
Neuwirth, Victor J. (1987) Laboratory Associate, Chemistry; State University of New York, Stony Brook, B.S., 1963; State University of New York, New Paltz, M.S., 1968
Neveu, Raymond P. (1982) Professor of Finance; Providence College, A.B., 1959; Boston College, M.A., 1961; University of Pittsburgh, Ph.D., 1968 Nevins, Susan Sinclair (1989) Co-Director, Centerfor Continuing Education; Colby College, B.A., 1973; Syracuse University, M.S., 1976; University of Southern Maine, M.A., 1988
Newell, Ahna H. (1969) Associate State Director, State Business Development Centers, School of Business; University of Southem Maine, B.A., 1986 Newton, Thomas A. (1987) Associate Professor of Chemistry; Hobart College, B.S., 1965; Bucknell University, M.S., 1968; University of Delaware, Ph.D., 1973
Ng, Ah-Kau (1988) Professor of Applied Imınunology; National Chung-Hsing University, Taiwan, B.S., 1969; SUNY at Plattsburgh, M.A., 1972; Temple University School of Medicine, Ph.D., 1975 Nickerson, Merton A. (1986) Director of University Computing Technologies; University of Maine, B.S., 1963; University of Northern Iowa, M.S., 1968; University of Maine, Ph.D., 1976
Nicoll, Leslie H. (1991) Research Associate II and Editor-in-Chief, Muskie School; Russell Sage College, B.S., 1977; University ofIllinois, M.S., 1980; Frances Payne Bolton School of Nursing, Case Western Reserve University, Ph.D., 1988; Wittemore School of Business \& Economics, University of New Hampshire, M.B.A., 1991
Novak, Irwin D. (1971) Associate Professor of Geology; Hunter College, A.B., 1966; University of Florida, M.S., 1968; Cornell University, Ph.D., 1971
Noyce, Heidi Dolloff (1981) Assistant Director of Transfer Affairs, Admissions; University of Southern Maine, B.S., 1991
Nye, Kenneth P. (1994) Assistant Professor of Educational Leadership; Colby College, B.A., 1964; Northwestern University, M.A.T., 1965, Ph.D., 1971
O’Donnell, Michael P. (1970) Professor of Education; University of Maine, B.S., 1958, M.S., 1961; Syracuse University, Ed.D., 1968
O'Hara, Frank (1989) Faculty Associate in Public Policy and Management; Haverford College, A.B., 1972; Yale Divinity School, M.A., 1975

Olsen, Louise (1992) Research Assistant III,

Muskie School; University of Southem Maine, B.A., 1988

O'Mahoney-Damon, Patricia M. (1977) Associate Professor of Biology; Long Island University, B.S., 1971; State University of New York at Buffalo, M.A., 1974, Ph.D., 1977
Ouellette, Julie C. (1995) Family Nurse Practitioner, Student Health Services; Trinity College, B.A., 1973; University of Denver, M.A., 1975; Pace University, M.S.N., 1983
Owen, Jacqueline M. (1994) Accounts Manager, Financial Resources
Padula, Alfred L. (1972) Professor of History; College of the Holy Cross, B.S., 1957; University of the Americas (Mexico City), M.A., 1961; University of New Mexico, Ph.D., 1975
Page, Martha Israel (1989) Professional Nurse, Student Health Services; Claremont College, B.A., 1976; University of Southem Maine, B.S.N., 1984
Panici, Daniel A. (1995) Assistant Professor of Communication and Director, Media Studies Program; Augustana College Rock Island, B.A., 1983; Colorado State University, M.A., 1986; University of Missouri, Ph.D., 1989
Parchınan, Thomas (1984) Associate Professor of Music; Southem Methodist University, B.M., 1976; Northwestern University, M.M., 1978
Parent, Suzanne P. (1975) Collection Development Law Librarian, School of Law; University of Southern Maine, B.A., 1975; University of South Carolina, M.L.I.S., 1997
Park, Margaret S. (1998) Student Services Advisor, Lewiston-Aubum College; University of Southern Maine, B.A., 1998
Parker, Helen F.M. (1974) Senior Associate Director, Student Financial Aid; University of Southern Maine, B.A., 1973
Passernian, Toni L. (1984) Director, First Year Altemative Experience; University of New Hampshire, B.S., 1981; University of Southem Maine, M.S.Ed., 1984

Pattenaude, Richard L. (1991) President; Califormia State University, B.A., 1968; University of Colorado, Ph.D., 1974
Peake-Godin, Helen (1980) Associate Professor, College of Nursing; Spalding College, B.S., 1969; Emory University, M.N., 1979
Pearson, Karen ( 1997) Library Services Associate, Muskie School; North Park College, B.A., 1981; University of Wisconsin-Milwaukee, M.L.I.S., 1985; St. Xavier University, M.A., 1993 Pellegrino, Vincent (1998) Vice President of University Advancement; University of Florida, B.S., 1975, M.A., 1981
Pelletier, Therese A. (1988) Director of Administration, Lewiston-Aubum College
Pelsue, Stephen C. (1996) Assistant Professor of Applied Immunology; Northland College, B.S., 1988; North Carolina State University, Ph.D., 1993 Pennuto, Christopher (1995) Assistant Professor of Environmental Science and Policy; Iowa State University, B.S., 1984; North Dakota State University, M.S., 1988; University of Kansas, Ph.D., 1994

Peters, Gerald (1987) Associate Professor of English; University of Saskatchewan, B.A., 1975, M.A., 1982; University of Illinois, Ph.D., 1986

Peterson, Dawn C. (1994) Assistant Manager of Fimess, Lifeline; St. Cloud State University, B.A., 1982
Philippon, Roger G. (1995) Director of Student Services, Lewiston-Aubum College; University of Maine at Augusta, B.P.A., 1983; University of Southem Maine, M.S.Ed., 1995
Phillips, Susan L. (1994) Adoptive/Foster Parent Trainer II; University of Massachusetts, B.A., 1971; Western Michigan University, M.A., 1975
Phillips, William A. (1980) Associate Professor of Economics; Florida State University, B.S., 1961, M.S., 1975, Ph.D., 1979

Piaget, Nicole (1984) Associate Director, Portland Bookstore; Hope College, B.A., 1977; University of Southem Maine, M.S.Ed., 1992
Picinich, Susan E. (1987) Associate Professor of Theatre; State University of New York, Albany, B.A., 1978, M.A., 1980; University of Michigan, M.F.A., 1985

