

1983

University of Southern Maine Undergraduate Catalog 1983-1984

University of Southern Maine

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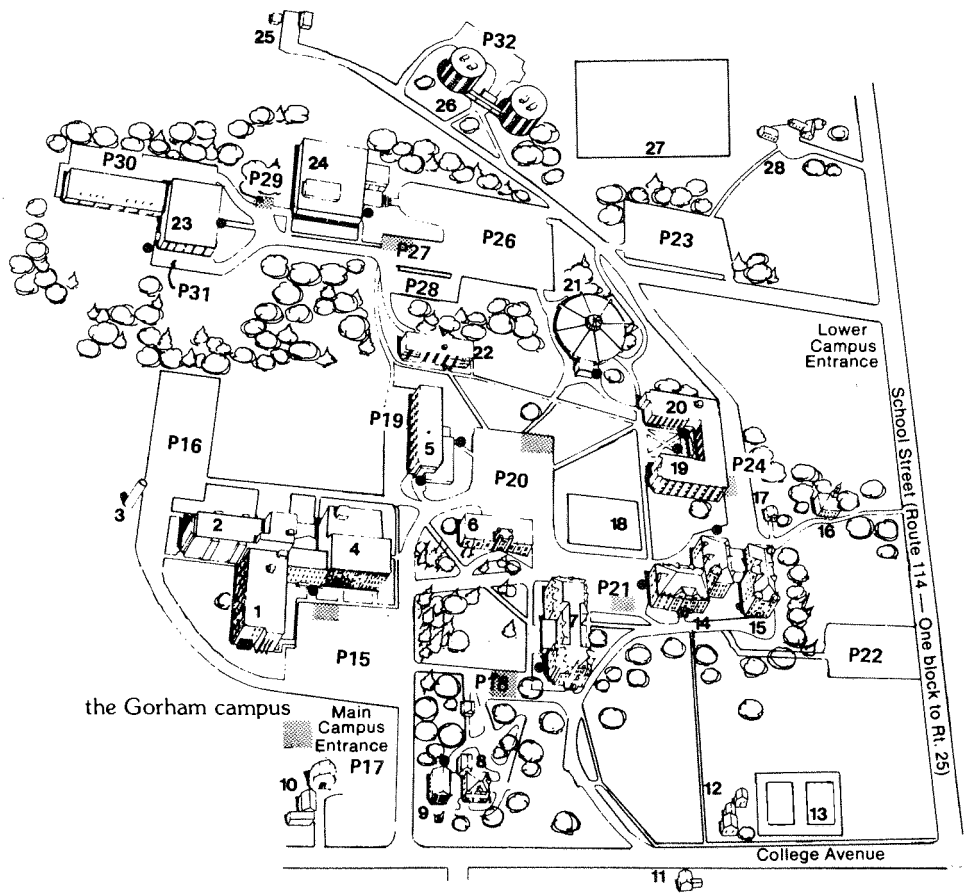
Betty Lewis



University of Southern Maine

Undergraduate Catalog
1983-1984





Accessible buildings provide entrances (indicated by dots) and elevators adequate for all handicapped persons. Parking areas for the handicapped are shown by dotted areas.

Gorham Campus

- | | |
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| <ul style="list-style-type: none"> 1. Bailey Hall (Science) 2. Bailey Hall (Classroom) 3. Water Tower 4. Bailey Hall (Library) 5. Woodward Hall 6. Russell Hall 7. Corthell Hall (Admissions) 8. President's House 9. Art Gallery 10. Facilities Management 11. University College of Education,
24 College Avenue 12. Maine Children's Resource Center,
10 College Avenue 13. Tennis Courts 14. Robie Hall 15. Andrews Hall 16. The "Academy" 17. Service Building 18. Tennis Courts 19. Hastings Hall 20. Upton Hall 21. Dining Center 22. Anderson Hall | <ul style="list-style-type: none"> 23. Industrial Education Center 24. Warren G. Hill Gymnasium 25. Heating and Sewage Plants 26. Dickey-Wood Residential Towers 27. Athletic Field 28. McLellan House <p>Parking</p> <ul style="list-style-type: none"> P15. Faculty/Staff P16. Student Commuter P17. Faculty/Staff P18. Visitor P19. Student Commuter P20. Faculty/Staff P21. Faculty/Staff P22. Student Resident P23. Student Resident P24. Student Resident P26. Student Resident P27. Faculty/Staff/Student Commuter P28. Student Resident P29. Faculty/Staff P30. Student Commuter P31. Faculty/Staff P32. Faculty/Staff |
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University of Southern Maine

Undergraduate Catalog
1983-1984

University of Southern Maine

For Gorham mailing address: University of Southern Maine, College Avenue, Gorham, Maine 04038

For Portland mailing address: University of Southern Maine, 96 Falmouth Street, Portland, Maine 04103

The University's main telephone number: (207) 780-4141

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Mrs. Ellen W. Wasserman, 3416 Garrison Farms Road, Pikesville, Maryland 21208, 301-484-5862

Office of the Chancellor, 107 Maine Avenue, Bangor

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

The University of Southern Maine does not discriminate on the basis of race, color, creed, sex, national origin, handicap, or age in the recruitment and admission of students, the recruitment and employment of faculty and staff, and the operation of any of its programs and activities, as specified by federal and state laws and regulations. The designated coordinator for University compliance with these laws is Kathleen H. Bonchard, Director of Equal Employment Opportunity/Affirmative Action.

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

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

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Academic Calendar, 1983-1984

Fall 1983 Semester

First Day of Classes	8:00 a.m., Tuesday, September 6
Fall Vacation Begins	After classes on Thursday, October 20
Classes Resume	8:00 a.m., Monday, October 24
Thanksgiving Vacation Begins	After classes on Tuesday, November 22
Classes Resume	8:00 a.m., Monday, November 28
Last Day of Classes	Friday, December 16
Final Exams	Monday, December 19 through Thursday, December 22

Spring 1984 Semester

First Day of Classes	8:00 a.m., Monday, January 9
Winter Vacation Begins	After classes on Friday, February 17
Classes Resume	8:00 a.m., Monday, February 27
Spring Vacation Begins	After classes on Friday, March 23
Classes Resume	8:00 a.m., Monday, April 2
Last Day of Classes	Friday, April 27
Final Exams	Monday, April 30 through Friday, May 4
Commencement	Saturday, May 5

The University

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

In 1878, the Western Maine Normal School was founded at Gorham. Its mission broadened and its student body grew, and in 1945 it became Gorham State Teachers College. Similarly, Portland Junior College, developed in 1933 to bring higher education within commuting distance of a growing population, became the University of Maine at Portland in 1957. The two institutions were joined in 1970 as the University of Maine at Portland-Gorham, and in 1978 became known as the University of Southern Maine. Looking back over the history of those schools and colleges, one can appreciate that the University today is stronger because each of its predecessors grew with the times and the students they served.

Not surprisingly, each college and university in the country likes to think of itself as unique, as offering experiences unavailable at other institutions of higher learning. To be sure, the University of Southern Maine has many characteristics typical of medium-sized, public universities elsewhere in the United States. It comprises six academic units (Arts and Sciences, Law, Education, Nursing, Business, and Basic Studies); it enrolls over 8,000 students, and is the second largest of the seven campuses making up the University of Maine system; it offers five associate and forty baccalaureate degree programs, as well as graduate and professional degrees in law, nursing, business, computer science, education, and, most recently, public policy and management.

But the University has many unique features, too.

It is both large and small. With 1,100 students resident on the Gorham campus, the University has the characteristics of a rural, New England college; faculty close to hand and facilities set in attractive pastoral surroundings. 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 only found in much larger institutions.

The student body of the University is the most diverse in the state of Maine. Over two-thirds are full-time students; more than half are women, and the average age of an undergraduate is 25. This diversity of age provides a lively and challenging environment for learning; a context in which scholarship and the experience gained from living complement one another.

The University is also the most cosmopolitan of Maine institutions of higher education. There is easy access to the cultural and social resources of Boston and New York, as well as those of Portland. The City of Portland and the University cooperate to provide internships for students in political science, law, sociology, nursing, and related areas. The University's Center for Research and Advanced Study engages in a broad range of ventures with municipal, county, state, and federal agencies, as well as with private foundations and industry. These all serve to provide the student with formal and informal learning opportunities in the areas of the arts, humanities, politics, business, mass communication, and high technology.

Most important, however, the University is a growing and developing institution. At a time when many colleges and universities in the country are struggling with declining enrollments, drastically curtailed resources, and a need to redefine their mission, this University, by virtue of its location, range of student body, quality of faculty, and level of support, is responding creatively to its particular circumstances and the challenges of its students. Within the past year, a new Core curriculum has been established: a curriculum which

attempts to define the types of skills and the kinds of learning experiences our graduates should have in today's world. University Convocation, first begun in 1981 and repeated yearly, seeks to address an issue of interest to the times — "The City," "The Changing Roles of Women and Men," and in 1983-84, "The Age of the Computer" — and to engage students, faculty, and citizens in a common discussion across academic disciplines and between the University and the community. New graduate programs in computer science, nursing, and public policy and management reflect a concern with preparing individuals for contemporary careers. The University is attempting to strengthen its commitment to serve the needs of off-campus students, in-service teachers, and professionals on-site in business and industry.

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

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

Programs of Study and Admissions

Baccalaureate Degree Programs

College of Arts and Sciences

Applied Chemistry (B.A. degree or B.S. degree)	History
Art (B.A. degree or B.F.A. degree)	Liberal Studies*
Biology, including Pre-med, Pre-dental and Pre-vet	Mathematics
Communication	Music (B.A. degree or B.M. degree in Performance)
Computer Science (B.S. degree)	Philosophy
Criminology	Physics and Engineering
Earth Science	Political Science
Economics	Psychology
English	Self-Designed major**
French	Social Science
Geology	Sociology
Geography-Anthropology	Theatre

*Liberal Studies: Declaration of the major is normally done at the end of the sophomore year with the approval of the Liberal Studies Major Board.

**Self-Designed Major: Approval of this program must be given by the Committee on Self-Designed Majors after students have enrolled at the University.

Engineering

This University offers the first year of the four-year program common to all engineering majors (with the exception of electrical engineering), and the first and second years in engineering physics. These offerings meet the general requirements of the corresponding programs at the University of Maine at Orono. Preferred transfer consideration to UMO is extended to Maine residents.

College of Education

The College of Education currently offers four-year programs leading to the degree of bachelor of science.

- Art Education (certification, K-12)
 - Early Childhood/Elementary Education
 - Industrial Arts Education (certification, K-12)
 - Industrial Technology (non-teaching program)
 - Music Education (certification, K-12)
 - Vocational/Occupational Education (teaching program)
 - Vocational Technology (non-teaching program)
- *Secondary Education Mathematics

For more information refer to the College of Education section of this catalog.

*See mathematics and computer science information under College of Arts and Sciences.

School of Nursing

The School of Nursing offers a baccalaureate program with an upper-division major in nursing. The program leads to the degree of bachelor of science with a major in nursing. The School also offers the bachelor of science and associate of science degrees in therapeutic recreation. For more information refer to the School of Nursing section of this catalog.

School of Business, Economics and Management

The School of Business, Economics and Management offers a four-year program leading to the degree of bachelor of science in business administration with majors available in business administration and accounting. The bachelor of science degree with a major in economics is also available. The School also offers a master of business administration degree. For more information refer to the School of Business, Economics and Management section of this catalog.

Associate Degree Programs

School of Business, Economics and Management

The School of Business, Economics and Management offers two-year programs leading to the degree of associate of science in business administration. Students in this program may choose from among the following options: accounting, business computer programming, business management, business marketing, hotel, motel, and restaurant management, and real estate.

College of Arts and Sciences

The College of Arts and Sciences, in conjunction with the Division of Basic Studies, offers a two-year program of study leading to the degree of associate of arts in liberal arts. For further information, please refer to the College of Arts and Sciences section of the catalog.

School of Nursing

The School of Nursing offers a two-year program leading to the degree of associate of science in therapeutic recreation. Candidates who successfully complete this program may have opportunities for employment in nursing homes, homes for the elderly, agencies for the handicapped, rehabilitation centers, and programs offered by human services agencies, camps, parks, and playgrounds.

Division of Basic Studies

The Division of Basic Studies offers two-year programs leading to the associate degree in selected studies and human services through centers located in Saco, Sanford, and the Intown Center (68 High Street, Portland). For further information, please refer to the Division of Basic Studies section of the catalog.

Undergraduate Admissions

The University welcomes applications for admission from academically qualified students regardless of their race, color, creed, sex, national origin, handicap, or age. All candidates for admission must submit a completed University of Maine application form. Application materials may be obtained either in person or by telephone (207-780-5215) from the Office of Admissions located in Corthell Hall on the Gorham campus.

Admission to most degree programs at the University is on a selective basis. The University admits men and women to its baccalaureate and associate degree programs whose academic credentials and life experiences indicate potential for success in a University-level curriculum.

Each applicant for admission is required to submit a completed University of Maine application form, including the nonrefundable \$15 application fee, which details the candidate's personal, academic, and recreational background. Also, as an integral part of this application, the candidate is asked to describe in narrative form his or her interest in the University and the specific degree program to which the applicant is applying.

The University will consider applications for the fall semester at any time beginning in September of the year prior to the fall semester in which the applicant intends to commence academic work. Due to the fact that some programs are only able to accept a limited number of candidates, applicants

are urged to submit their credentials at their earliest convenience in order to receive maximum consideration. The University also considers applicants for the spring semester each year. As in fall admissions, applicants are urged to submit all credentials on a timely basis in order to receive appropriate consideration.

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

General Admission Requirements

Requirements for admission to the University are established by each school and college within the University. The requirements indicated below are in keeping with the degree programs currently offered.

College of Arts and Sciences

	Unit = one year of study
English	4 units
Mathematics	3 units (Algebra I, II, and Geometry)
Sciences	2 lab units
History/Social Science	2 units
Foreign Language	2 units (one language)
Mathematics majors require 4 units	
Biology majors require 3 lab units; pre-nursing candidates require Biology and Chemistry; foreign language majors require 3 units; foreign language optional for pre-nursing candidates.	

School of Business, Economics and Management

Four-year Baccalaureate Program

English	4 units
Algebra I, II	2 units
Geometry	1 unit
Electives	9 units

College of Education

English	4 units
Mathematics	3 units (Algebra I, II, and Geometry)
Sciences	2 lab units
History/Social Sciences	2 units
Foreign Language	Optional
Mathematics majors in Secondary Education	4 units

The Trustees of the University recognize that terms such as traditional, adult, and so on, are useful in describing certain administrative procedures. The trustees wish to emphasize, however, that the factors which determine a student's enrollment status are secondary in the University's definition of a student and that students of varying circumstances represent a desirable form of diversity.

Traditional Freshman Candidates Applicants who are applying to the University during their senior year in secondary school, or who have been graduated for less than three years with no collegiate attendance, must arrange for the forwarding of their secondary school transcript to the Office of Admissions. Scores from the Scholastic Aptitude Test (SAT) or the College Board must also be submitted. Achievement tests of the College Board are **not** required. The American College Test (ACT) may be substituted for the SAT for admission purposes.

Adult Candidates Applicants who have been graduated from secondary school for more than three years must also arrange for the forwarding of their secondary school transcript to the Admissions Office. The Scholastic Aptitude

Test (SAT) scores are optional for admission. Adult candidates may submit SAT scores for placement purposes since these scores may be used to declare minimum academic proficiencies. Evaluation of adult candidates will take into account the uniqueness of each applicant's background and life experiences in addition to academic records.

Transfer Candidates The Office of Transfer Affairs, a division of the Admissions Office, coordinates the evaluation and admission of transfer candidates to the University. Applicants who have attempted 12 semester hours of credit or more beyond the secondary school level are classified as transfer candidates and must submit their collegiate transcripts together with secondary school and SAT records. Transfer candidates who have earned 30 or more semester hours of credit may forego submitting their secondary school and SAT records. Credit for previous collegiate study is granted for C grades or better in courses that are generally applicable to those offered in the student's degree program at the University of Southern Maine. Students applying for transfer from non-accredited institutions must have earned a minimum 2.75 average (on a 4.0 scale) to be considered for admission. The Admissions Office, in conjunction with the dean of a particular school or college within the University may defer for one semester the acceptance of credit from a non-accredited institution.