Pinkelman, Robert (1995) Software Support Specialist, Software Services; University of Southern Maine, B.A., 1998
Pinkham, Michelle (1996) Financial Assistant, Muskie School; University of Maine, B.S., 1993
Podgurski, Holly (1996) MACWIS Technical Associate, Muskie School
Pollock, Stephen G. (1979) Professor of Geology; Bucknell University, A.B., 1968; University of Maine, M.S., 1972; Rutgers University, Ph.D., 1975
Potter, Judy R. (1972) Professor, School of Law;
Cornell University, B.A., 1960; University of Michigan Law School, J.D., 1967
Potts, Andrew J. (1985) Professor of Accounting; George Washington University, A.B., 1960, M.B.A., 1962, Ed.D., 1977

Power, Thomas A. (1966) Associate Professor of Theatre; University of Maine, B.S., 1964, M.A., 1968
Pranger, Eugene B. (1973) Director, Office of Sponsored Programs; Indiana University, B.S., 1971
Pratt, Christine R. (1991) Administrative Director, Office of the Provost; Katharine Gibbs School, A.A., 1967

Pretorius, Johann (1990) HRIS Associate, Human Resources; Information Associate, Management Information Systems; University of South Africa, B.A., 1994; University of New England, B.A., 1998 Prieto, Patricia L. (1997) Research Services and Instruction Librarian; Tulane University, B.A., 1976; University of North Carolina, M.S.L.S., 1982; School for Intemational Training, M.A.T., 1990
Purdy, Warren (1980)Associate Professor of Business Administration; Bethany College, B.A., 1970; Fordham University, M.B.A., 1974
Quinlan, Maureen P. (1994) Serials Law Librarian, School of Law; Fairfield University, B.S., 1988; CUNY at Queens, J.D., 1991; Pratt Institute, M.L.S., 1994

Quinn, Cynthia (1976) Director, USM Bookstores; University of Maine, B.S., 1975
Quinones, Steven (1998) Women's Soccer Coach; Franklin Pierce College, B.S., 1990
Rabata, Dan (1993) Employment Manager; University of Wisconsin, B.S., 1966; Southern Illinois University, M.B.A., 1971
Rahman, Mahmud (1997) Assistant Professor of Finance and International Business; School of Business; University of Rajshahi, B.S., 1972; University of Dhaka, M.B.A., 1974; University of TexasDallas, M.A., 1982, M.S., 1982; University of Texas-Arlington, Ph.D., 1991
Raimon, Eve A. (1995) Assistant Professor of Arts and Humanities; Cornell University, B.A., 1980; University of Vermont, M.A., 1988; Brandeis University, Ph.D., 1995
Rainey, Nan (1998) Assistant Professor of Art; The College of William and Mary, B.F.A., 1977; Pratt Institute, M.F.A., 1983
Rakovan, Lawrence F. (1967) Associate Professor of Art; Wayne State University, B.S., 1967; Rhode Island School of Design, M.A., 1969
Ralph, Ruth O. (1993) Research Associate I, Muskie School; Sioux Falls College, B.A., 1953; Oregon State University, M.S., 1961; Kent State University, Ph.D., 1972
Rand, Steven (1972) Director, Student Information Research Services; University of Maine at Presque Isle, B.S., 1970; University of Southern Maine, M.S., 1991
Raposo, Leigh (1993) Staff Associate for Publications and Marketing, University Advancement; University of Delaware, B.S., 1977
Rau, Cheryl A. (1997) Director, Northern New England Products Trade Show, Maine Small Business Development Centers, School of Business; PointPark College, B.A., 1982
Raymond, Themia (1985) Head Teacher, Child Care Services; University of Maine, B.S., 1983
Raynes, Sunita (1998) Nutrition Network Project Specialist, Muskie School; University of Maine, B.S., 1985; University of North Carolina, M.P.H., 1993
Redinger, Christopher (1996) Software Support Specialist, Software Services; University of Southern Maine, B.A., 1998
Redonnett, Rosa S. (1987) Vice President, Division of Enrollment Management; Simmons College, B.A., 1980; Northeastern University, M.B.A., 1982
Rees, Toni (1984) Associate Professor of Special Education; Teaching Certificate, Norwich College of Education (England), 1967; Southampton University, M.A., 1971; Gallaudet College, Ph.D., 1983 Reeves, Scott D. (1988) Professor of Music; Indiana University, B.M., 1972, M.M., 1982
Rhodes, Gale (1985) Professor of Chemistry, North Carolina State University, B.S., 1965; University of North Carolina, Ph.D., 1971
Rhodes, Pamela S. (1987) Laboratory Manager; University of North Carolina, B.A., 1964
Ricci, John S. (1981) Professor of Chemistry;

American International College, A.B., 1962; Columbia University, M.A., 1963; SUNY (Stony Brook), Ph.D., 1969
Rich, Barbara (1974) Associate Professor of Social Welfare; University of Maine, B.A.; Columbia University, M.S.W., 1970
Richards, Mark (1992) Research Assistant III, Muskie School; University of Southern Maine, B.S., 1991

Richfield, Leslie R. (1982) Laboratory Coordinator, Social Welfare; Boston University, B.S. 1974, M.S.W., 1978

Rieser, Alison (1980) Director, Marine Law Institute and Professor, School of Law; Cornell University, B.S., 1973; George Washington University, J.D., 1976; Yale University, L.L.M., 1990

Ridlon, Paul (1998) ResearchAssistant III, Muskie School; University of Southern Maine, B.A., 1984; University of Maine, B.S., 1994
Robbins, Gretchen (1997) Child Welfare Training Specialist, Muskie School; University of Maine, B.S., 1974, M.S., 1986

Roberts, Bruce B. (1995) Associate Professor of Economics; Dartmouth College, A.B., 1970; University of New Hampshire, M.A., 1975; University of Massachusetts, Ph.D., 1981
Roberts, James W. (1967) Associate Professor of Political Science; San Diego State College, B.A., 1954; University of North Carolina, Ph.D., 1973
Robinett, Ronald Scott (1994) Statewide Manager, Computer and Information Technology, Maine Small Business Development Centers, School of Business
Robinson, Betty D. (1988) Dean, Lewiston-Auburn College, and Associate Professor of Management and Organizational Studies; Colby College, B.A., 1973; University of Maryland, M.A., 1976; Boston University, Ph.D., 1983
Robinson, Jean (1970) Staff Associate, Business Services-Student Loans; Westbrook Jr., A.A.S., 1965
Rodgers, Marianne W. (1981) Interim Dean of Nursing and Associate Professor, College of Nursing; University of Maine, B.S.N., 1967; Boston University, M.S., 1981; Vanderbilt University, Ed.D., 1991
Rogoff, Martin A. (1972) Professor, School of Law; Cornell University, B.A., 1962; University of California, Berkeley, M.A., 1963; Yale Law School, LL.B., 1966
Rollins, Lynn Ann (1987) Assistant Director of Pre-Award Services, Office of Sponsored Programs; University of New Hampshire, B.S., 1979
Romanoff, Stephen J. (1994) Associate Professor of Interdisciplinary Studies and Director of Russell Scholars Program; University of Maine, B.A., 1969, M.A., 1971; New York University, Ph.D., 1984

Ronquist, Karen J. (1995) Director of Student Support Services, Lewiston-Auburn College; Northern Michigan University, B.A., 1961, M.A., 1964; Wayne State University, Ph.D., 1973
Rootes, Minor R. (1966) Professor of Theatre; University of California, Santa Barbara, A.B., 1954;

San Francisco State College, M.A., 1961; University of Connecticut, M.F.A., 1983
Rosen, Kenneth F. (1965) Professor of English; Pennsylvania State University, B.A., 1962; University of Iowa, M.F.A., 1964
Rosene, John M. (1998) Assistant Professor of Sports Medicine, College of Nursing; Keene State College, B.S., 1987; Southern Connecticut State University, M.S., 1993; Springfield College, D.P.E., 1996
Rosenthal, Charlotte (1987) Associate Professor of Russian; Cornell University, B.A., 1964; University of Chicago, M.A., 1967; Stanford University, Ph.D., 1979
Ross, R. Carr (1990) Research and Instruction/ Government Information Librarian; University of New Hampshire, B.A., 1978; Simmons College, M.L.S., 1986

Rost, Mary Ann (1972) Director of Health Professions, Center for Continuing Education and Adjunct Faculty, College of Nursing; Boston College, B.S., 1964; University of Massachusetts, M.S., 1972
Rousseau, Linda (1993) Manager of Benefits and Injury Management; University of SouthernMaine, B.S.N., 1977, M.S., 1998

Roux, Pauline (1989) Assistant Director of Annual Fund, University Advancement
Rusch, Willard (1987) Associate Professor of English; State University of New York, Fredonia, B.A., 1976; University of Illinois, M.A., 1981, Ph.D., 1987
Russell-Johnson, LynneW. (1993) Director, Training and Special Events, Maine Small Business Development Centers, School of Business; University of Southern Maine, B.A., 1993
Russell, Marilyn (1984) Research Associate II, Muskie School; University of Southem Maine, B.A., 1981, M.Ed., 1992

Russell, Robert J. (1979) Professor of Music; Wake Forest University, B.A., 1971; University of North Carolina, M.M., 1975; University of Colorado, D.M.A., 1979
Russo, Marianne E. (1985) Professional Nurse, Student Health Services; Akron General Hospital, R.N., 1969

Ryan, Judith S. (1979) Vice President, Student Development; University of South Florida, B.F.A., 1975; University of Southern Maine, M.S., 1982
Ryden, Kent C. (1994) Assistant Professor of American and New England Studies; Carroll College, B.A., 1981; University of Connecticut, M.A., 1984; Brown University, M.A., 1986; Brown University, Ph.D., 1991
Sady, Christine (1996) Nutrition Network Coordinator, DHSTI, Muskie School; Springfield Technical Community College, A.S., 1973; University of Maine, B.S., 1984, M.S., 1986
Sahonchik, Kris (1991) Director, Child and Family Policy Center, Director, NCWRC, Muskie School; New York University, B.A., 1982; Antioch School of Law, J.D., 1985
St. Onge, Anita (1996) Research Associate II,

Muskie School; St. Anselm College, B.A., 1977; University of Maine School of Law, J.D., 1980
St. Pierre, Pauline (1997) Staff Associate, Office of Student Financial Aid
Sandberg, Stewart (1994) Assistant Professor of Geociences; University of Utah, B.S., 1975, 1976, M.S., 1980; Rutgers University, Ph.D., 1995

Sanders, John J. (1982) Associate Professor of Business Administration; Plymouth State College, B.S., 1972; University of Southern Maine, M.B.A., 1977
Sandstrum, Tiffany C. (1997) Instructor of Recreation and Leisure Studies, College of Nursing; University of Florida, B.S., 1991, M.S., 1997
Sanford, Robert M. (1996) Assistant Professor of Environmental Science and Policy; SUNY at Potsdam B.A., 1982; SUNY College of Environmental Science and Policy at Syracuse, M.S., 1984, Ph.D., 1989
Saucier, Ann (1996) Co-Director, Child Welfare Training Institute, Muskie School; University of Maine, B.A., 1970
Saucier, Paul (1996) Senior Policy Analyst, Muskie School; Comell University, B.S., 1982; University of Southern Maine, M.A., 1989
Savage, Lydia A. (1996) Assistant Professor of Geography and Anthropology; University of California at Berkeley,B.A., 1990; Clark University,M.A., 1993, Ph.D., 1996
Scala, Elise (1988) Disability Program Development Associate; Comell University, B.S., 1975; University of Southern Maine, M.S., 1989
Schaible, Robert M. (1986) Associate Professor of Arts and Humanities, Furman University, B.A., 1965; University of Tennessee, M.A., 1966, Ph.D., 1971
Schiferl, Ellen (1980) Associate Professor of Art; Grinnell College, B.A., 1971; University of Minnesota, M.A., 1974, Ph.D., 1980
Schwanauer, Francis (1962) Professor of Philosophy; Technical University of Stuttgart, Dr. Phil., 1959
Selkin, Michael (1970) Associate Professor of English; Columbia College, A.B., 1961; Comell University, M.A., 1963; Columbia University, Ph.D., 1975
Sepples, Susan B. (1996) Assistant Professor of Nursing, College of Nursing; Duke University, B.S.N., 1983; University of Virginia, M.S.N., 1991, Ph.D., 1996
Sexton, Mary (1997) Reference Law Librarian; Barat College, B.A., 1969; Northwestern University, M.A., 1971; University of Michigan Law School, J.D., 1982; New York University School of Law, LL.M., 1983; Rosary College, M.A.L.S., 1993
Shandorf, Emily (1992) Head Teacher, Child Care Services; Springfield College, B.S., 1977
Shaughnessy, Michael (1987) Associate Professor of Art; University of Missouri, Kansas City, B.A, 1981; Ohio University, M.F.A., 1984
Shedletsky, Leonard (1979) Professor of Communication; Brooklyn College, B.A., 1965; San Fran-
cisco State College, M.A., 1968; University of Illinois, Ph.D., 1974
Sheehy, Alfred (1993) Research Assistant IV, Muskie School; Colby College, B.A., 1978; University of Southern Maine, M.A., 1992
Shewell-Woodbury, Larry (1995) Network and Software Support Specialist, Lewiston-Auburn College
Siebold, Cathy (1990) Associate Professor of Social Work; SUNY Cortland, B.A., 1972; NYU School of Social Work, M.S.W., 1977; Yeshiva University, D.S.W., 1987
Silvernail, David L. (1977) Professor of Education and Director of Center for Applied Research and Evaluation; Indiana University, A.B., 1969, M.S., 1975, Ed.D., 1977