Special procedures for transfer students from within the University of Maine system:

- a. Applications may be procured at the Admissions Office of any University of Maine campus. Transcripts are sent from the sending campus to the Admissions Office at no cost to the student; however, students must request that the transcript be sent.
- b. Students must have a minimum grade point average (GPA) of 2.0 (on a 4.0 scale) in a parallel degree program for transfer consideration to this campus.
- c. Transfer credit will be awarded for all courses in liberal studies or a University parallel program. A grade of B or better must be earned in general studies or nonparallel programs from other University of Maine campuses.
- d. 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.

Readmission Candidates Students enrolled in degree programs who either formally withdraw or who simply fail to register for a particular semester maintain their enrolled or matriculated status for one academic year from the fifth class day of the next regular academic term. If the student wishes to register during that time, no readmission process is required; they may register through the Registrar's Office. If the non-registered time period is longer than one academic year, an application for readmission must be filed with the Admissions Office. Readmission following academic suspension generally requires the approval of the academic dean from the suspending school or college.

Special Student Candidates The University of Southern Maine encourages the local community to take advantage of the many diverse course offerings of the University. Regular academic courses for self-interest and enrichment are available through the classification "special student." By University definition a special student is one not enrolled in a degree program of study.

Special students are enrolled each semester on a space-available basis. Those special students interested in pursuing coursework toward a degree at the University as special students are required to contact the Advising and Information Department, Payson Smith Hall, on the Portland campus to discuss appropriate course selection and scheduling. Special students enrolled at the University are ineligible to be considered for campus-based financial aid. However, bank loans for educational purposes based on at least half-time University enrollment (6 credits) may be investigated by interested applicants.

International Students Due to limitations on financial assistance, applications are encouraged only from those international students who are able to fund fully their educational expenses from their own resources. To certify this, a Declaration and Certification of Finances Statement must be filed as part of the application process. This form must be fully documented and notarized and should accompany the completed application. Candidates from foreign countries whose native language is not English are required to submit test results of the TOEFL examination (Test of English as a Foreign Language). In addition, candidates must submit test results of the Scholastic Aptitude Test (SAT). Candidates who have completed at least one year of University studies at an English-speaking University with acceptable grades are not required to take the SAT examination. They must, however, take the TOEFL examination if English is not the native language. For September 1984 admission, all international student admission credentials must be filed with the Admissions Office no later than April 15, 1984.

Physically Handicapped Students The University is committed to developing the educational potential of handicapped students by providing the opportunity and support to fulfill their aspirations of higher learning. For detailed information, handicapped students should contact the Coordinator for Handicapped Student Services who is located in Payson Smith Hall on the Portland Campus.

College of Arts and Sciences Early Admission Program This program provides the opportunity for selected students who have completed their junior year of high school to enter the University as fully matriculated University freshmen. The Early Admission Program has been designed for students who display both the intellectual capacity and social maturity to succeed in a university program.

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

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

Interested applicants should confer with their high school guidance counselor or principal regarding eligibility to participate in the Early Admission Program. The student and the principal/counselor should complete the University application, and along with an official transcript, submit it to the Admissions Office, Gorham, Maine 04038.

The Admissions Office in cooperation with the Dean's Office in the College of Arts and Science will review each Early Admission application. Students thus admitted under this program are accorded all the rights and privileges of entering freshmen. Academic advising can 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 most Early Admission Program applicants will apply for the fall semester. Application forms must be submitted as early as possible. For fall semester, all Early Admissions applications should be received by April 15.

For specific admissions requirements of art, music, industrial arts, industrial technology, vocational-occupational education, and nursing refer to the appropriate section in this catalog.

Admissions Decisions

Regular Acceptance Admission to the University is based primarily on the candidate's academic background. The rigor of the secondary school program and the grades achieved are the basis for the admissions decision. Scholastic Aptitude Test scores as well as individual talents and activities also influence the final decision. Evaluations of transfer candidates will emphasize their most recent college grades.

Admissions decisions are made on a rolling basis. Applications are evaluated shortly after they have been submitted and all appropriate transcripts and test scores received. It is the responsibility of the candidate to arrange for the Admissions Office to receive these credentials. All candidates are urged to complete the application process by December 15 for spring semester entrance and by June 1 for fall semester entrance.

Acceptance with Conditions Conditional admission status exists for both freshman and transfer candidates who show significant academic promise, but whose credentials reflect a deficiency in course selection, test scores, or grades. Students in this category are fully admitted and pursue their first year of academic work under the guidance of the Advising and Information Department. Normally, conditionally admitted students take fewer than five courses per semester.

Students admitted on a conditional basis to associate and bachelor's degree programs have up to five and six semesters respectively to attain regular status.

Transition to regular status may be initiated through the student's assigned academic counselor. The student must complete the University's proficiency requirements and a minimum of 15 credit hours of graded, nonremedial coursework with a grade point average placing the student in good standing. The Coordinator of Academic Counseling may approve transition to regular status prior to completion of 15 credit hours, if the student earns an exceptional grade point average.

Admission to Selected Studies Students whose academic credentials are insufficient to warrant either regular or conditional admission to the University, or those students whose education has been interrupted for a considerable length of time, may wish to apply for admission to the Selected Studies Program. The program is a two-year, associate degree course of study that offers the student several options: (1) to complete a self-designed, two-year program; (2) to transfer to another associate or baccalaureate program offered by the University; or (3) to transfer to another educational institution. Selected Studies is administered by the Division of Basic Studies and is available at any of the four off-campus centers of the University. For further information, refer to the Division of Basic Studies section of this catalog.

Credit for Prior Learning Assessment

The term prior learning assessment refers to an evaluation of learning the student has gained outside a sponsored collegiate setting. Prior learning may have taken place through paid or non-paid employment, through self-directed study, or through avocational talents and skills. The following are the prior learning assessment procedures which are currently in use.

Advanced Placement High school seniors who score a 3 or better on an Advanced Placement Examination of the College Entrance Examination Board will be granted credit for an introductory course in an appropriate subject area.

College Level Examination Program (CLEP) Credit for prior learning will be granted to a student who receives a satisfactory score on a CLEP examination, a nationally standardized test. Contact the Office of Prior Learning Assessment for more information, or to register for a CLEP test.

General Examination

The schools and colleges at the University will grant credit for a score of 500 or higher on the general College Level Examination Program (CLEP) examinations as follows:

<i>Examination</i>	<i>Credit Hours</i>	<i>Credit for</i>
English	3	ENG 100
Humanities	6	Core curriculum
Social Science	6	Core curriculum
Mathematics	6	Core curriculum
Science	6	Core curriculum

Any CLEP examination which satisfies a course approved for the Core curriculum requirements will satisfy the Core requirement in that area. The five general examinations are designed primarily for incoming freshmen rather than for typical transfer students with advanced standing credit at the introductory level.

Subject Examination

College of Arts and Sciences

The following departments — Biological Sciences, Chemistry, Economics, History, Mathematics/Computer Science, Political Science, Psychology and Sociology — have established policies relative to the acceptance of CLEP subject credit. Interested candidates should contact the Assistant Dean of the College of Arts and Sciences for detailed information.

School of Business, Economics and Management

The School of Business, Economics and Management will accept satisfactory completion of CLEP subject examinations and allow credit toward the completion of degree requirements. Interested candidates should discuss their eligibility for taking these examinations with the Dean of the School of Business, Economics and Management.

School of Nursing

Available for advanced placement is credit earned for any prerequisite courses for the upper-division nursing major in subject examinations offered through CLEP. For more information candidates should contact the Office of Counseling and Career Development.

College of Education

The College of Education will accept satisfactory completion of CLEP subject examinations and allow credit toward the completion of degree requirements. Interested candidates should discuss their eligibility for taking these examinations with the Dean of the College of Education.

Challenge Examinations

The School of Nursing allows students to receive credit for prior learning by successfully challenging selected upper-division courses. For further information, please refer to the School of Nursing section of the catalog.

Portfolio Assessment

The University has recently established a program for assessing learning based on an individual student's portfolio. This new program is currently available on a limited basis only. The assessment process involves detailed, comprehensive documentation of prior learning, an interview with a faculty assessor, and specific performance or demonstration, if appropriate. Contact the Office of Prior Learning Assessment for further information.

Armed Services Experience

The University recognizes credit based on the American Council on Education's *Guide to the Evaluation of Educational Experiences in the Armed*

New England Regional Program

In cooperation with the New England Board of Higher Education the University offers undergraduate programs of study to qualified candidates from the New England states. Tuition rates for regional candidates approved by the Board of Trustees will be that of in-state tuition plus a surcharge of 25 percent. Because the listing of programs varies from year to year, candidates should check the most up-to-date listings. The following schedule represents the fields of study available at the University in the New England Regional Student Program for 1983-84. The 1984-85 listing will be available from the New England Board of Higher Education during the fall of 1983. Check with your guidance counselor or the Board at 68 Walnut Road, Wenham, Massachusetts 01984.

Program

Open to Students From

Two-Year Majors

Business Administration
Therapeutic Recreation

Conn., Mass., Vt., R.I.
Conn., Mass., N.H., R.I., Vt.

Four-Year Majors

Art Education
Criminology
Industrial Technology
Industrial Arts Education
Social Welfare
Therapeutic Recreation

Conn., R.I.
Conn., N.H., R.I., Vt.
Conn., R.I.
Conn., R.I.
Conn., Mass., R.I.
N.H., R.I., Vt.

Tuition and Fees 1983-84

The financial requirements of the University, changing costs, state and legislative action, and other matters may require an adjustment of these charges and expenses. The University reserves the right to make adjustments to the estimated charges and expenses as may from time to time be necessary in the opinion of the Board of Trustees up to the date of final registration for a given academic term. The applicant acknowledges this reservation by the submission of an application for admission or by registration.

Schedule of Expenses

Application Fee An application fee of \$15.00 must accompany each application at each campus unless the student has previously matriculated at this campus.

Matriculation Fee A one-time fee of \$15.00 for each student who elects to pursue a degree program within the University of Maine.

New Student Advising and Orientation Fee A one-time fee of \$20.00 is required of all new degree candidates.

Student Activity Fee (Compulsory) Undergraduate students taking 6 to 12 credit hours are required to pay a \$6.00 Student Activity Fee. Students taking 12 or more credit hours are required to pay \$12.00. This fee is charged each semester.

Tuition Charges

	Semester	Year
<i>Undergraduate Tuition</i>		
Maine Resident – \$50.30 per credit hour; 15 or more credit hours	\$ 754.50	\$1,509.00
Non-Resident – \$152.00 per credit hour; 15 or more credit hours	\$2,280.00	\$4,560.00
New England Program – \$62.88 per credit hour; 15 or more credit hours	\$ 943.20	\$1,886.40
<i>Graduate Tuition</i>		
Maine Resident – \$57.90 per credit hour; 15 or more credit hours	\$ 868.50	\$1,737.00
Non-Resident – \$174.80 per credit hour; 15 or more credit hours	\$2,622.00	\$5,244.00
Double Room and Board (19-meal plan)	\$1,200.00	\$2,400.00
Single Room and Board (19-meal plan)	\$1,275.00	\$2,550.00
Optional meal plans available for off-campus students.		

Room and Board Charges

Other Charges

Yearbook (Optional)

Students may elect this optional fee with their fall semester bill.

USM Health Services Fee and Insurance Package (Optional)

This optional fee is available to all students who are carrying at least three credit hours. Students may elect this fee of \$85.00 per year (includes \$40.00 USM Health Service Fee and \$45.00 Insurance Fee) with their fall semester bill.

Student Health Services Fee (Optional)

Students may elect this fee of \$40.00 per year with their fall semester bill. This service may be purchased independently of the insurance package.

Late Fee

A late fee of \$25.00 is charged to all students who register after the prescribed day of registration or who fail to satisfy their financial obligations with the Business Office when due and payable. This fee will also be assessed to students whose registration checks are returned and not cleared by the specific deadline.

Books and Supplies

The cost of books and supplies varies according to the course for which a student is registered. Books and supplies are not billed on the semester invoice. Payment for them must be made directly to the Bookstore at the time of purchase.

Applied Music Fees

The fees are outlined in the music section of the catalog.

Commencement Fee

A one-time fee (\$15.00) for each degree candidate, to be paid six weeks prior to Commencement.

Tuition for Other Classifications of Students

Auditing of Courses Tuition and fees are charged for audited courses at the usual hourly rate, except for a student who is already paying the maximum tuition.

Adding Courses All adds must be paid for at the time of the add, if it results in an additional charge. The \$25.00 late fee will apply if not done so.

Tuition and Fee Grants Tuition and fee grants will be restricted to those specifically authorized by the Board of Trustees and include tuition grants for Maine residents over 65 years of age who wish to register for undergraduate courses at any campus of the University of Maine.

Deposits

A deposit of \$25 is due when the applicant is notified of acceptance by the Director of Admissions. If a residence hall room is requested, an additional \$75 is due. These deposits will be applied toward the student's account when the student registers, and are subject to the refund policy listed below.

The deposits are forfeited if an applicant withdraws after June 1 for the fall semester or after January 1 for the spring semester. If a freshman, transfer, or readmission applicant notifies the Director of Admissions of withdrawal prior to June 1 for September enrollment or January 1 for spring semester, the deposits will be refunded. Notification must be in writing.

Students desiring to live in a residence hall must pay a room deposit of \$75.00 during the spring in order to ensure that rooms will be reserved for them in the fall. The deposit will be applied to the fall semester bill. If it is found that residence hall accommodations are not desired, the deposit will be refunded if the Office of Residence Life is notified by June 1. After June 1, the \$75.00 is nonrefundable.

Payment of Bills

Students who preregister may receive a bill through the mail. However, the University is not obligated to send out such a bill. The student is responsible for paying fees in full or complete financial arrangements as noted below by the appropriate due date stated in this catalog or registration instructions. Failure to do so will result in the student being assessed the \$25.00 late fee.

All University bills, including those for room and board in University buildings, are due and payable on or before September 2 for the fall semester and on or before January 6 for the spring semester. Bills may be paid at the business office at either campus by mail or in person. Checks should be made payable to University of Maine.

A \$5.00 penalty is imposed if any institutional charges are paid by check which is returned because of an irregularity for which the person submitting it is responsible.

Scholarships and grants, other than University awards, which are to be used for tuition payments, should be confirmed with the Business Office on or before the first day of classes in order to receive proper credit against outstanding bills and to avoid a \$25 late fee.

Students not on an authorized deferred payment of fees plan and who have not paid their tuition and fees in full by the due date, may have their registration for that semester cancelled. This means specifically that a student will

receive no credit for any courses taken during that semester. Students who are allowed to register in error may have their registrations cancelled. Any fees paid by that student will be refunded to the student or credited against other charges due the University by that student.

Transcripts of records and/or permission to register for succeeding semesters will be withheld from students who have not paid all bills and all loans due the University or who have not made arrangements for proper settlement. Included among these bills are damage to University property, charges or fines owed for violation of the University motor vehicle regulations, and library fines.

Installment Program

Students whose circumstances are such that payments of their semester bill in full at the time prescribed would present a real hardship, will be permitted to use the installment program.

The program requires that one-half of the semester bill, plus any previous balance and a nonrefundable \$10.00 finance charge be paid at the time prescribed above. The balance is to be paid in three consecutive monthly installments commencing 30 days after the first day of semester classes.

The privilege of using the program will be withdrawn and the full balance will be immediately due and payable if payments are not made promptly as scheduled. A student must be registered for and maintain a minimum of six credit hours at USM in order to use this plan.

Refund Policy

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

Tuition Refunds

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 writing.