Skolfield, Thomas G. (1995) Tracking and Assessment Specialist, Testing and Assessment Center; Colby College, B.A., 1959; University of Maine, M.Ed., 1968

Skoner, Martha (1987) Associate Professor, College of Nursing; University of Pittsburgh, B.S.N.Ed., 1959, M.N.Ed., 1963, Ph.D., 1974

Sky, Harry Z. (1997) Senior College Coordinator, Center for Extended Academic Programs; Yeshiva University, B.A., 1945; Jewish Theological Seminary, M.H.L., 1951; Rabbi Degree, 1951
Sloan, Mary M. (1994) Assistant Director, Graduate Studies and Research; Boston College, A.B., 1975; University of West Florida, M.A., 1977; University of Southern Maine, M.A., 1997
Smart, Kerry (1997) Admissions Counselor/Liaison to Athletics, Admissions; University of Maine, B.A., 1993, M.Ed., 1995

Smith, Barbara D. (1995) Associate University Librarian; Boston University, B.A., 1960; Simmons College, M.L.S., 1965
Smith, Dorothy Woods (1986) Associate Professor of Nursing, College of Nursing; Johns Hopkins University, B.S.N., 1960; University of Southern Maine, M.Ed., 1975; New York University, M.A., 1985, Ph.D., 1992
Smith, James W. (1986) Associate Professor of Applied Science; Pennsylvania State University, B.S., 1961, M.S., 1963, Ph.D., 1967

Smith, Robert S. (1988) Assistant Director of Business Services; Andover College, A.A.S., 1971 Smith, Timothy G. (1994) Coordinator, Recreational Sports, (Gorham); University of Maine at Presque Isle, B.S., 1993
Smith-Petersen, G. Andrew (1998) Software Support Specialist, Software Services; University of Southern Maine, B.A., 1997
Smoluk, Herbert J. (1998) Assistant Professor of Finance; The Pennsylvania State University, B.S., 1984; Rider University, M.B.A., 1992; Lehigh University, Ph.D., 1997
Snell, Mary E. (1985) Concert Manager; University of Maine, B.A., 1971
Sobczak, Carol Currie (1993) Operations Manager,Academic Computing Services; University of Southern Maine, B.S., B.A., 1984; Utah State University, M.Ed., 1986

Sockbeson, Rebecca (1997) Coordinator of Nalive American Student Affairs/Multicultural Programming, Office of Campus Pluralism and Equal Opportunity; University of Maine, B.A., 1996; Harvard University, M.A., 1998
Soloway, Marshall (1994) Technology Coordinator, Muskie School; State University of New York at Oneonta, B.A., 1986; University of Southern Maine, M.A., 1994
Somma, Donna M. (1980) Budget Analyst, Finance and Administration; University of Southern Maine, A.A., 1984
Spence, Ruth Anne (1998) Interdisciplinary Training Specialist, Muskie School; University of Maine, B.S., 1974; Harvard University, M.P.A., 1988

Spicer, Ruby (1997) Policy Analyst, Muskie School; Bowdoin College, B.A., 1988; Boston University, M.P.H., 1991
Stearns, Bonnie (1991) Director of Business/Industry Development and Services, Applied Science External Programs; University of Southern Maine, B.S., 1990

Stebbins, Barbara D. (1984) Assistant Director of Media Services; Bethany College, B.A., 1971; University of Hawaii, M.Ed., 1983
Stebbins, Richard G. (1983) Professor of Chemistry; Wesleyan University, B.A., 1965; Texas A \& M University, Ph.D., 1970
Steckevicz, Mary Jo (1991) Project Director, School of Applied Science; Emmanuel College, B.A., 1973; Northeastern University, M.A., 1976, Ph.D., 1981
Steege, Mark W. (1989) Associate Professor of School Psychology; Iowa State University, B.S., 1978; University of Iowa, Ed.S., 1982, Ph.D., 1986 Steele, Wilhiam P. (1967) Associate Professor of Theatre; University of Maine, B.S.Ed., 1964, M.A., 1967
Stevens, Reid D. (1985) Associate Professor of Education; Suffolk University, B.S., 1971; University of Maine, M.Ed., 1973; University of Georgia, Ph.D., 1981
Stump, Walter R. (1968) Professor of Theatre; San Diego State College, B.A., 1959, M.A., 1960; Indiana University, Ph.D., 1974
Sturgeon, Richard H. (1962) Associate Professor of Physical Education and Coordinator, Developmental Mathematics Program; University of Maine, B.S., 1960, M.Ed., 1966

Sturman, Ted S. (1994) Assistant Professor of Psychology; Harvard College, A.B., 1987; University of Michigan, M.A., 1991
Sullivan, Kerry (1997) Computer and Database Specialist I, Muskie School; St. Joseph's College, B.A., 1970

Suscavage, Charlene E. (1986) Associate Professor of Spanish; Millersville University, B.S.E., 1970; University of Delaware, M.A., 1973; Penn State University, Ph.D., 1980
Sutton, John M., Jr. (1978) Professor of Education; Boston College, A.B., 1961; University of Maine, M.S., 1972, Ed.D., 1976
Swain, Susan (1986) Associate Director of Media
and Community Relations; City College of New York, B.A., 1974
Swanson, MarkT. (1983) Professor of Geology; Northeastern University, B.S., 1975; Lehigh University, M.S., 1979; State University of New York at Albany, Ph.D., 1982
Swartz, Richard G. (1991) Associate Professor of English; Washington University, B.A, 1976; University of California, Ph.D., 1986
Sylvain-Leonas, Mary L. (1996) Academic/Career Counselor, Lewiston-Auburn College; University of Southern Maine, B.A., 1991, M.S.Ed., 1998 Sytsma, Donald (1972) Associate Professor of Psychology; Arizona State University, B.A., 1965; University of Waterloo, Ph.D., 1971
Talbott, Celia Y. (1981) Transfer Admissions Counselor/Information Systems Specialist; University of Southern Maine, B.S., 1984
Taylor, Susan (1979) Director of Administration, College of Nursing; Westbrook College, A.S., 1979; University of Southern Maine, B.A., 1992
Theunissen, Yolanda (1989) Head, Osher Map Library and Curator of Cartographic Collections; Hunter College, B.A., 1973; University of Rhode Island, M.L.I.S., 1990
Thomas Lawson, Marjorie (1995) Assistant Professor of Nursing, College of Nursing; University of Pittsburgh, B.S., 1970; Pennsylvania State University, M.S.N., 1976; University of Rochester, Ph.D., 1995
Thompson, Janice (1984) Associate Professor of Nursing and Director, Honors Program; University of Iowa, B.S.N., 1975; University of Utah, Ph.D., 1983
Thompson, Nolan M. (1997) Coordinator of Employee and Community Outreach, Office of Campus Pluralism and Equal Opportunity; Clark University, B.A., 1976; Washington University in St. Louis, M.S.W., 1980
Thompson, W. Douglas (1989) Assistant Dean, School of Applied Science, and Professor of Epidemiology and Faculty Associate in Public Policy and Management; Director of Bingham Consortium; Yale University, B.A., 1970, Ph.D., 1980
Thornton, Bill (1989) Professor of Psychology; University of Texas at Austin, B.A., 1974; Baylor University, M.A., 1975; University of Maine, Ph.D., 1982
Tiffany, Julia (1981) Associate Professor, College of Nursing; University of Washington, Seattle, B.S., 1962; Rutgers, The State University, M.S., 1967; Vanderbilt University, Ed.D., 1990
Tisdale, Janice (1984) Manager, Business Research, Maine Small Business Development Centers, School of Business; Bates College, B.S., 1971; University of Minnesota, M.A., 1972
Tizon, Judy (1972) Associate Professor of Anthropology; University of Illinois, B.A., 1965; University of California, M.A., 1969, Ph.D., 1975
Towle, George (1997) Lecturer in Physical Education, Head Women's Cross Country and Track Coach; University of Maine, B.S., 1973; University of Southern Maine, M.S., 1978

Toy, Brian (1996) Associate Professor of Sports Medicine and Director, Department of Sports Medicine, College of Nursing; State University of New York, Cortland, B.S., 1983; Marshall University, M.S., 1985; University of Toledo, Ph.D., 1992

Tracy, Henry J. (1991) Assistant Professor of Chemistry; Bowdoin College, A.B., 1983; Massachusetts Institute of Technology, Ph.D., 1990
Troester, Bonnie L. (1994) Computer Applications Programmer, Management Information Services; Queens College, B.S., 1974.
Tukey, Geraldine M. (1970) Associate Professor, College of Nursing; Mercy College of Detroit, B.S., 1957; Boston University, M.S., 1964
Turner, Kimberly (1997) Assistant Athletics Director; University of Maine, B.S., 1987; University of Massachusetts, M.S., 1990
Turyn, Romaine (1993) Research Associate I, Muskie Institute of Public Affairs; Otterbein College, B.A., 1973; University of Maine, M.A., 1976 Ubans, Juris K. (1968) Professor of Art; Director, Art Gallery; Syracuse University, B.F.A., 1966; Pennsylvania State University, M.F.A., 1968
Ubans, Mara (1970) Associate Professor of German; Indiana University, A.B., 1960; University of Southern Califomia, M.A., 1962, Ph.D., 1975
Ullian, Lawrence (1994) Director, Public Welfare Training; Boston State College, B.S., 1968; University of Massachusetts, M.S., 1973; Indiana University, Ed.D., 1980
Vail, Thomas (1996) Technical Director, Department of Theatre
Valdes-Leon, Silvia R. (1994) Assistant Professor of Mathematics and Staistics; University of ChileSantiago, B.S., 1982; University of Iowa, M.S., 1990, Ph.D., 1993
Vance, FR (1985) Head Teacher, Child Care Services; University of Southern Maine, B.F.A. 1975
VanZandt, C.E. (1987) Professor of Education; MichiganState University, B.A., 1969, M.A., 1970; University of Maine, Ed.D., 1976
Vess, Susan M. (1988) Associate Professor of School Psychology, Human Resource Development; Loretto Heights College, B.A., 1970; University of Illinois, A.M., 1972, Ph.D., 1977
Vines, Susan W. (1991) Chair, Undergraduate Program and Associate Professor of Nursing, College of Nursing; Keuka College, B.S.N., 1966; Boston University, M.S.N., 1971; Case Westem Reserve University, Ph.D., 1987
Violette, George R. (1988) Associate Professor of Accounting; University of Maine at Augusta, B.S., 1978; University of Maine, M.B.A., 1982, Arizona State University, Ph.D., 1987
Vose, Margaret E. (1987) Laboratory Associate, Department of Geosciences; Springfield College, B.S., 1980

Voyer, John J. (1987) Associate Professor of Business Administration; Harvard University, A.B., 1973; Clark University, M.B.A., 1981; University of Massachusetts, Ph.D., 1986
Wachholz, Sandra (1997) Assistant Professor of Criminology; St. Cloud University, B.A., 1982;

Sam Houston State University, M.A., 1984, Ph.D., 1994
Wagner, David (1988) Associate Professor of Social Work and Sociology; Columbia College, B.A., 1972; Columbia University, M.S., 1976; University of Massachusetts, M.A., 1980; City University of New York, Ph.D., 1988
Wakem, Crystal (1996) Automation Administrator, Muskie School
Walker, H. Fred (1995) Assistant Professor of Technology; Califomia State University at Fresno, B.S., 1990, M.B.A., 1992; Iowa State University, Ph.D., 1995
Walker, Lisa (1995) Assistant Professor of English; Oberlin College, B.A., 1987; Louisiana State University, M.A., 1991
Walker, Sue (1996) Graphic Designer, Muskie School; Syracuse University, B.A., 1967
Walkling, Robert A. (1969) Associate Professor of Physics; Swarthmore College, B.A., 1953; Harvard University, M.S., 1954, Ph.D., 1962
Walton, David (1990) Assistant Director for Data Processing, Student Financial Aid; University of Maine, B.A., 1990
Walz, Catherine H. (1993) Project Coordinator, Workplace Literacy Project; University of New Hampshire, B.A., 1972; University of Southern Maine, M.S., 1980
Wanderer, Nancy (1995) Director of Legal Writing and Research Program and Instructor of Law; Wellesley College, B.A., 1969; George Washington University, M.A., 1978, University of Maine School of Law, J.D., 1990
Ward, Sarah (1995) Training Specialist, Muskie Institute; Bucknell University, B.A., 1968
Ward, Thomas M. (1976) Professor, School of Law; University of Pennsylvania, B.A., 1965; Notre Dame Law School, LL.B., 1968; University of Illinois Law School, LL.M., 1970
Waxler, Lawrence I. (1976) Associate Director, Office of Sponsored Programs; University of Southem Maine, B.S., 1975, M.B.A., 1989
Webb, Kate (1998) Project Specialist, Muskie School; University of Southem Maine, B.A., 1989, M.S., 1996