Schedules

<i>Academic Year (Fall and Spring Term)</i>	<i>Refund Percentage</i>
Cancellation prior to first day of class	100%
Withdrawal prior to end of first week	100%
Withdrawal prior to end of second week	75%
Withdrawal prior to end of third week	50%
Withdrawal prior to end of fourth week	25%
Withdrawal after fourth week	0%
<i>Sessions which are more than three weeks</i>	
Cancellation prior to first day of class	100%
Withdrawal prior to end of first week	75%
Withdrawal prior to end of second week	50%
Withdrawal prior to end of third week	25%
Withdrawal after third week	0%
<i>Sessions which are three weeks or less</i>	
Cancellation prior to first day of class	100%
Withdrawal prior to first day of class	50%
Withdrawal after first week	0%

Provisions

No part of an advance deposit is refundable after June 1. Although such deposits are applicable to tuition charges for students who remain enrolled, they are forfeited by students who withdraw.

In no case will tuition be reduced or refunded because of voluntary absence from classes.

Refunds for involuntary withdrawals, e.g., extended illness or military service, will be considered by the campus on a case-by-case basis.

University fees are not refunded, including the Student Activity fee.

Room Refunds

For purposes of calculating room refunds the attendance period begins on the opening day of scheduled campus classes, includes weekends and holidays, and ends on the date the student provides written notification.

Schedules

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	75%
Withdrawal prior to end of third week	50%
Withdrawal prior to end of fourth week	25%
Withdrawal after fourth week	0%

Sessions which are more than three weeks

Cancellation prior to first day of class	100%
Withdrawal prior to end of first week	75%
Withdrawal prior to end of second week	50%
Withdrawal prior to end of third week	25%
Withdrawal after third week	0%

Sessions which are three weeks or less

Cancellation prior to first day of class	100%
Withdrawal prior to end of first week	50%
Withdrawal after first week	0%

Provisions

No part of an **advance deposit** is refundable after June 1. Although such deposits are applicable to room charges for students who remain in the dormitory, they are **forfeited for students who withdraw**.

This room refund policy pertains to students who are withdrawing from the University of Maine. Refunds, if any, for students who remain enrolled but vacate a dormitory room will be governed by their terms and conditions of campus residence hall contracts. Refunds for involuntary withdrawals, e.g., extended illness or military service, will be considered by the campus on a case-by-case basis.

Board Refunds

Students who withdraw from the University will be charged for meals at the established daily rate through the date of clearance.

Add/Drop

Students may drop courses during the first two weeks of classes* without incurring any financial obligation for tuition charges. However, students will be responsible for any nonrefundable fees which may include, but not limited to, registration fee, activity fee, and lab fee(s). After this time, no adjustment to tuition charges for courses dropped will be made. For students who withdraw from the University, the Refund Policy is applicable.

All courses added must be paid for at the time of the add unless the maximum charge is applicable or the tuition charge is offset by a drop during the first two weeks of classes in order to avoid a \$25 late fee.

Rules Governing In-State and Out-of-State Tuition

*For purposes of calculation of 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 writing.

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

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

The domicile of a student who is an unmarried minor follows that of the parents or legally appointed guardian of the student. In such cases, the domicile of the parent with whom the student lives or to whom custody has been granted by court order, or of the student's legally appointed guardian, shall be the domicile of the student.

If a student classified as an out-of-state marries a person who is domiciled in the State of Maine and asserts the establishment of a domicile in Maine, that student shall be presumed to be eligible for in-state tuition status at such student's next registration.

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

A. Submit "Request for Change of Tuition Status" form to the Business Manager, or other designated official. If the Business Manager's (or such other official's) decision is considered incorrect by the student:

B. The student may appeal that decision in the following order:

1. To the Executive Director for Budget and Institutional Research or equivalent official as designated by the campus.
2. To the President of the campus.
3. To the Treasurer of the University, whose decision shall be final.

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

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

Student Financial Aid

To acquire a higher education a student must invest a significant amount of money, as well as time and talent. For many, college costs represent the single largest and most important expenditure they will ever make. For some, these costs are a serious obstacle. The University assists students by offering various forms of financial aid. During the 1982-83 academic year, more than \$6,000,000 was available from aid programs. The average student aid award was \$2,300. In addition, the University helped 2,500 students borrow more than \$6,200,000 in low interest loans from commercial lenders. Over 200 students found jobs with the assistance of the Job Locator Program and earned more than \$250,000. Students may also choose to participate in the Reserve Officer Training (ROTC) program and receive \$100 per month during their junior and senior year.

Eligibility for Aid

Financial need exists when the student and his/her family are found to lack the money needed to pay college costs. Since the federal government provides the majority of the funds the University allocates to students, need is determined 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 pay the full cost of a college education. The Office of Student Financial Aid administers a strong and versatile program. When a student's financial resources are insufficient to meet educational expenses, grants, loans, or employment can usually be made available. If funds are not available from the University, the Office of Student Financial Aid helps students explore other potential sources of aid.

Application Procedures

Students are encouraged to apply as early as possible after January 1. Many find it convenient to apply at the same time a federal income tax return is completed. While no deadline exists for entering students, early application is encouraged. Continuing students should apply before the first of May.

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

Students under age 26 must have a parent sign the FAF. If the student is dependent, this attests to the accuracy of the parent's financial information. If the student is independent, the signature certifies this. Students and the parents of dependent students are required to submit copies of tax returns and other financial records to verify information reported on the FAF.

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

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

How Financial Aid is Allocated

The University begins reviewing student aid applications in early spring. Once a student is accepted by the Admissions Office, a completed FAF is

received, and as soon as the University is told how much federal aid it will have for students, a notice of eligibility is sent. This first notice is an estimate of the amount of financial aid the student will receive from the University. If a student receives outside scholarship funds, the amount of aid from the University may have to be reduced. An award notice, detailing the exact types of aid, is sent in the summer.

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.

Even after a student is allocated aid, the amount may be adjusted if the student's financial situation changes. Students and parents should 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.

Students are offered aid in a package which may consist of grant and/or loan and/or work-study. Only students who have not yet earned a bachelor's degree are eligible for grant funds. Students who have a bachelor's degree may receive only loan and work-study funds.

Types of Aid Available

Pell Grants This is a federally funded program to help needy students. Grants vary between \$150 and \$1,800 per academic year.

Supplemental Educational Opportunity Grants This is a federally funded program to help needy students. Grants range from \$200 to \$2,000 per academic year.

University and Miscellaneous Scholarships These are funded by the University and private donors. Awards range from \$100 to \$2,000 and are given on the basis of financial need.

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

National Direct Student Loans Funded by the federal government, the University, and former borrowers repaying loans, this program lends money to needy students. No repayment is required until after the student ceases his/her education. Once repayment begins, the student is charged 5% simple interest on the amount borrowed. While the monthly repayment amount varies with the amount borrowed, a minimum of \$30 must be repaid each month. Loans vary between \$200 and \$1,500 annually.

Nursing Student Loans Funded by the federal government, the University, and loans repaid by former borrowers, money is lent to needy nursing students. Repayment terms are similar to those of the National Direct Student Loan.

Guaranteed Student Loans This is a program sponsored by the federal and state governments that allows students to secure low-cost loans. Contact your local bank, credit union, or savings and loan institution for more information.

Guaranteed Parent Loans This is a program sponsored by the federal and state governments that allows parents and some students to secure relatively low-cost loans. Contact your local bank, credit union, or savings and loan institution for more information.

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

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

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

Student Life and Services

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

Academic Advising

The University provides academic advising during the period of a student's initial registration and thereafter throughout his/her educational career. With the assistance of faculty from the schools and colleges of the University, the Advising and Information Department (AID) conducts a New Student Advising Program for all newly admitted degree students. Upon declaring a major and being accepted by the appropriate department, students will be assigned a faculty advisor in that academic department. Students are strongly encouraged to maintain regular contact with their academic advisors throughout their career at the University.

First Enrollment Advising and Registration

All newly admitted students may participate in the New Student Advising Program conducted during the summer prior to the student's first fall semester. This program is repeated in December for those students entering the University for the first time in January. A definite advantage of the program is that it allows the new student to register for his/her first semester of coursework with the benefit of a personal interview. During that interview, such issues as the Core curriculum requirements and the requirements of the major may be fully discussed.

Continuing Academic Advising

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

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

Students who have not declared a major are provided academic advising by the Advising and Information Department (AID). The AID staff 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.

Conditionally admitted students are assigned to the AID staff for academic advising during the period they complete the conditions required for regular admission to the University. Upon completion of these requirements, the student is assigned an advisor in his/her major department.

Pre-nursing students receive academic advising during their freshmen and sophomore years from the AID staff with assistance from faculty of the School of Nursing. Upon acceptance by the School of Nursing Undergraduate Admissions Committee, the student is assigned an advisor in the School of Nursing.

Special (non-degree) students (those who are enrolled in courses at the University on a space available basis and who have not applied for admission) are advised by the AID staff.

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

Office of Student Testing and Assessment

The Office of Student Testing and Assessment is responsible for evaluating entry-level skills of students and the development of measures to assess student needs and interests. The Office provides assistance to students in identifying their career and educational goals. The Office administers national examinations, and coordinates the Prior Learning Assessment Programs through the Office of Prior Learning Assessment.

Students are encouraged to contact the Office of Student Testing and Assessment (780-4383/4384) for information regarding the various assessment programs available.

Library and Media Services

The University Library and Educational Media Services, administratively merged in 1982, maintain collections representing more than 500,000 items. The Portland campus library and the Portland Media Center are located in Luther Bonney Hall. The Gorham campus library and Gorham Media Center are located in Bailey Hall. Together, the four facilities provide staff, collections, equipment, services, and programs to the academic community of the University, to the citizens of the state of Maine, and to the international bibliographic community. This broad effort thus supports the educational, public service, and scholarly activities of the University community.

The University Library acquires, catalogs, and circulates a great variety of print and non-print material, provides interpretive and instructional reference services, offers computerized searching of more than 200 data bases, offers a computerized, international, interlibrary loan network currently locating over 11 million titles, includes the University Archives, and provides patrons with terminals to the University's mainframe computer, with microcomputers, with microfilm and fiche reading, and print machines.

Educational Media Services works directly with faculty in designing, developing, and evaluating classroom instruction, circulates and maintains video camera/recorders, and other materials supporting the academic mission of the institution.

Personal and Psychological Counseling Services

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

Career Counseling and Placement Services

The Counseling and Career Development Department offers career counseling, vocational testing, and part-time and full-time job placement services for University students. The staff provide a complete information service, guidance information, computerized terminal services, appropriate career inventory and testing, in addition to referrals. The department also offers internship opportunities related to academic majors. (780-4050)

Handicapped Student Services

Services for students with a handicapping condition are provided through the Office of Counseling and Career Development. In addition to counseling and placement services, direct academic support (including, where necessary, readers and interpreters) is provided. A specially equipped bus provides round-trip transportation daily between the campuses for wheelchair-bound individuals. (780-4050)

Health Services

The University offers two health care facilities for students, one in Portland and one in Gorham. In Portland, a clinic operates from 8 a.m. to 4:30 p.m., Monday through Friday. On the Gorham campus full in-patient services are available seven days a week, twenty-four hours per day, year round. Physician services are available at both locations, and students are offered a variety of health service as well as health insurance options. (780-5240)

International Students

International students are served for immigration documentation as well as academic and personal counseling by the Office of the Dean for Educational Services. (780-4035)

Exchange Study Opportunities

The University offers a variety of national and international exchange opportunities for its students. Students are able to spend a semester or a year at any one of over 40 universities in the United States. International opportunities exist in England, Ireland, Holland, and Sweden. For further information regarding the National Student Exchange Programs, contact the Admissions Office. For information regarding international programs, contact the International Studies Office at 780-5326.

Veterans

Services to veterans are provided through the Department of Advising and Information and include, in addition to certification and liaison with the Veterans' Administration, counseling and academic advising. (780-4040)

Student Activities

Many organizations and clubs exist within the University to serve a variety of student interests and needs. These organizations range from political, social, and educational, to special purpose groups. Offices for these groups are available on both campuses.

The Student Senate administers student programs and supervises organizations including the student newspaper, *Free Press*; the student radio station, WMPC; the literary journal, *The Presumpscot*; and the yearbook, *The Reflection*. Through its Student Activities Board the Student Senate sponsors a series of major weekends in addition to concerts, lectures, films, and other activities throughout the academic year.

The Student Union facilities on both campuses provide quiet areas for study and conversation, in addition to offices for student government and Student Activities organizations. For further information on Student Activities contact the Coordinator of Student Activities 780-4090, or 780-5470.

Fraternities and Sororities

Ten social fraternities and sororities are active on the Gorham campus of the University. Four of the fraternities maintain off-campus houses and all organizations are involved in philanthropic and social activities. (780-5242)

Residence Halls

The University provides on-campus housing in Gorham for approximately 1,100 students in nine residential units, ranging in size from 15 to 180 students. Accommodations are either in single sex or coeducational dormitories, with a variety of visitation and quiet hour options as selected by residents themselves. The residential units have their own organizations and numerous programs are offered within the dormitory units throughout the year. The residence life staff includes four resident director/counselors, and twenty-six resident advisors and programming assistants. (780-5240)

Food Services

Dining facilities may be found at four separate locations on the two campuses. In Gorham, the main University dining facility is glass-enclosed, providing vistas toward the Sebago Lake region, and accommodates approximately 650 diners. Also on the Gorham campus, the University Pub offers short-order fare through late evening hours. In Portland, the University offers a cafeteria seating 250 and dining room facilities for an additional 80 people. The College Room operates as a short-order restaurant during late afternoon and evening hours, Monday through Thursday. A number of musical and theatrical events are held regularly throughout the year in each of the four food service locations. Students may use their meal program cards on either campus.

Intramural and Recreation Programs

Both group and individual sports competition and recreational activities are available. The Gorham and the Portland gymnasiums are the main facilities for free play, as well as basketball, flag football, badminton, racquetball, and other league competition sports. Programs in such areas as aerobic dance, Lifeline, and bodyshop and weightlifting are also available. For further information contact the Coordinator of Intramural and Recreation Programs, Gorham Gymnasium, 780-5431.

Off-Campus Housing

The University maintains lists of available rooms and apartments off-campus for the benefit of students. The lists are available in the Department of Residence Life on the Gorham campus or the Office of Advising and Information on the Portland campus.

Day Care Services

The University Day Care Center serves 30 children, ages 2½ to 6. There are two classrooms that are divided by age, and staffed by four experienced and highly qualified teachers. Priority is given to children of University students, employees, and faculty. The Center provides full day care in a warm, supportive, and developmentally oriented program. A wide range of materials is available. Two snacks, lunch, and a rest time are provided. Contact 773-0881.

Intercollegiate Athletics

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

Academic Policies

Requirements for all Baccalaureate Degree Candidates

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

- I. minimum proficiency requirements
- II. Core curriculum requirements
- III. school or college major requirements

The Core curriculum requirements apply to all students who entered the University in September 1982 and thereafter. (Transfer students should refer to the following section, "Transfer Students and the Core Curriculum," p. 29).

I. 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 freshmen students, readmitted students, and transfer students with less than 30 credits, admitted for the 1983-84 academic year and thereafter, must complete both the Mathematics Placement Examination and the Writing Placement Examination before registering in a mathematics or English course. (Details of these examinations may be obtained from the Office of Student Testing and Assessment). Ways of satisfying the Minimum Proficiency Requirements are summarized as follows:

- A. Evidence of Minimum Writing Proficiency **Do One**
 1. Score 43 or above on the Test of Standard Written English (TSWE)
 2. Pass the Writing Placement Examination
 3. Successfully complete ENG 009 (Developmental English) (no degree credit)
- B. Evidence of Minimum Mathematics Proficiency **Do One**
 1. Score 450 or above on the quantitative subtest of the Scholastic Aptitude Test (SAT)
 2. Score 500 or above on the General Mathematics Test of the College Level Examination Program (CLEP). (This will also satisfy the Core Quantitative Decision Making requirement.)
 3. Pass the Mathematics Placement Examination
 4. Successfully complete MS 011 (Intermediate Algebra). (Credit for this course may apply only toward associate degrees.)
 5. Successfully complete a 100 level mathematics course (MS 100 — MS 131 inclusive). Enrollment must be approved by an AID counselor or the chair of the Department of Mathematics and Computer Science. (A passing grade in the course will satisfy both the Mathematics Proficiency requirement and the Core Quantitative Decision Making Requirement.)