Weber, Kenneth E. (1991) Associate Professor of Biology; Northem Arizona University, B.A., 1971; The College of William and Mary, M.A., 1979; Harvard University, Ph.D., 1986
Webster, Brenda D. (1984) Student Services and Information Systems Coordinator, College of Nursing; University of Southem Maine, B.A., 1981
Wechsler, Barton (1998) Dean, Muskie School; Antioch College, B.A., 1970; Wright State University, M.S., 1975; The Ohio State University, Ph.D., 1985
Wechsler, Louise (1998) Director of Administration, University of Maine School of Law; Antioch College, B.A., 1970
Wells, William (1986) Director of Law Library, Professor of Law and Associate Provost for Technology, Information Systems, and Libraries; Eastem Oregon College, B.S., 1972; University of Puget

Sound, J.D., 1977; University of Washington, M.L.L., 1979

Welty, Charles (1979) Professor of Computer Science; University of California at Berkeley, B.S., 1967, M.S., 1968; University of Massachusetts, M.S., 1977, Ph.D., 1979

West, Richard L. (1991) Associate Professor of Communication and Associate Dean, College of Arts and Sciences; Illinois State University, B.A., 1983, M.S., 1984; Ohio University, Ph.D., 1991
Westfall, James R. (1983) Associate Professor of Business Administration; Dartmouth College, A.B., 1967; Amos Tuck School of Business Administration, M.B.A., 1968
Westlake, Susan (1996) Computer Trainer II, Muskie School; Mount Holyoke College, B.A., 1973; University of Southem Maine, M.B.A., 1987 Weyand, Arthur (1989) Director, English as a Second Language Services, Student Language Services; Colby College, B.A., 1968; University of Wisconsin, M.A., 1969; Trinity College Dublin, H.Dip.Ed., 1974; OxfordCenter for English Studies, RSA Cert. TEFL, 1981
Wheeler, Susan (1997) MACWIS Computer Trainer II, Muskie School; University of Hawaii, B.A., 1985

Whitaker, R. Blake, Jr. (1997) Assistant Professor of Natural and Applied Sciences; Bates College, B.S., 1974; Yale University, Ph.D., 1980
White, ColleenA. (1989) Academic Counselor and Coordinator of Advising Support Services; University of Southem Maine, B.A., 1991
White, William (1998) Assistant Professor of Clinical Education; Lake Forest College, B.A., 1974; Lesley College, M.A., 1975; University of Massachusetts, Ph.D., 1985
Whitehouse, Nancy L. (1996) Software Specialist; University of Conneclicut, B.S., 1965, M.A., 1967; Western New England College, MBA, 1979
Whitmore, Allan R. (1969) Associate Professor of History; University of Maine, B.A., 1962; Northwestern University, M.A., 1964, Ph.D., 1970
Wilcox, Lynn (1989) Assistant Law Librarian for Technical Services, School of Law; University of Southem Maine, B.A., 1976; Simmons College, M.S., 1981

Willoughby, Darryn S. (1995) Assistant Professor of Sports Medicine, College of Nursing; Tarleton State University, B.S., 1986, M.Ed., 1989; Texas A\&M University, Ph.D., 1993
Wilson, Trudy G. (1995) Assistant Professor of Art Education; University of North Carolina at Charlotte, B.A., 1970; Appalachia State University, M.A., 1982; Indiana University, Ph.D., 1992

Wininger, Kathleen J. (1989) Associate Professor of Philosophy; Southern Connecticut State University, B.A.; Temple University, Ph.D., 1988
Wood, Karen (1997) Coordinator of MH/MR Training, Muske School; Bates College, B.A., 1978 Wood, Margo (1980) Professor of Education; Vassar College, B.A., 1961; University of Southem Maine, M.S., 1979; Boston University, Ed.D., 1986

Woshinsky, Oliver H. (1971) Professor of Political Science; Oberlin College, B.A., 1961; Yale University, M.A., 1967, M. Phil., 1968, Ph.D., 1971
Wriggins, Jennifer (1996) Associate Professor of Law; Yale University, B.A., 1980; Harvard Law School, J.D., 1984
Yonng, Cynthia A. (1978) Coordinator of Student Affairs and Academic Counselor, School of Business; University of Southem Maine, B.S., 1987
Young, Jane Coolidge (1994) Director, University Health Services; University of Maine, B.S., 1970; Boston University, M.S., 1975; University of Rochester, Ph.D., 1988
Zaner, John A. (1974) Associate Professor of Technology; Millersville State College, B.S., 1969, M.Ed., 1972;Pennsylvania State University, Ed.D., 1977
Zanghi, Martin (1996) Manager of Youth Development, Muskie School; University of Massachusetts, B.A., 1981; University of Connecticut, M.S.W., 1985

Zarr, Melvyn (1973) Professor, School of Law; Clark University, A.B., 1958; Harvard University, LL.B., 1963
Zenie, Katherine (1998) Assistant Director, Northern New England Products Trade Show, Maine Small Business Development Centers, School of Business
Zhao, Jie (1998) Assistant Professor of History, Lanzhou University, B.A., 1982; University of Hawaii at Manoa, M.A., 1988; Princeton University, Ph.D., 1995
Ziller, Jasper (1998) Computer and Database Specialist I, Muskie School
Zillman, Donald (1990) Godfrey Professor of Law; University of Wisconsin, B.S., 1966, J.D., 1969; University of Virginia, LL.M., 1973