II. Core Curriculum Requirements

The term "core" refers to the innermost part or heart of an object. The core of a fruit, for example, is the vegetative center which contains and protects the seeds of future growth. Applied to the process of education, a core curriculum refers to that nucleus of educational experiences which makes possible and sustains broad intellectual growth. The University believes that a mastery of certain broad competencies, an experience of different academic disciplines, and an appreciation of the interconnectedness of knowledge are the core or heart of future intellectual development.

The Core curriculum comprises three parts:

- A. The *basic competence* component stresses the development of skills of communication, quantitative decision making, and analysis/philosophy.
- B. The *methods of inquiry/ways of knowing* component adds breadth and content to the Core curriculum. Courses in this area help the student understand the methods of different academic disciplines,

the ways those disciplines understand human experience, and the relationships among them. The student will also develop his or her ability to think and analyze independently, to identify the major sources of an academic discipline, and to recognize the ethical and philosophical issues inherent in the discipline.

In particular, this part of the Core curriculum includes courses in fine arts, humanities, social sciences, and natural sciences. Courses in the fine arts seek to vitalize the human spirit and to prepare an individual to participate intelligently in an aesthetic experience through performance-centered and history-centered classes. The humanities seek to understand, interpret, and criticize the acts and creative works of civilization. This is accomplished through a study of literature which reflects the richness of the written word as an expression of human ideals, aspirations, and reflections, and through a study of other times/other cultures which provides a link with the past and a perspective on our own culture by a comparison with other cultures. Courses in the social sciences attempt to describe, analyze, and evaluate fundamental social institutions, behavior patterns, and issues of societies and their individual members. Through lecture and laboratory, courses in the natural sciences promote an understanding of the natural sciences, their methods and accomplishments, and their role in a technological society.

- C. The *interdisciplinary* component seeks to overcome a fragmented view of experience which may result from a division of knowledge into academic disciplines and departments. The interdisciplinary course helps the student integrate knowledge and skills across these traditional lines by focusing on an important issue, major event, or specific region and demonstrating how new knowledge and insight can be gained thereby.

The Core Curriculum

A. Basic Competence

1. English Composition **Do one**
 - a. Successfully complete ENG 100 or ENG 101 (3 credits)
 - b. Score 59 or above on the TSWE (no credit)
 - c. Score 500 or above on the CLEP General or English Composition Test (3 credits)
 - d. Satisfy composition standards in ENG 100 or ENG 101 by the second week (no credit)
2. Quantitative Decision Making **Do one**
 - a. Successfully complete MS 100 or above (3 credits)
 - b. Successfully complete computer skills courses BUS 290 or CS 100 or above (3 credits)
 - c. Successfully complete statistics courses MS 120, PSY 201, or SOC 307 (3 credits)
 - d. Pass a locally administered examination (no credit)
3. Skills of Analysis/Philosophy **Do one**
 - a. Successfully complete a PLY 100 level course (3 credits)
 - b. Successfully complete a skills of analysis course (a list of courses satisfying this requirement will be published prior to registration.) (3 credits)

B. Methods of Inquiry/Ways of Knowing

1. Fine Arts **Do one each**
 - a. Performance-centered arts (3 credits)
 - b. History-centered arts (3 credits)

(The courses in the fine arts must be selected from different departments.)
2. Humanities **Do one each**
 - a. Literature (3 credits)
 - b. Other Times/Other Cultures (3 credits)

The two courses in the humanities must have different course prefixes.)

3. Social Science **Do two**

(The two courses in social science must be selected from different departments.) (6 credits)

4. Natural Science **Do one**

(The natural science course must include a laboratory.) (4 credits)

C. Interdisciplinary (0-3 credits)

The interdisciplinary component includes a CORE 100 level interdisciplinary course and a senior seminar. (The senior seminar is not offered at present, and students are not currently bound by this part of the interdisciplinary requirement.)

The CORE 100 level interdisciplinary course should be taken before the completion of 60 credits. A list of these courses may be found on page 40. Each CORE interdisciplinary course carries as a prerequisite the successful completion of the Minimum Writing Proficiency. In addition, it is strongly recommended that the student satisfy the Basic Competence English Composition requirement prior to or concurrently with the CORE interdisciplinary course.

Core Curriculum Regulations

1. The student has primary responsibility for ensuring that she/he completes all the requirements of the minimum proficiency requirements and the Core curriculum requirements.
2. Courses completed in a student's major department may not be used to satisfy a Core curriculum requirement in the area of Methods of Inquiry/Ways of Knowing.
3. The student should satisfy the basic competence requirements before the completion of 60 credits.
4. The student should satisfy the CORE 100 level interdisciplinary course before the completion of 60 credits.
5. The CORE 100 level interdisciplinary course may be used to satisfy either the Basic Competence Skills of Analysis/Philosophy requirement or one of the Methods of Inquiry/Ways of Knowing requirements.
6. Courses taken to satisfy the Core curriculum requirements may not be taken on a pass-fail basis.

III. School or College Major Requirements

Please refer to the appropriate school, college, or department section for the major requirements.

Transfer Students and the Core Curriculum

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

A. Basic Competence

1. The English Composition requirement can normally be satisfied by transfer credit for an equivalent English composition course. If no such course is available for transfer credit, the student should refer to the other options noted under the Core curriculum requirements.
2. The Quantitative Decision Making requirement can normally be satisfied by transfer credit for an equivalent mathematics, computer science, 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.
3. The Skills of Analysis/Philosophy requirement can normally be satisfied by transfer credit for a course which deals with logic, reasoning, or analytical thinking. If no such course is available for transfer credit, the student should refer to the other options noted under the Core curriculum requirements.

B. Methods of Inquiry/Ways of Knowing

These requirements can normally be satisfied by transfer credit for equivalent courses in each of the four areas. Equivalent courses will be determined at the time of admission and transfer evaluation. Any CLEP examination which satisfies a course approved for the Core curriculum will satisfy the Core curriculum requirement in that area. When a specific requirement cannot be satisfied by transfer credit, the student is expected to take the appropriate course(s) from the list on page 37.

C. Interdisciplinary

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

Transfer students should complete the Basic Competence Requirements as early as possible after admission to the University.

Course Numbering

001-009	No Degree Credit
010-099	Associate Degree Program
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 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.).
3. Matriculated baccalaureate students should not register for courses with numbers less than 100.
4. Associate degree students who wish to transfer to a baccalaureate program should see their prospective dean for a transcript evaluation and complete a Change of Major form. Some programs require a minimum grade point average (GPA) for transfer into a four-year program. Generally up to 60 credits (but not quality points) of courses numbered 010-099 with grades C or better may be included towards a baccalaureate degree at the discretion of the dean.

Registration

The registration process is conducted by the Registrar, Advising and Information Department (AID), and Business Office. It includes selection of courses, completion of proper forms, and payment of University charges. Newly admitted students are notified by the Admissions Office of their orientation, advising, and registration schedule. The Advising and Information Department coordinates the new student academic advising and initiates the registration procedure by approving course schedules prior to processing by the Registrar and Business Office.

Continuing degree students may preregister in priority order, based on the number of credits earned through the previous semester. Pre-registration is conducted near the end of each semester for the following semester. Eligible students who fail to preregister must then wait until the open registration period which immediately precedes each semester. Non-degree students may register only during the open registration period. Degree students must obtain advisor approval prior to registration. Non-degree students must have approval from the Advising and Information Department prior to registration. No student may register for more than 18 credits in one semester without the permission of the advisor and dean. No registration is complete unless all related financial obligations to the University are satisfied.

Grading System

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

A	High honors
B	Honors
C	Satisfactory, successful, and respectable meeting of the course objectives
D	Low-level work, below the average required for graduation for an undergraduate, and a failing grade for a graduate student. In addition, individual departments may limit the number of D grades accepted, as stated in the departmental sections of this catalog. The paragraph on Minimum Grade and Academic Suspension and Repeated Courses should also be noted.
F	Failure to meet the course objectives
P	Pass; given only for certain courses open to the pass-fail option
I	Incomplete; a temporary grade given when the student, because of extraordinary circumstances, has failed to complete the course requirements. Incomplete grades must be resolved by the end of each semester; the Registrar shall notify faculty members involved, and their department chair, of students who have carried unresolved incompletes on their transcript for one semester. If the incomplete is not resolved by the instructor, an I grade will be automatically counted as an F in the grade point average and so indicated on the student's permanent record. Under special circumstances, the instructor may request that the dean extend the time limit for a specific period.
INC	Permanent Incomplete. When a temporary incomplete (I) grade is not resolved to a normal letter grade, a permanent incomplete may be assigned in extraordinary circumstances as determined by the instructor and the dean. In unusual circumstances wherein the faculty member is no longer available, the dean may exercise this function.
MG	Missing Grade. Occasionally, faculty assign students invalid grades for a course, or fail to submit a grade for a particular student in a course. In these cases, the Registrar's Office will note this act by designating a missing grade, or MG instead of a grade for the course. Missing Grades must be resolved by the end of each semester. The Registrar shall notify faculty members involved, and their department chair of students who have carried unresolved MGs on their transcript for one semester. If the missing grade is not resolved by the instructor, an MG grade will be automatically counted as an F in the grade point average and so indicated on the student's permanent record. Under special circumstances, the instructor may request that the dean extend the time limit for a specific period.
W	Withdrawal after the second week through the sixth week of a semester. If a student has not officially withdrawn by the end of the sixth week of the course, one of the above regular grades, normally F, will be assigned. The W notation may be obtained after the sixth week under unusual circumstances if so determined by the instructor and the dean. A threat of failure is not considered to be an unusual circumstance.
Y	Satisfactory progress after one semester of a two-semester course; grade and credits to be given upon completion of second semester.
AU	Student attended courses on a noncredit basis.

Grade Point Averages

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

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

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

Dean's List

At the end of each semester, full-time, undergraduate degree students 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.

Minimum Grade and Academic Suspension

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

		For Probationary
	For Good Standing	Standing
<i>Associate Degree Programs</i>		
0-15 credit hours	1.60	1.35
16-30 credit hours	1.80	1.60
31-45 credit hours	2.00	1.80
<i>Baccalaureate Degree Programs</i>		
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

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

Students with majors or minors in English, history, political science, or psychology in the baccalaureate program of the College of Arts and Sciences, or the secondary education mathematics program of the College of Education 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.

Students in the School of Nursing, please refer to the sections entitled Prerequisites to the Nursing Major and Academic Policies — Upper Division Nursing Major in the School of Nursing portion of this catalog.

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

Unsatisfactory Progress

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

Academic Dismissal

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

Class Membership

As a minimum of 120 credit hours for graduation is required in most four-year programs, at least 30 credits should be earned each year. To progress satisfactorily through the University, a full-time student is expected to carry at least 15 credit hours each semester. Permission must be obtained from the advisor and the appropriate dean to carry more than 18 credit hours.

For standing as a sophomore, a student shall have completed at least 19 percent of the hours required for graduation, for junior standing 44 percent, and for senior standing 69 percent. Exceptions are the industrial arts education and industrial arts technology programs with respective percentages of 20 percent and 53 percent.

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

<i>School or College</i>	<i>Total to</i>			
	<i>Sophomore</i>	<i>Junior</i>	<i>Senior</i>	<i>Graduate</i>
Arts and Sciences	23	53	83	120
Business, Economics and Management				
Baccalaureate Programs	23	53	83	120
Two-Year Business	23	—	—	62
Education				
Music Education	26	60	94	137
Industrial Arts Education	33	65	94	124
Industrial Arts Technology	33	65	94	124
All Other Programs	23	53	83	120

Schedule Changes

Once a semester commences, a period of one week is permitted to add courses and select or reverse the pass-fail option. A period of two weeks is permitted to drop courses with no grade notation. 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 sixth week of classes will receive the grade notation of W. If a student has not officially withdrawn by the end of the sixth week of the course, he or she will be assigned a regular grade, normally F. The W notation may be assigned after the sixth 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.

Pass-Fail Option

The purpose of the pass-fail grade option is to encourage a student to broaden his or her educational experience without risking the overall grade point average. The student's choice is kept confidential and the instructor grades the student in the same manner as the rest of the class. The Registrar will retain the instructor's submitted grade on file. If the grade is A, B, C, or D it will be converted to a P. Grades of F or I will be handled in the normal way.

Courses taken to satisfy Core curriculum, 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 the registration period or during the add period each semester. The pass-fail option, once contracted, may be reversed only during the add period.

Repeated Courses

When a student repeats a course and earns a grade of A, B, C, D, F, or P, the initial grade remains on the transcript but only the later grade is used in computing the grade point average or for credit. No course in which one of the above grades has been earned may be repeated more than once without written permission of the dean or director of the appropriate school, college, or division. This policy does not apply to courses specifically designed to be repeated.

Auditing Courses

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

Independent Study

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

Variable Credit Courses

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

Grade Report

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

Permanent Academic Record

The permanent academic record is maintained by the Office of the Registrar for all students of the University. While the grade report is the unofficial notification to the student, academic dean, and advisor of the student's academic achievements for a given semester, the only true and valid documentation of academic work and student status is an official transcript of the academic record, stamped with the Registrar's signature and embossed with the seal of the University of Maine. The transcript is available only with the signature of the student and will be released to that student or a designee only if there are no outstanding charges against his or her account with the Business Office. There is a charge of two dollars for a single transcript and one dollar for each additional copy ordered at the same time. Other types of transcripts are: Unofficial — Issued Directly to Student, available at no charge to an active student, but limited to one per semester and only after grades are posted for that semester; Placement Transcript provided for the student's placement folder. This is unofficial, but may be reproduced by the Counseling and Career Development Office for prospective employers at no additional cost.

Academic Record Changes

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

Coursework at Other Institutions

Matriculated students at the University are expected to secure written approval from the appropriate dean prior to taking coursework at another institution. Such credits outside the University of Maine system count towards the total degree hours required but are not figured in the cumulative grade point averages.

Graduation Requirements

A candidate for the baccalaureate degree must (a) receive passing grades in courses required by the University, the school or college, and the major department; (b) accumulate the number of credit hours required by the school or college in which the student is registered; (c) achieve an accumulative average of not less than 2.00; (d) meet the requirements of the major department; (e) complete an Application for Degree with the Office of the Registrar at the beginning of the semester of graduation.

Residence Requirement

In all undergraduate divisions of 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. A student may earn 6 of these 30 credit hours at another campus of the University of Maine. Unless special permission is granted by the dean of the school or college concerned to pursue work elsewhere, the work of the senior or final year must be completed at this University.

Graduation with Distinction

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

Transfer students (including those transferring within this University from a two-year to a four-year program) must maintain a cumulative average of 3.0 or above for coursework in the baccalaureate program, and must earn at least 30 credits, normally the final 30 credits, at the University.

Post-Baccalaureate Study for Second Degree

A second bachelor's degree may not be granted a student until he or she has completed an additional year of college work, as represented by a minimum of 30 semester hours above 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 any of the Core curriculum requirements.

Withdrawal from the University

To withdraw from the University, a student must secure an official withdrawal slip from the Registrar's Office and complete an exit interview with a member of the Educational Services staff.

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 sixth week will receive a W grade for each

course in which the student was enrolled. Students withdrawing after the sixth week will receive regular grade designations as determined by the instructors. Under unusual circumstances, grades of W can be assigned after the sixth week if approved by both the instructor and the dean.

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

Information concerning financial obligations to the University relative to the withdrawal policy will be found on page 17.

Matriculation Status (Leave of Absence)

Matriculated degree candidates who withdraw from all coursework in a given semester maintain their matriculated status for one year from the fifth school day of the next regular academic term. Matriculated degree candidates who do not register for a given semester maintain their matriculated status for one year from the fifth school day of the semester for which they did not register. If a student resumes attendance during the time period specified above, no readmission process is required. The student should contact the Registrar's Office for registration instructions.

If a student wishes to resume studies as a degree candidate after the time period specified above, an application for readmission must be filed with the Admissions Office.

Suspended students must follow the instructions provided in the section below.

Readmission after Academic Suspension

Matriculated degree candidates may apply for readmission to the University in accordance with the stipulations specified in the suspension office. If readmission is requested within one year from the fifth school day of the next regular academic term following suspension, the student need only receive the approval of the dean.

If a student wishes to resume studies as a degree candidate after the time period specified above, an application for readmission must be filed with the Admissions Office.

Change of Major within a School or College

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 candidates, pre-nursing, and conditional candidates must be processed by the Advising and Information Department.

Change of College or School

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

Double Majors

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

Attendance Policy

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

Examination Policy

The examination policy states that it is the responsibility of the faculty member to inform the students in each class of the examination requirements for that class. Usually, two to four preliminary examinations are administered in each course and count heavily toward the final grade. Giving a final exam is not mandatory; however, in classes where they are given, the examinations must be scheduled within the specific final exam period. A time for make-up

exams is also scheduled. Take-home exams are also due within the final exam period. By action of the Faculty Senate, no test or exam may be scheduled during the last week of classes.

Absence from a Final 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. A student who misses a final examination should immediately contact the instructor to apply for a special examination.

Independent Study Term

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

Confidentiality Policy

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.

Catalog Effective for Graduate Requirements

Freshmen and new transfer students (including transfers from other campuses of the University of Maine system) must satisfy the graduation requirements set out in the catalog in effect for the first semester of their attendance as a matriculated student. Students who terminate their matriculation at the University 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 re-admitted student.

At the student's choice, a later catalog may be selected for graduation requirements; but a student may not select an earlier catalog.

Students must complete all degree requirements within a ten-year period unless approval is given otherwise by the dean of the school/college/division. In some cases, academic units have time limits that are shorter than ten years. If so, that time limit will be noted in the appropriate school/college/division section of this catalog.

Courses Approved to Satisfy Core Curriculum Requirements

- A. Basic Competence
 - 1. English Composition ENG 100 or ENG 101
 - 2. Quantitative Decision Making MS 100 or above
CS 100 or above, BUS 290
MS 120, PSY 201, SOC 307
 - 3. Skills of Analysis/Philosophy PLY 100 level course
HIST 377 Chinese Thought
- B. Methods of Inquiry/Ways of Knowing
 - 1. Fine Arts
 - a. Performance-centered arts:
 - ARTS 141 Design I
 - ARTS 151 Drawing I
 - ENG 201 Creative Writing
 - ENG 202 Fiction Writing
 - ENG 203 Poetry Writing
 - ENG 302 Fiction Workshop
 - ENG 303 Poetry Workshop
 - MUS 110 Fundamentals of Music
 - MUS 130 Music Theory I
 - MUS 150 Applied Music Freshmen I
 - MUS 160 Applied Music Freshmen I
 - MUS 400 Chamber Orchestra
 - MUS 402 University Concert Band
 - MUS 405 The Chamber Singers
 - MUS 408 Wind Ensemble
 - THE 120 Acting I Fundamentals of Acting: Movement and Improvisation
 - THE 121 Acting II Fundamentals of Acting: Scene Work

THE	122	Contemporary Dance I
THE	222	Contemporary Dance II
THE	135/ 137	Stagecraft I & Lab
THE	290	Oral Interpretation
b. History-centered arts		
ART	101	Introduction to Art
ARTH	111	History of Art I
ARTH	112	History of Art II
MUS	100	Music Appreciation and History
MUS	102	Music of the Portland Symphony
MUS	103	Introduction to Jazz
MUS	120	History of Music I
MUS	121	History of Music II
MUS	202	Music in America
MUS	203	Music in the 20th Century
MUS	205	Chamber Music Literature
MUS	220	History of Music III
MUS	221	History of Music IV
THE	101	Introduction to Drama
CORE	103	Revolution in the Arts 1850-1918
2. Humanities		
a. Literature		
CLS	283	The Epic Hero
CLS	284	The Tragic Hero
ENG	120	Introduction to Literature
ENG	220	World Masterpieces I
ENG	221	World Masterpieces II
ENG	250	Chaucer and the Medieval World
ENG	255	The English Renaissance
ENG	260	Shakespeare
ENG	261	Shakespeare
ENG	265	The Neoclassical Age
ENG	270	Major Romantic Writers
ENG	275	Eminent Victorian Writers
ENG	280	The American Renaissance
ENG	290	The Modern Age: British
ENG	291	The Modern Age: American
ENG	295	Women Writers
ENG	394	Experimentation in Modern Poetry
ENG	395	Modern Short Story: Themes and Methods
ENG	396	Modern Novel: Themes and Methods
FRE	251	Introduction to French Literature I
FRE	281	Masterpieces of French Literature (in English translation)
FRE	283	Contemporary French Thinkers (in English translation)
FRE	362	French Poetry
GMN	281	The German Novelle (in English translation)
GMN	351	Introduction to German Literature I
GMN	352	Introduction to German Literature II
SPN	281	Masterpieces of Spanish Literature (in English translation)
SPN	351	Introduction to Hispanic Literature I
SPN	352	Introduction to Hispanic Literature II
THE	210	Play Analysis
b. Other Times/Other Cultures		
ANY	203	Origins of Civilization
ANY	220	North American Indians
ANY	221	South American Indians

ANY	232	Women in Cross Cultural Perspectives
ANY	301	Victims of Progress: Primitive Peoples in the Modern World
ANY	222	Peoples of the North
CLS	281	The Golden Age of Greece
CLS	282	Rome, from Republic to Empire
FRE	291	French Civilization — Historical Approach (in English)
FRE	292	French Civilization — Contemporary France (in English)
GEOG	201	Cultural Geography
GEOG	325	Geography of Asia
HIST	101	Western Civilization I
HIST	102	Western Civilization II
HIST	131	U. S. History to 1877
HIST	132	U.S. History Since 1877
HIST	133	American History I
HIST	134	American History II
HIST	161	Introduction African History to Partition
HIST	162	Introduction African History Since Partition
HIST	171	Traditional East Asia
HIST	172	Modern East Asia
HIST	181	Latin America I
HIST	182	Latin America II
PLY	310	History of Ancient Philosophy
PLY	320	History of Medieval Philosophy
PLY	330	History of Early Modern Philosophy
PLY	340	History of Late Modern Philosophy
PLY	350	American Philosophy
PLY	360	Existentialism
CORE	101	Three Crises in Western Civilization
CORE	106	War and Peace in the 20th Century
<i>3. Social Sciences</i>		
ANY	101	Anthropology: The Cultural View
COM	102	Introduction to Communications
ECON	201	Principles of Economics I
ECON	202	Principles of Economics II
GEOG	101	Principles of Geography
GEOG	303	Economic Geography
HRD	333	Human Growth and Development
POL	101	Introduction to American Government
POL	102	People and Politics
POL	104	Introduction to International Relations
PSY	101	General Psychology I
SOC	100	Introduction to Sociology
SOC	170	Social Issues
SWE	101	Introduction to Social Welfare
CORE	101	Three Crises in Western Civilization
CORE	102	Human Ecology
CORE	104	Women & Men: Perspectives on Gender
CORE	105	Work in America
CORE	106	War and Peace in the 20th Century
CORE	107	Man, Society, and Technology
<i>4. Natural Sciences</i>		
ASTR	100	Astronomy
ASTR	103	Astronomy Exercises/Experience
BIO	101	Biological Principles
BIO	102	Biological Experiences
CHEM	101	Chemistry I
CHEM	102	Introduction to Laboratory Measurement

GEOL	111	Physical Geology
GEOL	112	Physical Geology Lab
OCN	100	Introduction to Oceanography
OCN	101	Oceanographic Laboratory
PHYS	121	General Physics I & Lab
C. Interdisciplinary		
CORE	101	Three Crises in Western Civilization
CORE	102	Human Ecology
CORE	103	Revolution in the Arts 1850-1918
CORE	104	Women and Men: Perspectives on Gender
CORE	105	Work in America
CORE	106	War and Peace in the 20th Century
CORE	107	Man, Society, and Technology

Interdisciplinary CORE course descriptions

CORE 101 Three Crises in Western Civilization

An interdisciplinary investigation of three turning points in Western culture: Greece about 400 B.C.; Europe about 1600 A.D.; and Europe about 1900 A.D. The course is team-taught and consists of lectures, panel presentations, discussion sections, and films.

Cr 3.

CORE 102 Human Ecology

An interdisciplinary study of the function and evolution of ecosystems, models for decision making, and human-environmental interactions. The course is team-taught and consists of lectures, discussions, workshops, and films. The course is an examination of the way in which human beings interact with the world around them. Three aspects of ecology are examined in detail: energy, population, and the impact that populations have on the environment. Throughout the course the emphasis is upon people; therefore, the dynamics of human populations, people's use of energy, and the impact that human beings have on the systems of which they are a part are the dominant themes. The environment is viewed as a system which people act upon and which acts upon people.

Cr 3.

CORE 103 Revolution in the Arts (1850-1918)

A study of the changes in art, music, and theatre from 1850-1918 in light of cultural and historic events. The team-taught course uses lectures, slides, live and recorded music, and theatrical dramatizations. No prerequisites.

Cr 3.

CORE 104 Women and Men: Perspectives on Gender

This course is designed as an interdisciplinary investigation of the various perspectives on

the complexity of gender issues. Special attention will be focused on theoretical explanations for sex similarities and differences in contemporary and cross cultural society. The course will be team-taught and will consist of lectures, films, small group discussions, and experiential activities. Cr 3.

CORE 105 Work in America

An interdisciplinary course designed to provide students with historical, cultural, social, and individual perspectives on work in America. Each student will also examine their own values, motivations, and goals as they relate to their working careers and to their personal and professional development. The course is team-taught. It will consist of lectures, films, discussion sections, inventories, experiential activities, the writing of journals, and the completion of annotated bibliographies and analytic papers, as appropriate.

Cr 3.

CORE 106 War and Peace in the 20th Century

This course analyzes basic causes of war -- psychological, political, social, economic -- and problems of maintaining peace in the 20th century. After a look at important theorists of war, it focuses on World War I, World War II, and the Vietnam war as case studies and then examines current nuclear and peace issues within the framework of the Cold War. It aims at helping students living in the nuclear age make informed decisions about the life-and-death issues confronting them as citizens.

Cr 3.

CORE 107 Man, Society, and Technology

An interdisciplinary examination of the interaction of man, society, and technology. The relationships of technology to social, philosophical, and physiological issues will

be studied from the perspective of single and combined disciplines. Interpretation, analysis, and evaluation of technological alternatives in cultural and environmental contexts

will receive particular attention. The course will be team-taught and consist of lectures, readings, small group discussions, films, guest speakers, and research papers. Cr 3.

Women's Studies Program

Coordinator: Joanne H. Clarey, 124 Luther Bonney, Portland

Committee: MacPherson, Tizon, Gish, Lazar, Padula, Ricci, Gutmann, Loudon, Kandoian, McKeil, Cohen

The Women's Studies Program is an interdisciplinary academic program focusing on the study of women, their experiences, and accomplishments. It is dedicated to the investigation of knowledge, theories, and research about women's roles and function in society and the perspectives which can be brought to these by new systems of thought.

Historically, research, theory, and course content have failed to explore with depth or objectivity the conditions, contributions, and quality of women's lives. Women's studies critically examines the issues surrounding gender, the origins of gender differentiation, the gendering of knowledge, and the attitudes and expectations related to gender in various societies and historical periods. The goal of this program is to gather and present knowledge which will provide the foundation for and encouragement of a balanced curriculum and equitable learning environment at the University.

The Women's Studies Program offers an interdisciplinary concentration leading to a bachelor of arts degree through the Self-Designed Major Program in the College of Arts and Sciences.* The Program also seeks to incorporate research by and about women into traditional course offerings, generating new perspectives and changes in intellectual, political, and social spheres in order that opportunity for all are expanded.

Graduates with a bachelor of arts degree with an interdisciplinary concentration in women's studies are prepared for graduate studies in a wide spectrum of disciplines. They are also prepared for employment in such areas as affirmative action in government, industry, and education; personnel and career advising; women's centers and agencies; women's programs in government, agencies, industry, or education; crisis intervention centers; human service agencies with large numbers of women clients; careers in social services, politics, and communications.

*See listing for Self Designed Major requirements on page 46.

Women's Studies Courses

CAS	111	Exploring Options: A Resocialization Program
CAS	130	Introduction to Women's Studies
CAS	299	Psychosocial Development of Women
CAS	395	Feminist Theories
CAS	495	Advanced Seminar in Research on Women
CAS	499	Field Experience and Internship
CAS	399	History of Women

SWE	265	Women-Social Change
SOC	316	Sex Roles
THR	219	Personal Fitness
THR	314	Leisure Counseling: Methods and Techniques
THR	233	Environmental Recreation for Special Populations
BUS	349	Women in Management
NUR	308	Women and Health
NUR	499	The Women's Health Movement
ARTH	218	Women in Art
ENG	299	Women Writers in American Society
ENG	299	Women Writers in 19th and 20th Century
FRE	292	Women in Contemporary French Literature
PSY	235	Psychology of Women
GEOG	101	Principles of Geography
ANY	232	Women in Cross Cultural Perspective
POL	201	Women and Politics
CORE	104	Women and Men: Perspectives on Gender
COM	310	NonVerbal Communication
COM	495	Sex Differences in Communication
HRD	333	Human Growth and Development
Lifeline		Aerobics Program
PLY	295	Philosophy and Relations Between the Sexes

Women's Studies Courses

CAS 111 Exploring Options: A Resocialization Program

This course is an experiential learning program designed to facilitate the student in gaining awareness and understanding of the socialization process and the acquisition of sex role identity. The course involves the study of the potential of self and the options and opportunities that exist for individuals who are freed from the restrictions of stereotypes. Cr 3.

CAS 130 Introduction to Women's Studies

The course examines women's experiences and accomplishments from biological, developmental, sociological, psychological, economic, political, cultural, and historical perspectives. The goal of the course is to provide a scholarly and substantial overview of the new research and theories relevant to women's studies. Cr 3.

CAS 299 Psycho-social Development of Women

The psychological, cognitive, moral, and sociological development of women from conception through the life span will be examined. The interaction of biological and environmental factors will be considered as new theories and research related to women's life span development are explored. Cr 3.

CAS 399 History of Women

A survey of women's roles during critical his-

torical periods will be examined utilizing new perspectives raised by current research. Students will be introduced to the methods and materials of oral history and the relevance of folk sources to the study of women's history and culture. Cr 3.

CAS 395 Feminist Theories

This comparative course focuses on five selected theories, only four of which would be ordinarily described as feminist. The theories are: conservatism, traditional marxism, radical feminism, and socialist feminism. The practical implications of these theories for women and men will be examined within the three dimensions of work, family, and sexuality. Cr 3.

CAS 495 Advanced Seminar in Research for Women

This seminar will explore feminist research and methodology from an interdisciplinary perspective. Emphasis will be on applying critical and scholarly approaches to selected issues and topics related to women's studies. Cr 3.

CAS 499 Field Experience and Internship

This course is designed to provide an opportunity for students to relate women's studies theory to practice. The links between community and campus, social action and research will be emphasized through experiential learning. Cr 3.

Convocation

In 1983-84 the University of Southern Maine will sponsor its third year-long Convocation, a series of lectures, debates, workshops, programs, and cultural events focused on an important contemporary theme.

The 1983-84 theme is the Age of the Computer. The computer has come to symbolize for our age the ever-increasing role of technology in our lives. Throughout the world, people are cognizant not only of the promise new information technologies hold for our futures, but also the complex philosophical, ethical, legal, and human issues they engender. Convocation events will examine the impact of the current information revolution on individuals, the world economy, our social structure, the meaning of work and the nature of human interaction within the context of advances in computer technology, telecommunications, and other technologies as well.