## Part-Time Faculty

Allen, Bruce A., Associate Professor Emeritus of Mathematics Education
Ames, Pamela, Lecturer in Criminology
Andersen, Patricia, Lecturer in Art
Bailow, Judith, Assistant Professor of Nursing
Baker, Harlan R., Lecturer in Theatre
Barnes, Diane Newson, Lecturer in History
Barnes, Jack C., Lecturer in Core Curriculum
Baschkopf, Daniel J., Lecturer in Associate Business Administration
Baxter, Jean M., Lecturer in Art
Beauclair, Claude, Lecturer in French
Bendzela, Michael T., Lecturer in English
Bennett, Sarah S., Lecturer in Spanish
Benson, S. Patricia, Lecturer in Art
Bernier, Rene, Lecturer in Chemistry
Bien, Leon J., Lecturer in Economics
Biggie, Dennis P., Assistant Professor of Philosophy
Birtolo, Pat Delaney, Lecturer in Human Resource Development
Blayne, Gerald, Lecturer in Accounting
Boisvert-Guay, Monique, Lecturer in Business Law
Bolduc, George R., Lecturer in Mathematics
Boston, Robert C., Lecturer
Bouchard, Donald L., Lecturer
Briggs, Kaitlin, Assistant Professor of Interdisciplinary Studies
Brown, Charles, Lecturer in Mathematics
Brunette, John, Lecturer in Mathematics
Bruns, William, Lecturer in Mathematics
Burlin, Paul T., Assistant Professor
Caldwell, Jean M., Lecturer in English
Carner, Marcia W., Lecturer in Art
Chacko, Rosy J., Lecturer in Biology
Chase, Linda, Instructor in Nursing
Chebowicz, John, Lecturer in English
Chickering, Ellen S., Lecturer in Music
Clark, Wayne, Lecturer in Business Administration
Coleman, Carolyn, Lecturer in Basic Writing
Connolly, Michael C., Lecturer in History
Crockett, Charles, Lecturer in Accounting
Cummings, Glenn, Lecturer in Economics
Cuzner, Robert, Lecturer in Business Administration
Dana, Richard, Lecturer in Accounting
Davidson, Daniel, Lecturer in Media Studies
Davis, Gloria, Lecturer in Social Work
Davis, Mary, Lecturer in Mathematics
DeLeon, Andrea, Lecturer in Media Studies
Dennison, Richard A., Lecturer in Basic Writing
Denton, Priscilla, Lecturer in Mathematics
DeRaps, Penny, Associate Professor of Nursing
Dickson, William, Lecturer in Business
Administration
DiMillo, Jane Burke, Lecturer in Basic Writing
DiRocco, Arthur, Lecturer in Human Resource Development
Donnis, Margaret, Lecturer in Basic Writing

Doran, Mary J., Lecturer in Business
Administration
Dorney, Lindsay, Lecturer in English
Ennamorati, Audrey, Lecturer in Basic Writing
Eyerman, Mark, Lecturer in Geography and Anthropology
Fink, Elaine, Lecturer in Biology
Fleishman, Carol, Lecturer in Mathematics
Fleming, Colleen, Lecturer
Foote, Richard H., Lecturer in Accounling
Fournier, Anthony, Lecturer in Therapeutic Recreation
Fowler, Mary Lee, Lecturer in English
Freeman, Ardith A., Associate Professor in Music
Gatehouse, Sally, Lecturer in Linguistics
Gendron, Roger, Lecturer in Astronomy
Gilbert, Dennis C., Lecturer in English
Glover, Robert A., Lecturer in Music
Goodale, Rebecca, Lecturer in Art
Hanna, John G., Professor Emeritus in English
Hannemann, Judith E., Lecturer in English
Harrington, Faith, Assistant Professor of American and New England Studies
Harrod, Elizabeth, Lecturer in Philosophy
Hart, Valerie, Associate Professor of Nursing
Hartley, Herbert S., Lecturer in Business
Hebson, Charles, Lecturer in Environmental Science and Policy
Hendrickson, Julie, Lecturer in Basic Writing
Higgins, Ikuko, Lecturer in Japanese
Hines, John, Lecturer in Philosophy
Hinson, Alison, Lecturer in Business Administration
Hinson, Jonathon, Lecturer in Business Administration
Hodgdon, Wendy, Lecturer in Mathematics
Humphrey, Gene D., Lecturer
Hutton, Nancy, Lecturer in Professional Education
Irish, Jayne E., Lecturer in Basic Wriving
Johnson, Christine M., Lecturer in Basic Writing
Johnson, Mark, Lecturer in Philosophy
Jones, Joanna M., Lecturer in Business Administration
Jones, Robert K., Assistant Professor
Jordan, Robert, Lecturer in Economics
Kaufman, Polly, Lecturer in History
Kempton, Gay E., Lecturer in Art
Kelleher, Dorothy F., Lecturer in Mathemarics
Kemp, Robert, Lecturer in English
Kennedy, Judith Caren, Lecturer in Professional Education
Konrad, Shelley C., Lecturer
Krass, Teresa, Lecturer
Lamberson, Linda, Instructor in Nursing
Langevin, Cynthia, Lecturer
Layton, Dean, Lecturer in Business Administration
Leach, Thomas C., Lecturer in Business Administration
Lee, Richard H., Lecturer

Libby, Patricia, Lecturer
Lisberger, Linda, Lecturer in Art
Lovell, John, Lecturer in English
Lynch, Frederick J., Lecturer in Art
MacArthur, Susanne G., Lecturer in Professional Education
Makas, Elaine C., Associate Professor
Manduca, Mark W., Lecturer in Music
Marston, Alan, Lecturer in Communication
Martel, Michael P., Lecturer in Accounting
Mason, Ann M., Lecturer in Mathematics
Max, Stanley M., Lecturer in Mathematics
Mazer, Ronald S., Lecturer
McCarthy, Joseph E., Lecturer in Biology
McGrath, Barbara Hope, Assistant Professor of English
McMillan, Amy, Lecturer in Biology
Meyers, Bernard C., Lecturer
Milliken, Robert A., Lecturer in English
Moore, Karen R., Lecturer in Business Administration
Moore, Margaret H., Lecturer
Morris, Elke, Lecturer in Art
Moulton, Robert, Lecturer
Mundhenk, Leigh, Lecturer in Business Administration
Naiden, Peter C., Lecturer in Geosciences
Nason, Carol G., Lecturer in Public Policy and Management
Neuberger, Harold T., Professor of Professional Education
O'Reilly, Elaine, Lecturer in University Seminar
Padham, Elwood, Lecturer in Technology
Palmer, Margaret, Lecturer in Human Resource Development
Paras, Taxia E., Lecturer in Mathematics
Parke, Gregory, Lecturer in Art
Patterson, Vernon P., Lecturer in Human Resource Development
Pendleton, Denise, Lecturer
Pflug, Julie, Lecturer in Chemistry
Phinney, Rosamond J., Lecturer in Mathematics
Piggott, Jill, Lecturer in English and University Seminar
Pijewski, John, Lecturer in English
Porter, Daniel, Lecturer in Core Curriculum
Potter, Anne, Lecturer in Linguistics
Prince, Sanford J., Lecturer in Professional Education
Prudente, Caryn K., Lecturer in Chemistry
Quimby, Judith H., Lecturer in Music
Reckitt, Lois Galgay, Lecturer
Redlon, Rebecca, Lecturer in Basic Writing
Reeves, Janet, Lecturer in Music
Regler-Daniels, Margaret, Lecturer in Foreign Languages and Classics
Reim, Bernard B., Lecturer in Astronomy
Rhudy, James, Instructor in Nursing
Richard, W.I., Lecturer in Core Curriculum
Riesenberg, Elaine, Lecturer in English
Robbins, Susan M., Lecturer
Rodick, David W., Lecturer in Philosophy
Rolfe, John Frederick, Lecturer in English