This information revolution, epitomized by the computer, merits rigorous investigation from the perspective of each academic discipline within the University and is of profound importance and interest to the community at large.

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

For further information contact Richard Maiman, associate professor of political science or Alyce O'Brien, Office of University Relations.

College of Arts and Sciences

Dean: Robert J. Hatala

Assistant Dean for Student Academic Services: Kathie L. Benton; *Assistant*

Dean for Administration: Maurice J. Chabot

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

Departmental Organization

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

Art	Mathematics and Computer Science
Biological Sciences	Music
Chemistry	Philosophy
Communication	Physics and Engineering
English	Political Science
Foreign Languages and Classics	Psychology
Geography-Anthropology	Social Welfare
Geosciences	Sociology
History	Theatre

Baccalaureate Degree Programs

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

Applied Chemistry	History
Art	Liberal Studies
Biology	Mathematics
Communication	Music
Computer Science	Philosophy
Criminology	Political Science
Earth Science	Psychology
Economics	Self-Designed
English	Social Science
French	Sociology
Geography-Anthropology	Social Welfare
Geology	Theatre

Requirements for all Baccalaureate Degree Candidates

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

- I. minimum proficiency requirements
- II. Core curriculum requirements
- III. departmental or program requirements

Minimum Proficiency Requirements

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

Core Curriculum Requirements

Every baccalaureate degree student who is admitted to the University is required to meet the Core curriculum requirements. These are set out in the Academic Policies section of this catalog.

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.

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

Selecting a major is an important and often difficult decision. Students who are undecided about a major should take courses in programs that interest them before making a final decision. Undecided students are encouraged to consult the Advising and Information Department as well as those departments which interest them prior to declaring a major.

Individual departmental or program requirements are described in the sections that follow.

Associate of Arts Degree Program in Liberal Arts (60 credits)

A two-year program leading to the associate of arts degree (A.A.) in liberal arts is available in conjunction with the Division of Basic Studies. Graduates of this program may transfer into a baccalaureate degree program.

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

- I. minimum proficiency requirements
- II. Core curriculum requirements
- III. electives from the College of Arts and Sciences

A list of courses approved for satisfying the requirements of the Core curriculum may be found on page 37.

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.

Academic Majors for the College of Education

The College of Arts and Sciences offers certain liberal arts majors for students in the College of Education. These are: art education (K-12); mathematics (secondary education); and music education (K-12).

In addition, liberal arts concentrations (36 credits) for students in elementary education and early childhood development are being developed by certain departments of the College of Arts and Sciences. These will be available as interdisciplinary sequences in the liberal studies major. Students should contact the Office of the Dean of the College of Education for further information.

Other Educational Opportunities

Independent Study Term

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

Double Majors

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

College of Arts and Sciences Minors

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

Individualized Program Majors

The **liberal studies major** is a structured, generalized program in the College of Arts and Sciences for students who choose not to specialize in an academic discipline. Students interested in such an option may apply to the Liberal Studies Major Board at the normal time for declaring a major. Guidelines for this program may be obtained from the Office of the Dean of the College of Arts and Sciences.

The **social science major** is a multi-disciplinary program offered by the Departments of Economics, Geography-Anthropology, History, Political Science, and Sociology. Each student must take a minimum of 51 credits, 21 of which must be in a particular subject area.

Students must meet the following requirements within the discipline selected for concentration:

- a. Geography-Anthropology — to include GEOG 101, GEOG 102 or GEOG 201, ANY 101 or ANY 103, and at least 3 courses in geography or anthropology at the 300 level or above. (21 credits)
- b. History — to include at least 21 credit hours at the 200 level or above. (21 credits)
- c. Political Science — 21 credit hours as arranged with advisor
- d. Sociology — to include SOC 100, SOC 300, SOC 305; or SOC 307, SOC 312, or SOC 356. (21 credits)
- e. Economics — to include ECON 201, ECON 202, ECON 301, and ECON 302, and three advanced economics courses. (21 credits)

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

The **self-designed major** allows a student to design a multi-disciplinary program not currently available through a department major. A student wishing to pursue such an option should apply to the Self-Designed Major Board for approval, normally during the student's sophomore year.

A self-designed major program must be as comprehensive as departmental majors in the College of Arts and Sciences. Coursework outside the College may be included, but the major must consist mainly of courses within arts and sciences. The Board has approved guidelines for common degree programs serving groups of students. Two such programs are in classics and women's studies.

Deadlines for submission of completed proposals are September 15, February 15, and April 15. Students may obtain applications, program descriptions, and guidelines from the Office of the Dean of the College of Arts and Sciences.

Graduate Programs

The College of Arts and Sciences offers a master of science degree in computer science. A master of arts in history (by extension from the University of Maine at Orono) is also available. For details of both programs, refer to the Graduate Catalog.

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:

CAS 121 The Religious Dimension

This course will explore the religious dimensions of our lives in a number of different ways. We will develop a personal and satisfying definition of religion, investigate the expressions of religion in the whole life, gain understanding of the experience of various religious communities and explore our own personal identities. The focus will be through Western religious thought, a study of myths, and exploration of the perceptions on religion by Carl G. Jung. Cr 3.

CAS 122 Career Development

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

Cr 1.

CAS 123 Topics of Human Sexuality

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

Cr 3.

CAS 124 Patterns in Comparative Religion

This course seeks to stimulate a broadened understanding of religion through an examination of such typical religious phenomena as rites associated with birth, life-stages, death, sacred times, sacred places, myths, and religious symbolism. Course materials, including lectures, readings, and other sources, will be drawn from the major religions of the world as well as from ancient and regional traditions. Throughout the course, particular emphasis will be given to a sympathetic, rather than judgmental, examination of religious traditions.

Cr 3.

Each semester, the University of Maine School of Law offers an undergraduate course with a CAS designation. Previous course titles have included "Foundations of Legal Thought," "Current Problems in International Law," and "Environmental Law and Land Use Planning." Please consult the course schedule, available in the Registrar's office, for current offerings.

Some courses in women's studies are offered with a CAS designation. Please consult the course schedule for current offerings or contact the coordinator of Women's Studies.

Art

Chair of the Department: Duncan Hewitt, 101 Academy Building, Gorham
Professors: Bearce, Ubans; *Associate Professors:* Franklin, Hewitt, M. Moore, Rakovan; *Assistant Professors:* J. Moore, Schiferl

The department offers three bachelor's degrees: the bachelor of arts (B.A.), the bachelor of fine arts (B.F.A.), and the bachelor of science (B.S.). The requirements for the B.F.A. heavily involve the student in studio art courses and prepare him/her for graduate school or suitable professions. The B.S. gives the student preparation in several studio areas and professional education, and leads to teacher certification in the state of Maine. The B.A. is designed to provide a broad liberal arts education and to prepare students for graduate study in allied fields. In all of the programs, the faculty strive to promote the student's creative abilities.

Specifically, the department goals are a.) to provide a broad and challenging foundations program, which will enable students to develop a self-awareness, an historical perspective, and insight into the meaning and application of creative media in the visual arts; b.) to develop the capacity for critical analysis, the ability to investigate and experiment, and to make judgments within a framework of reason; c.) to develop an art vocabulary appropriate to the visual arts; d.) to develop an overview and understanding of literature on art; e.) to develop an open attitude for viewing and creating art; f.) to develop basic proficiencies in a variety of art media, as well as an in-depth competency in selected art areas; g.) to develop understanding of nonverbal communication skills; and h.) to provide an enriching gallery program for students, faculty and staff, and the greater Portland community.

Above all, the faculty helps students develop an intelligent and cosmopolitan attitude about art, and encourages self-reliance in developing their own art-work and other creative endeavors.

Admission Requirements

Students wishing to apply for admission to the Department of Art should observe the following procedures: Formal application should be made to the Director of Admissions, Admissions Office. Current degree candidates enrolled at the University, wishing to transfer into the Department of Art from another discipline, must obtain a change of major form and submit this form with an up-to-date transcript to the chair of the Department of Art.

By following these procedures a student is identified as a candidate for matriculation in the Department of Art. All candidates must complete the art core (consisting of Fundamental Design I & II, Fundamental Drawing I & II, and History of Art I & II) before matriculating as an art major in the Department of Art.

In order to become a full-time matriculated art major in one of the three degree programs, a portfolio of original works must be submitted to the Department for evaluation. This must be done subsequent to or during the semester in which art core requirements are completed. The portfolio should consist of 12 works in varying media, including one self-portrait drawn from life. The entire portfolio should indicate the applicant's current interest and may include prints, drawings, paintings, posters, photographs, and films, but 35mm slides or photographs of three-dimensional work should be submitted rather than the work itself. The Department cannot accept responsibility for damage or loss, and asks that no glass, three-dimensional work, or work larger than 20" x 24" be submitted.

Portfolio deadlines and application forms may be obtained from the Admissions Office or the Department of Art.

Final notification of a decision will come from the Department of Art approximately two weeks after the portfolios have been evaluated.

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

Programs and Requirements

Bachelor of Arts (B.A.)

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 90.

Art Core (18 credits)

ARTS	141	Design I
ARTS	142	Design II
ARTS	151	Drawing I
ARTS	152	Drawing II
ARTH	111	History of Art I
ARTH	112	History of Art II

Art History Requirements (9 credits)

ARTH	411	Philosophy of Art (may substitute PLY 220)
ARTH		Elective
ARTH		Elective

Studio Art Requirement (18 credits of ARTS courses)

Electives (45 credits)

No more than 60 credit hours with ART designation may be used to fulfill 90 credit-hours degree requirement.

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

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 90.

Art Core (18 credits)

ARTS	141	Design I
ARTS	142	Design II
ARTS	151	Drawing I
ARTS	152	Drawing II
ARTH	111	History of Art I
ARTH	112	History of Art II

Studio Art Requirement (45 credits)

9 credits in Drawing above the 152 level

6 credits from each of the following two categories: three-dimensional — ceramics, sculpture; two-dimensional — painting, printmaking, photography

24 credits ARTS electives

Art History Requirement (9 credits)

ARTH	411	Philosophy of Art (may substitute PLY 220)
ARTH		Elective
ARTH		Elective

Electives (18 credits)

A concentration of 12 credits in painting, printmaking, ceramics, drawing or other (specified by the Department) area is required. In addition, B.F.A. candidates are required to have an exhibit of their work during their senior year.

Bachelor of Science in Art Education

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 92.

Art Core (18 credits)

ARTS	141	Design I
ARTS	142	Design II
ARTS	151	Drawing I
ARTS	152	Drawing II
ARTH	111	History of Art I
ARTH	112	History of Art II

Art History Requirement (9 credits)

ARTH	411	Philosophy of Art (may substitute PLY 220)
ARTH		Elective
ARTH		Elective

Studio Art Requirement (27 credits)

ARTS	232	Ceramics I
ARTS	261	Painting I
ARTS	271	Photography I
ARTS	281	Printmaking
ARTS	291	Sculpture I
ARTS		Elective
ARTS		Elective
ARTS		Elective
ARTS		Elective

Professional Education Requirement (26 credits)

ARTE	221	Practicum in Art Education
ARTE	321	Principles and Procedures in Art Education
EDU	200	Studies in Educational Foundations
HRD	333	Human Growth and Development
EDU	324	Student Teaching (6 Cr course)
EDU	324	Student Teaching (6 Cr course)
ARTE	421	Seminar in art education

Electives (12 credits)

Includes 2 credits of physical education

Minor in Art History

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

The minor consists of ARTH 111; ARTH 112; and ARTH 411, and 12 credits of art history courses (noted by ARTH prefix) above the 200 level including: a.) at least one in any 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

Art History

ART 101 Introduction to Art

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

ART 416 Exhibitions & Gallery Management

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

ARTH 111 History of Art I

Examination and discussion of the early epochs of art from prehistoric cultures through the Renaissance. Special attention is directed to the relationships of historical and theoretical knowledge to creative expression. Divergent viewpoints of the art historian, the critic, and the artist are explored. The first half of an overview of the visual arts empha-

sizing the interrelationships of cultural values and the forms of art. Prerequisite: preference given candidates for matriculation in the Department of Art, or those with permission of the instructor. Cr 3.

ARTH 112 History of Art II

A continuation of ARTH 111 from the Renaissance through the 20th Century. In both semesters of the course, examples of architecture and sculpture, paintings, etc. are used as the basis of inquiry. Prerequisite: preference given candidates for matriculation in the Department of Art, or those with permission of the instructor. Cr 3.

ARTH 212 Classical Art

A survey of ancient art and architecture with special emphasis on discussing the key monuments of Greek and Roman art and their influence on later artistic periods. Prerequisite: ARTH 111. Cr 3.

ARTH 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: ARTH 111. Cr 3.

ARTH 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 which contributed to the development of Renaissance art. Prerequisite: ARTH 112. Cr 3.

ARTH 215 Seventeenth and Eighteenth Century Art

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

ARTH 217 Oriental and Non-Western Art

A survey of some of the major styles in Asian art (India, China, Japan) followed by an overview of the art of tribal Africa and Indian art of the Americas. The emphasis will be on an understanding of the art through the cultural factors which influenced its development. Prerequisite: none. Cr 3.

ARTH 218 Women in Art

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

ARTH 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 this, the only major form of creative expression conceived and developed

entirely within the Industrial Age. Principles of evaluation, illustrated through the development of motion pictures to their present state. Prerequisite: permission of the instructor. Cr 3.

ARTH 315 Western Art (1790-1880)

A study of the major movements of the first half of the modern era covering the period between 1790-1880. Prerequisite: ARTH 112. Cr 3.

ARTH 316 Modern Art

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

ARTH 317 Contemporary Art (1950-Present)

An examination and discussion of development in the visual arts since 1950. Prerequisite: ARTH 112. Cr 3.

ARTH 411 Philosophy of Art

An investigation into the theories of art and beauty found in the writings of philosophers, painters, writers, and critics which form the basis of understanding of the fine arts. Readings and discussion of writers from ancient to modern times. Prerequisite: ARTH 112. Cr 3.

ARTH 412 Topics in Art History

A seminar on a selected topic in art history which will be the focus of in-depth research and discussion. Prerequisite: Permission of the instructor. Cr 3.

ARTH 418 Independent Study in Art History

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

Studio Art

ARTS 141 Fundamental Design I

A studio introduction to the basic elements of two-dimensional and color relationships. Cr 3.

ARTS 142 Fundamental Design II

A studio introduction to the basic elements of three-dimensional relationships, and "the aggregate," an extended project interrelating the two and three dimensional. Prerequisite: ARTS 141. Cr 3.

ARTS 151 Fundamental Drawing I

A studio introduction to drawing, including the basic elements of line, tone, design, and representation. Cr 3.

ARTS 152 Fundamental Drawing II

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

ARTS 233 Textiles

Introductory exercises with elementary

weaves, the harness loom, backstrap, and inkle looms, and tapestry weaving. The student is encouraged to experiment with fibre construction. The emphasis is on fundamentals. Prerequisite: art core courses. Cr 3.

ARTS 251 Drawing III

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

ARTS 261 Painting

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

ARTS 271 Photography

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

ARTS 281 Printmaking

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

ARTS 291 Sculpture

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

ARTS 331/332 Intermediate Ceramics

Application of design principles in production of ceramicware with a concentration on advanced problems in wheel-thrown forms and hand building sculptures. Prerequisite: ARTS 231. Cr 3/3.

ARTS 351/352 Intermediate Drawing

Continued drawing with emphasis on independent direction. Prerequisite: ARTS 251. Cr 3/3.

ARTS 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: ARTS 261. Cr 3/3.

ARTS 363 Painting/Watercolor

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

ARTS 365/366 Intermediate Watercolor

Continuation of Painting/Watercolor with emphasis on personal expression. Prerequisite: ARTS 363. Cr 3/3.

ARTS 371/372 Intermediate Photography

Exploration of concepts and techniques of photography with emphasis on individual forms of expression. Prerequisite: ARTS 271. Cr 3/3.

ARTS 381/382 Intermediate Printmaking

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

ARTS 391/392 Intermediate Sculpture

The theory and practice of sculptural composition using a variety of techniques with traditional and new materials. Prerequisite: ARTS 291. Cr 3/3.

ARTS 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. Prerequisite: permission of instructor and Art Department chairman. Cr 1 to 6.

ARTS 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. Prerequisite: permission of instructor and Art Department chairman. Cr 1 to 6.

ARTS 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.

ARTS 431/432 Advanced Ceramics

Investigation and realization of advanced ceramics projects with an emphasis on personal development and professional attitudes. Prerequisite: ARTS 331 and 332. Cr 3/3.

ARTS 451/452 Advanced Drawing

Making personal and complete drawings and series of drawings. Emphasis on individual concepts and personal expression. Prerequisite: ARTS 351 and 352. Cr 3/3.

ARTS 461/462 Advanced Painting

Continuation of Intermediate Painting. Emphasis on individual concepts and personal expression. Prerequisite: ARTS 361 and 362. Cr 3/3.

ARTS 481/482 Advanced Printmaking
Study and realization of personally-developed imagery through advanced investigation of preferred print-making media. Prerequisite: ARTS 381 or ARTS 382. Cr 3/3.

ARTS 491/492 Advanced Sculpture
Continuation of Intermediate Sculpture with emphasis on the pursuit of personal imagery. Prerequisite: ARTS 391 and 392. Cr 3/3.

ARTE 221 Practicum in Art Education
An introduction to Art Education theories and processes through reading, writing, discussion, observation, and clinical experiences with children. The examination of the relationship between art-making and learning is relevant to prospective art and classroom teachers. Prerequisite: Sophomore standing or above. Cr 3.

ARTE 321 Principles and Procedures in Art Education
History and philosophy of Art Education, theories of child art, relationship of goals to Art Education strategies, development of a workable set of beliefs about Art Education through readings, writings, discussion, observation, interview, and field experiences. Intended for the Art Education major. Prerequisite: ARTE 221 and Art Core Courses. Cr 3.

ARTE 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. Pre-

requisite: Completion of the sequence of courses in the related discipline and permission of the instructor and Art Department chair. Cr 1 to 6.

ARTE 412 Topics in Art Education
A course on a selected topic in art education to be offered at least once a year. Prerequisite: Permission of the instructor. Cr 3.

ARTE 421 Seminar in Art Education
This seminar examines Art curriculum design and evaluation. Critical issues in Art Education for the emerging Art Education professional today are explored through discussion, writing, and readings. This course is to be taken while student teaching. Cr 2.

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

Biological Sciences

Chair of the Department: Louis F. Gainey, Jr., 306 Science Building, Portland
Health Education Advisor: Patricia M. O'Mahoney, 206 Science Building, Portland.
Professor: Najarian; *Associate Professors:* Gainey, Greenwood, Holmes, Mazurkiewicz, Riciputi, Schwinck; *Assistant Professors:* Dorsey, O'Mahoney.

A four-year program leading to a B.A. in biology is offered. The program provides students with a liberal arts education emphasizing the sciences. The required biology courses expose the student to an examination of life from the molecular level to the biotic community. Other biology courses may be elected to suit individual interests and needs. The required courses in chemistry and physics reflect the interdisciplinary status of biology today. Graduates of this program have found careers in biological and medical research laboratories,

field biology and pharmaceutical sales, or have furthered their education by entering graduate medical, dental, optometry, veterinary, and law schools, as well as schools for allied health professions.

Pre-medical Students

Almost every American school of medicine, veterinary medicine, and dentistry requires for admission a baccalaureate degree (major optional), two years of biology, two years of chemistry, one year of physics, a course in calculus, satisfactory performance on a national professional aptitude test, and a recommendation from a committee at the baccalaureate institution. At this campus, the Health Professions Pre-professional Evaluation Committee is comprised of faculty from the Departments of Biology, Chemistry, and Physics and is responsible for evaluating, comparing, and recommending students. For further information contact Patricia O'Mahoney, 206 Science Building, Portland.

Programs and Requirements

Bachelor of Arts

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 64.5.

BIO	101 and 102	Biological Principles and Laboratory
BIO	103	Biological Diversity
BIO	201	Principles of Genetics
BIO	203, 204	Comparative Vertebrate Embryology and Laboratory

OR

BIO	205	Comparative Vertebrate Anatomy and Laboratory
BIO	311, 312	Microbiology and Laboratory
BIO	331, 332	Ecological Principles and Laboratory
BIO	401, 402	General Physiology and Laboratory
MS	152	Calculus A
PHYS	121, 122, 123, 124	General Physics I and II and Laboratory

OR

PHYS	111, 112	Elements of Physics I and II
CHEM	113, 114; 115, 116	Qualitative Principles of Chemistry, I and II and Laboratory
CHEM	251, 252; 253, 254	Organic Chemistry I and II and Laboratory

Foreign language through intermediate level, or a passing grade in French 106 or German 106 is required; credits to be earned depend upon the language proficiency of the student. Challenge examinations are available.

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 101, BIO 102, BIO 103; or BIO 101, BIO 102, BIO 111, BIO 112; plus electives numbered 200 or above to equal 18 hours in biology coursework.

BIO 019 Biological Basis of Human Activity
A course designed to elucidate the basic biological constraints of human performance. This course does not serve as a prerequisite for BIO 103 or BIO 111. Associate degree credit only. Cr 3.

BIO 101 Biological Principles
An introduction to the structure and function of animal and plant systems in terms of cells, molecules, energy, and heredity. Offered fall and spring semesters. Cr 3.

BIO 102 Biological Experiences

Laboratory studies of the structure, function, and reproduction of cells and examination of representative animals and plants. Offered fall and spring semesters. Cr 1.

BIO 103 Biological Diversity

Integrated lecture/laboratory course on the evolution and diversity of life. Three hourly lectures and one three-hour laboratory/week. Prerequisites: Grades of C or higher in BIO 101 and BIO 102. Cr 4.5.

BIO 111 Human Anatomy and Physiology

The study of functional anatomy and physiology of the human. Prerequisite: grade of C or higher in BIO 101. Spring semester only. Cr 3.

BIO 112 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 206. Prerequisite grade of C or higher in BIO 102; BIO 111 or concurrent with BIO 111. Cr 1.5.

BIO 151 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 101. Cr 3.

BIO 200 Human Heredity and Embryology

This course presents the fundamental principles of genetics and embryology as they apply to humans. The influence of nutrition, drugs, viruses and physical agents on development will be discussed. Prerequisite: grade of C or higher in BIO 101. NOT open to students who have passed BIO 203. Cr 3.

BIO 201 Principles of Genetics

A study of heredity through a discussion of the mechanism and control of gene action. Current research on the nature of mutations and the role of genes in development, behavior, and populations will be examined. Prerequisite: grade of C or higher in BIO 101. Fall semester. Cr 3.

BIO 202 Experimental Genetics

Practical laboratory experience in techniques used in genetics. Prerequisite: BIO 201. Cr 2.

BIO 203 Comparative Vertebrate Embryology

The embryonic origin and evolutionary relationships of vertebrate structure. Prerequisite: grade of C or higher in BIO 103. Spring semester. Cr 2.

BIO 204 Comparative Vertebrate Embryology Laboratory

Laboratory experiments and observations on amphibian, chick, and mammalian embryos. Prerequisite: BIO 203 or concurrent with BIO 203. Spring semester. Cr 2.

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. Prerequisite: Grade of C or higher in BIO 101 and BIO 102. Cr 5.

BIO 217 Evolution

A study of the processes of biological evolution. Prerequisite: Grade of C or higher in BIO 101. Cr 3.

BIO 231 Botany

A study of structure, function, development, reproduction, and environmental adaptations of representative non-vascular and vascular plants. Lecture three hours/week; one three-hour laboratory/week. Prerequisite: Grade of C or higher in BIO 101 and BIO 102. Cr 4.5.

BIO 241 Plant Physiology

A study of the physiological activities of plants, and their growth and development as influenced by internal and external factors. Prerequisites: BIO 103, one year of college chemistry or permission of the instructor. Cr 3.

BIO 242 Plant Physiology Laboratory

Laboratory examination of phenomena in plant physiology. Prerequisite: concurrent with BIO 241. Cr 1.5.

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 101, and college chemistry. Cr 3.

BIO 282 Microbiology and Human Disease Laboratory

Laboratory techniques in the cultivation, identification and control of microorganisms. Prerequisites: BIO 281 or concurrently. Cr 2.

BIO 292 Ornithology

The basic biology of birds: life histories, migration, behavior, and economic importance, with emphasis on species found in Eastern North America. (Students supply their own binoculars or spotting scopes.)

Prerequisite: grade of C or higher in BIO 101. Spring semester only. 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 101, 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 102, BIO 311 or concurrent with BIO 311. Cr 2.

BIO 321 Histology

A lecture and laboratory course in which the microscopic anatomy of animal tissues is studied. Two hours of lecture and 4 hours of lab. Prerequisites: grade of C or higher in BIO 101 and BIO 102. (offered irregularly.) Cr 3.

BIO 331 Ecological Principles

The interrelationships of living organisms and their environments, including man's impact on ecosystems. Prerequisite: grade of C or higher in BIO 103. Fall semester only. Cr 2.

BIO 332 Field Ecology

Field and laboratory studies demonstrating basic concepts of ecology. (Numerous field trips.) Prerequisites: BIO 331 or concurrent with BIO 331. Cr 2.

BIO 335 Entomology

Integrated lecture-laboratory course on the biology of insects and their impact on man. Prerequisite: grade of C or higher in BIO 103. Cr 3.

BIO 345 Pathophysiology

A study of the physiological, genetic, biochemical and environmental basis of non-infectious diseases. Prerequisite: grade of C or better in BIO 111 or permission of instructor. Fall only. Cr 3.

BIO 351 Invertebrate Zoology

The morphology, physiology, and phylogenetic relationship of non-backboned animals. Prerequisite: grade of C or higher in BIO 101. Cr 2.

BIO 352 Survey of Invertebrates

Laboratory experience on the anatomy, physiology, and behavior of invertebrate animals. Prerequisite: BIO 351, or concurrent with BIO 351. Cr 2.

BIO 361 Parasitology

The life histories and host-parasite relationships of animal parasites, with emphasis on

those of humans. Prerequisite: grade of C or higher in BIO 101. Cr 2.

BIO 362 Parasitological Laboratory

The morphology and life cycles of parasitic protozoa, helminths, and arthropods. Prerequisite: BIO 361, or concurrent with BIO 361. Cr 2.

BIO 371 Fishery Biology

A study of the principles, theories, and methods used in fishery biology; historic and contemporary fish culture practices, and environmental modifications affecting fishery resource production. Freshwater, estuarine, and marine fisheries will be considered. Prerequisites: grade of C or higher in BIO 103. Fall semester only. Cr 3.

BIO 372 Fishery Biology: Lab and Field

Practical laboratory and field experiences of methods and techniques used in fishery biology. Prerequisites: BIO 371 or concurrent with BIO 371. Fall semester only. Cr 2.

BIO 381 Cell Biology

Structure and function of cells on the cellular, subcellular and molecular levels. Prerequisites: grade of C or higher in BIO 101, 102; one year of college chemistry, or instructor's permission. Cr 3.

BIO 401 General Physiology

A study of physiological processes and their regulation in animals. Prerequisites: grade of C or higher in BIO 101; 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. Prerequisites: BIO 401 or concurrently. Cr 2.

BIO 403 Comparative Physiology

Physiological and biochemical basis of environmental adaptation. Prerequisite: one year college biology with grade of C or higher, one year college chemistry, junior standing. Cr 3.

BIO 404 Comparative Physiology Laboratory

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

BIO 407 Comparative Animal Behavior

The physiological, genetic, evolutionary and environmental basis of behavior in invertebrates and vertebrates. Emphasis is on the neurophysiological and hormonal controls of behavior. Prerequisites: grade of C or higher in BIO 101; BIO 201 or BIO 111. Cr 3.

BIO 415 Histochemistry

A laboratory course offering practical experience in histological and histochemical techniques. Prerequisites: grade of C or higher in BIO 101, 102, CHEM 251. (offered irregularly.)

Cr 3.

BIO 421 Biology Seminar

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

Cr 1 or 2.

BIO 441 Problems in Biology

Independent library or laboratory studies on a special topic, as mutually arranged by instructor and student. Prerequisite: by arrangement.

Credit Arranged.

BIO 491 Biochemistry

A lecture course in which the biological strategies for synthesis, energy utilization, information transfer, and control systems are examined at the molecular level. Prerequisites: CHEM 253 or permission of instructor.

Cr 3.

Chemistry

Chair of the Department: John S. Ricci, 370 Science Building, Portland
Professors: Hatala, Smith, Sottery; *Associate Professor* Ricci; *Assistant Professors* Matson, Stebbins

The field of chemistry is concerned with the structure of matter and its transformations. The Department of Chemistry offers a four-year program leading to a baccalaureate degree (either B.S. or B.A.) in applied chemistry. The principal objectives of this program are to provide students with knowledge of both the theoretical and practical aspects of the science of chemistry and the opportunity to explore an application of chemistry of their own choosing. Thus, students will be equipped upon graduation to enter a variety of occupations which require knowledge and practice of chemistry.

Among the industrial positions for which a B.S. in chemistry is appropriate are research and development, process control, technical sales, and management training. Industries in such fields as drugs, electronics, plastics, petroleum, paper, and metals require chemists.

Teaching in elementary and high schools is an extremely valuable calling for which a university degree is essential.

Programs and Requirements

Bachelor of Science

The minimum number of credits (including the University's Core curriculum) required for the major: 120.

Sample Schedule

Fall	Spring
<i>Freshman Year</i>	
CHEM 113, 114 (Principles I)	CHEM 115, 116 (Principles II)
PHYS 121 & 122 (General Physics)	PHYS 123 & 124 (General Physics)
*MS 152 (Calculus A)	Electives
CS 140 Programming, Fortran or MS 120 (Intro. to Statistics)	

Sophomore Year

CHEM 251, 252 (Organic Chem. I) Electives	CHEM 253, 254 (Organic Chem. II) MS 153 (Calculus B) CHEM 231, 232 (Analytical Chem.) Electives
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Junior Year

CHEM 371, 372 (Physical Chemistry I) Electives	CHEM 321 (Inorganic Chem.) or CHEM 361 (Biochemistry) CHEM 373, 374 (Physical Chem. II) Electives
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Senior Year

Independent Study
Electives

*MS 152 is a pre- or co-requisite for PHYS 121. Students lacking the necessary background for MS 152 (i.e., two years of high school algebra plus geometry and trigonometry) should plan to enroll in MS 140, Precalculus Mathematics (3 credits) and defer PHYS 121-124 until their sophomore year.

Bachelor of Arts

The minimum number of credits (including the University's Core curriculum) required for the major: 120.

Sample Schedule

Fall	Spring
<i>Freshman Year</i>	
CHEM 113, 114 (Principles I) CS 140 (Programming, Fortran) or MS 120 (Intro. to Statistics) Electives	CHEM 115, 116 (Principles II) *MS 152 (Calculus A) Electives
<i>Sophomore Year</i>	
CHEM 251, 252 (Organic Chem. I) PHYS 121 & 122 (General Physics) Electives	CHEM 253, 254 (Organic Chem. II) PHYS 123 & 124 (General Physics) CHEM 231, 232 (Analytical Chem.)
<i>Junior Year</i>	
MS 153 (Calculus B) CHEM 371, 372 (Physical Chem. I) Electives	CHEM 321 (Inorganic Chem.) or CHEM 361 (Biochem.) CHEM 373, 374 (Physical Chem. II) Electives
<i>Senior Year</i>	
Electives	Electives

*MS 152 is a pre- or corequisite for PHYS 121. Students lacking the necessary background for MS 152 (i.e., two years of high school algebra plus geometry and trigonometry) should plan to enroll in MS 140, Precalculus Mathematics (3 credits) in the fall semester of their freshman year.