Rooks Hughes, Lorna, Lecturer in English
Russell, Shirley, Instructor in Nursing
Salmon, Nancy C., Lecturer in Theater
Sanavitis, Yvonne, Lecturer in Spanish
Sandberg, Charles Michael, Lecturer in Public
Policy and Management
Scher, Reed, Lecturer
Schneider, David, Lecturer in Art
Schnell, John M., Lecturer in Music
Schuit, Stephen, Lecturer in Business Administration
Searway, Dixie L., Lecturer in Human Resource Development
Severens, Kenneth W., Professor of American and New England Studies
Sheridan, Jean, Lecturer in Basic Writing
Sholl, Elizabeth, Lecturer in English
Small, Ralph D., Lecturer in Mathematics
Smith, George E., Lecturer in English
Smith, Nancy, Lecturer in Music
Somers, Dane, Lecturer in Business Administration
Souliere, Yvonne, Lecturer in Basic Writing
Spinella, Ronald J., Lecturer in Human Resource Development
Stackpole, Robert, Lecturer in Business Administration
Steinman, Richard, Professor Emeritus of Social Work
Stevens, Theresa, Instructor in Nursing
Street, Philo W., Lecturer in Music
Taylor, Karen D., Lecturer in Foreign Languages and Classics
TenBroeck, Craig, Lecturer in Core Curriculum
Tepler, Denise, Lecturer in Anthropology
Thompson, John, Lecturer in Core Curriculum
Troiano, Joseph, Lecturer in Accounting
Trombley, Linda B., Lecturer
True, Michael D., Lecturer
Turcotte, Linwood N., Lecturer in Professional Development
Turlo, Kathleen E., Lecturer
Turner, Stephen, Lecturer in Chemistry
Verret, Julianne, Lecturer
Walker, David, Lecturer in English
Walley, David R., Lecturer in Technology
Walters, Susan, Lecturer in Professional Education
Warren, William C., Lecturer in Technology
Weaver, Virginia A., Lecturer in Basic Writing
Wilde, Dana, Lecturer in English
Witherell, Keith, Lecturer in Business Administration
Yuhas, Joseph G., Lecturer
Zarrilli, Gerald V., Lecturer in English
Ziko, Walter, Lecturer in Professional Education


## Portland Campus

1. Alumni House
2. 25 Bedford St.
3. 92 Bedford St.
4. 94 Bedford St.
5. 102 Bedford St.
6. 118 Bedford St.
7. 120 Bedford St.
8. 126 Bedford St.
9. Woodbury Campus Center
10. 1 ChamberlainAve.
11. 7 Chamberlain Ave.
12. 11 Chamberlain Ave.
13. 15 Chamberlain Ave.
14. Child Care
15. 209 Deering Ave.
16. 222 Deering Ave.
17. 228 Deering Ave.
18. 39 Exeter St.
19. 45 Exeter St.
20. 47 Exeter St.
21.49/51 Exeter St.
21. 55/57 Exeter St.
22. 59/61 Exeter St.
23. 65 Exeter St.
24. 11 Granite St.
25. Law Building
26. Albert Brenner Glickman

Family Library
28. Luther Bonney Hall
29. Masterton Hall
30. Payson Smith Hall
31. Physical Plant
32. Police and Safety Office
33. Powers House
34. Science Building
35. James Sullivan Gymnasium
36. 13-15 Surrenden St.
37. Portland Hall

## Parking

*P1. Faculty/Staff
*P2. Student Commuter

* P3. Student Commuter/Resident Faculty/Staff/Meters
P4. Faculty/Staff
P5. Faculty/Staff
*P6. Faculty/Staff/Meters
P7. Faculty/Staff
*P8. Faculty/Staff
* P9. Faculty/Staff
*P10. Meters
*P11. Meters
*P12. Student Commuter/Resident/ Faculty/Staff
*P13. Faculty/Staff/Meters
* P14. Student Commuter/Resident/ Faculty/Staff (not illustrated on map, location is on Marginal Way)
*Handicap Parking


## Emergency Telephone Key

T1. Science Building
T2. Masterton Hall
T3. Campus Center
T4. Payson Smith/Luther Bonney Hall
T5. Surrenden Sreet
T6. Law Building
T7. Library Building

## Directions to the <br> Portland Campus

From either the north or the south, take the Maine turnpike to Exit 6A. FollowI-295 to Exit 6B (Forest Ave. North). Turn left at second raffic light onto Falmouth Street. The campus is on your left.


## Gorham campus

1. Academy Building
2. Admissions Office
3. Anderson Hall
4. Art Gallery
5. Bailey Hall
6. Kenneth Brooks Student Center
7. 7 College Ave.
8. 19 College Ave.
9. 51 College Ave.
10. Corthell Hall
11. Dickey-Wood Hall
12. Field House
13. Ice Arena
14. Warren Hill Gymnasium
15. Mechanical Maintenace Shop
16. McLellan House
17. John Mitchell Center
18. Physical Plant
19. President's House
20. Robie-Andrews Hall
21. Russell Hall
22. Upton-Hastings Hall
23. Woodward Hall

## Parking

P1. Ice Arena Parking Lot
P2. Faculty/StaffParking, M-F, 7:30 a.m.-7:30 p.m.

P3. Visitor Parking (Metered)
University Parking Permit needed for on-campus parking. Meters available for visitor parking. Information available at Police and Safety in UptonHastings Hall.

## Emergency Telephone Key

T21. P-22 School Street
T22. Bailey Bus Stop
T23. P-16 Bailey Hall
T24. John Mitchell Center
T25. Warren Hill Gym
T26. P-23 Parking Lot
T27. 19 College Avenue
T28. P-34 Towers

## Directions to the <br> Gorham Campus

From the north, take the Maine Turnpike to Exit 8. Follow Route 25 west to Gorham. At Gorham Center, turn right onto Route 114. Take the first left onto College Avenue. The campus will be on your right. From the south, take the Maine Turnpike to Exit 6 and tum left after the toll booth. At the second traffic light tum left onto Route 114 west. Follow Route 114 to the village of Gorham. Tum left after the first traffic light onto College Avenue.

## Directions to the Lewiston-Auburn Campus

From either the north or south, take the Maine Turnpike to Exit 13.Coming from the south, take a left at the stop sign; if you're coming from the north, go straight. Follow the signs for Lisbon Falls and Brunswick. Proceed to the second stop light and turn left onto Westminster Street. Lewiston-Auburn College is the cedar-shingled building at the top of the hill on the right.

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Add/Drop Policy
Administration, University of Southern Maine
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Advising Services Center
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Appeals Policies
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