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 the first three years of their studies. The fourth year in the B.S. program will consist partly of 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 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 suitably qualified staff member of the host facility and by a member of the chemistry faculty, who will also supervise the independent study. Students will thus learn the practical techniques first hand, and will gain experience in approaches to the solution of real problems.

Elective and required courses in computer science and mathematics are intended to develop understanding of the applications of computers to such operations as the statistical analysis of laboratory data and the interfacing of mini-computers to laboratory instrumentation. Students who are interested in the applied chemistry major program are urged to consult with a member of the chemistry faculty to discuss the various options. Those who plan a career in an applied field of chemistry are advised to consider the B.S. option. In this program, they will have the opportunity for field experience with a practical application of chemistry. Students who prefer to retain a wider range of career options, especially in other disciplines which make extensive use of applications of chemistry, should consider the B.A. option. This program allows students to explore a somewhat broader set of elective courses. Even greater flexibility is afforded by the self-designed and liberal studies major programs which are administered by the Office of the Dean of Arts and Sciences. It is the intention of the chemistry faculty to prepare graduates of the applied chemistry program for productive effort in a society in which chemistry plays a vital role.

Admission Requirements

Students who apply for admission to the applied chemistry program are required to have completed college preparatory courses in chemistry, physics, and mathematics. At least two years of high school algebra and a semester each of geometry and trigonometry are recommended as part of the students' high school program. (Freshmen in the applied chemistry program who lack this preparation in mathematics are required to take MS 140, Precalculus Mathematics.) To be retained in the applied chemistry program, a student must maintain a minimum overall grade average (GPA) of 2.0; a GPA of 2.5 in required non-chemistry courses; and a GPA of 3.0 in required chemistry courses. Applied chemistry majors are required to complete the following courses: CHEM 113 & 114, 115 (or 215) & 116; 231 & 232; 251 & 252; 253 & 254 (or 255 & 256); 321 or 361; 371 & 372; 400 (*); MS 152, PHYS 121, 122.

In addition, all applied chemistry majors will be required either to demonstrate proficiency in technical writing or to pass satisfactorily a one-credit course in the topic.

*Candidates for the B.A. degree are not required to take the CHEM 400 series independent study.

CHEM 100 Foundations for College Chemistry

A course designed to help students who are inadequately prepared to complete successfully the CHEM 113-116 (Chemical Principles) sequence, either on the basis of their own perceptions or of their scores on two chemistry placement tests. The course will review basic chemical principles commonly

presented in high school chemistry and emphasize solving mathematical problems commonly done in freshman college-level chemistry. Two lectures and one recitation session per week. No prerequisite. Offered each semester. Cr 2.

CHEM 101 Introduction to Chemistry

General topics in chemistry including intro-

ductory units on matter and its properties; measurement; elements and compounds; atomic structure; solutions, dispersions, and water; osmotic pressure; chemical bonds; chemical nomenclature; stoichiometry; radiochemistry; gases; acids, bases and buffers; and energy relationships in chemical processes. Three lectures per week (usually concurrent with CHEM 102). Prerequisite: One year of high school chemistry (taken during the past five years) or a satisfactory grade level on the proficiency test administered by the Department. Offered each semester. Not appropriate for chemistry or biology majors. Cr 3.

CHEM 102 Introduction to Laboratory Measurement

Experiments will be designed to teach students how to perform accurate and reliable measurements using the major parameters of mass and volume. Topics to be covered include: physical and chemical changes; separation of a mixture; analysis of an ionic solution; properties of water; gases; acids, bases and buffers; titration. One recitation and two laboratory hours per week. Offered each semester. Corequisite: CHEM 101. Not appropriate for chemistry or biology majors. Cr 1.

CHEM 103 Introduction to Organic and Biochemistry

Stress will be placed upon topics of special importance for students of the health sciences: nomenclature of organic compounds; electron distribution in organic molecules; structural features of organic molecules; substitution, elimination, and addition reactions; oxidation reduction reactions; carbohydrates; lipids; proteins and amino acids; enzymes; nucleic acids; metabolism; summary of some aspects of nutrition; pharmaceuticals; medical applications of radiochemistry. Three lectures per week (usually concurrent with CHEM 104). Offered spring semester. Prerequisite: Grade of C or better in CHEM 101. Not appropriate for chemistry or biology majors. Cr 3.

CHEM 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: CHEM 103. Not appropriate for chemistry or biology majors. Cr 1.

CHEM 107 Chemistry for Technology

A one-semester course intended to illustrate the connections between chemical theory and practical problems in the Industrial Arts. Two hours of lecture and one two-hour laboratory per week. Offered spring semester only. Not suitable for chemistry majors. Cr 3.

CHEM 109 General Chemistry I

A study of selected fundamental concepts and theories of chemistry: atomic structure, periodic classification, electronic structure, chemical bonding, molecular structure, chemical reactions, chemical equations and quantitative relations, gases, kinetic theory, changes of state, solutions, acids and bases are discussed. Three lectures per week. No prerequisites. Cr 3.

CHEM 110 General Chemistry I Laboratory

Laboratory experiments to illustrate material presented in CHEM 109 lectures. One hour of recitation and two hours of laboratory per week. Corequisite: CHEM 109. Cr 2.

CHEM 111 General Chemistry II

A continuance of CHEM 109. Topics include thermochemistry, nuclear chemistry, selected materials in metallurgy, organic compounds, selected biological compounds, and synthetic materials. Three lectures per week. Prerequisite: CHEM 109 or permission of the instructor. Cr 3.

CHEM 112 General Chemistry II Laboratory

Laboratory experiments to illustrate material presented in CHEM 111 lectures. One hour of recitation and two hours of laboratory per week. Corequisite: CHEM 111. Cr 2.

CHEM 113 Principles of Chemistry I

A presentation of fundamental principles of chemical science. These principles will be presented in quantitative terms and illustrated by examples of their applications in laboratories and in ordinary non-laboratory experience. This course and CHEM 114 (normally taken concurrently) provide the basis for further study of chemistry for all students except those in health sciences. Three lectures per week. Fall semester. Cr 3.

CHEM 114 Laboratory Techniques I

Laboratory experiments to illustrate the principles which are presented in CHEM 113 lectures. One recitation and two laboratory hours per week. Corequisite: CHEM 113. Fall semester. Cr 2.

CHEM 115 Principles of Chemistry II

A presentation of topics of chemistry additional to those presented in CHEM 113. This course is designed to provide a solid foundation for all further studies in chemistry and is a prerequisite for all upper level chemistry courses. Prerequisite: grade of C or better in CHEM 113. Spring semester. Cr 3.

CHEM 116 Laboratory Techniques II

Laboratory experiments to illustrate the principles presented in CHEM 115 lectures. One recitation and two laboratory hours per week. Prerequisite: grade of C or better in CHEM 114. Corequisite: CHEM 115. Spring semester. Cr 2.

CHEM 140 Energy Man and Environment

This course presents a study of man's energy needs, and the alternative energy sources available. In addition, the impacts on the environment of the utilization of various energy sources will be considered. No prerequisite. Cr 3.

CHEM 141 Environmental Chemistry

The role of chemistry and the chemical industry in creating many environmental problems; the application of chemistry to aid in the solution of environmental problems. Prerequisite: one semester of an introductory college-level chemistry course or one year of high school chemistry completed within the last three years. Cr 3.

CHEM 231 Analytical Chemistry

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

CHEM 232 Analytical Chemistry Laboratory

Quantitative experimental determination by means of gravimetric, volumetric, and instrumental methods. Classical procedures and modern instrumentation, including spectrophotometry, electroanalysis and chromatography. One recitation and six laboratory hours per week. Prerequisite: a grade of C or better in CHEM 116. Corequisite: CHEM 231. Spring semester. Cr 4.

CHEM 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 CHEM 115. Offered each fall semester. Cr 3.

CHEM 252 Organic Chemistry Laboratory

Experiments will be performed to illustrate the basic laboratory skills of crystallization, extraction, distillation, and melting and boiling point determinations. The preparation and isolation of compounds by the Friedel-Crafts and Grignard reactions will be performed. The latter part of the semester will comprise an introduction to organic qualitative analysis. One recitation and three laboratory hours per week. Offered each fall semester. Prerequisite: a grade of C or better in CHEM 116. Prerequisite or corequisite: CHEM 251. Cr 2.5.

CHEM 253 Organic Chemistry II

A continuation of CHEM 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. Offered each spring semester. Prerequisite: a grade of C or better in CHEM 251. Cr 3.

CHEM 254 Organic Chemistry Laboratory II

A continuation of the experiments begun in CHEM 252 on organic qualitative analysis, including solubility tests, classification tests, and preparation of derivatives. Interpretation of spectra will be introduced to assist in the process of identification of unknowns. One recitation and three laboratory hours per week. Offered each spring semester. Prerequisite: a grade of C or better in CHEM 252. Prerequisite or corequisite: CHEM 253. Cr 2.5.

CHEM 321 Inorganic Chemistry

Descriptive chemistry of the inorganic compounds, structure, bonding and ligand field theory. Three lectures per week. Prerequisite: grade of C or better in CHEM 231. Not offered every year. Cr 3.

CHEM 322 Basic Laboratory Techniques of Inorganic Chemistry

Preparation and characterization of inorganic compounds. Particular emphasis on those techniques employed in industry, research and quality control laboratories. One recitation and three laboratory hours

per week. Prerequisite: a grade of C or better in CHEM 232 & 256. Prerequisite or corequisite: CHEM 321. Not offered every year. Cr 2.5.

CHEM 361 Biochemistry

A consideration of the structure, function, and transformations of the principal compounds of biological importance, and of the applications of chemical principles to these studies. Three lectures per week. Offered in the fall semester. Prerequisite: grade of C or better in CHEM 253. Cr 3.

CHEM 362 Biochemistry Laboratory

Experiments will be performed to illustrate material presented in CHEM 361. Offered in the fall semester. One recitation and three laboratory hours per week. Prerequisite or corequisite: CHEM 361 or permission of the instructor. Cr 2.5.

CHEM 371 Physical Chemistry I

This course introduces majors in applied chemistry 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 recitations per week. Prerequisites: grade of C or better in CHEM 231, MS 152, and PHYS 123. Fall semester. Cr 3.

CHEM 372 Physical Chemistry Laboratory I

Experiments illustrative of theoretical principles pertinent to chemical processes, such as thermochemistry, absorption phenomena, and physical properties of gases and liquids. One recitation and three laboratory hours per week. Prerequisite: grade of C or better in CHEM 232. Prerequisite or corequisite: CHEM 371. Fall semester. Cr 2.5.

CHEM 373 Physical Chemistry II

Additional principles of theoretical chemistry: reaction kinetics, surface chemistry electrochemistry, quantum mechanics and spectroscopy. Three lectures per week. Prerequisite: a grade of C or better in CHEM 371. Spring semester. Cr 3.

CHEM 374 Physical Chemistry Laboratory II

Experiments illustrating material presented

in CHEM 373. One recitation and three laboratory hours per week. Pre- or corequisite: CHEM 373. Spring semester. Cr 2.5.

CHEM 377 Instrumental Analysis

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

CHEM 378 Instrumental Analysis

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 CHEM 371. One hour of prelab recitation and three laboratory hours per week. Cr 2.5.

CHEM 400-498 Independent Study

Independent study required of all B.S. majors in applied chemistry. An intensive exposure to a selected area of applied chemistry through an internship served in an appropriate clinical, industrial, government or research facility. The site and problem are to be selected by the student in conference with a faculty advisory committee and a representative of the training facility. Offered fall, spring and summer.

Variable credit; maximum: 15.

PSCI 400 Science and Society

Readings and discussions concerning the relationships between science and society. The tactics and strategy of science and the philosophical and social implications of present scientific theories are considered with the aim of promoting understanding of the role of science in modern life. The interactions between scientists and society and the relationship between research and technology are also examined. Not offered every year. Senior students and others by instructor's permission. Cr 3.

Communication

Chair of the Department: James A. Bethel, 218 Bailey Hall, Gorham
Associate Professors: Bethel, Shedletsky; *Assistant Professors:* Kivatsky, Sayers

The development of communication understanding and skills, like communication itself, is a continual process. The study of communication involves the examination and exploration of processes by which verbal and/or nonverbal information is transmitted from one information processing system to another, the physical and social-psychological factors which affect the transmission and reception of the messages, and the consequences of feedback on the systems. The systems could be individuals, groups, organizations, societies, cultures, or cybernetic mechanisms. During human transactions, symbolic information such as words and behaviors are transmitted and processed by the participants. Machine-based communication focuses on the transmission and processing of electronic data. The Department of Communication emphasizes the study of human transactions in its coursework. However, students may focus their degree programs on other areas of communication theory by supporting their program with courses from appropriate departments, schools, or colleges within the University.

In order to understand the interdisciplinary nature of communication, majors may take courses in such fields as philosophy, business, sociology, psychology, education, and political science. The Communication Internship Program allows majors to study a particular aspect of communication in the field. This allows for applying knowledge acquired in the classroom to a practical setting. Since communication is essential to most forms of human endeavor, communication majors may prepare for employment or further study in education, government, business, law, health care, and the media.

Programs and Requirements

Bachelor of Arts

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

Communication majors will examine the different levels of communication analysis by completing the following required courses.

COM	102	Introduction to Communication
COM	290	Small Group Communication
COM	330	Interpersonal Communication Theories
COM	390	Organizational Communication
COM	495	Theories of Communication: Seminar

In addition, 15 credit hours must be selected from other departmental courses offerings. These courses may be chosen from the following.

COM	100	Research
COM	150	Business Communication
COM	171	Interpersonal Communication
COM	190	Media and Children
COM	265	Intrapersonal Communication
COM	272	Persuasion
COM	275	Theories of Language
COM	280	Mass Media and Human Interaction
COM	295	Communication Development in Children
COM	310	Nonverbal Communication
COM	320	Intercultural Communication
COM	420	Communication and Cognition
COM	430	Communication Internship
COM	485	Sex-Related Differences in Communication
COM	490	Theories of Mass Communication
COM	491	Independent Study

Fifteen additional credits of coursework should be selected from departments having courses consistent with the student's interests and goals. Such courses must be approved by the student's departmental advisor. Those students who wish to enter graduate study will be advised, in addition to the above requirements, to take a sequence of research courses.

Minor in Communication Theory

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

For students interested in a minor in communication theory, the Department offers the following concentration: COM 102, COM 290, COM 295, COM 330, COM 390, COM 495.

COM 100 Research

A lecture course designed to acquaint students with the sources and methods of scholarly research. Course will provide students with basic knowledge to carry out projects in secondary and primary research, from conception to execution. Research project required.

Cr 3.

COM 102 Introduction to Communication

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

Cr 3

COM 150 Business Communication

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

Cr 3.

COM 171 Interpersonal Communication

An experiential learning based course designed to acquaint the student with the elements of interpersonal communication, its basic nature and function. The course involves a study of the potential of human communication; with applications to the problems of misunderstanding and their remedy.

Cr 3.

COM 190 Media and Children

This course will examine media designed for the child audience. The class will view the

wide spectrum of children's media, and critically examine them in terms of their potential prosocial and antisocial effects. The readings and discussions will cover various theories and research models that address themselves to the impact of media on the young audience.

Cr 3.

COM 265 Intrapersonal Communication

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

Cr 3.

COM 272 Persuasion

A course designed to help students understand the basic principles of persuasion. The course deals with persuasion as a social phenomenon. The perspective from which the course is offered is the analysis of persuasion as a behavioral process. As such, the course will investigate the social science research which 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. Although this issue will be illusive, it is hoped that each student will give this topic adequate thought.

Cr 3.

COM 275 Theories of Language

The purpose of this course is to instigate thinking about the nature of language. The course is premised upon the conviction that, because language is such a central concern of

so many disciplines and because various disciplines have made important contributions to our understanding of it, language can only be studied adequately via an interdisciplinary approach. The student will be introduced to some of the foremost efforts to comprehend language in the fields of psycholinguistics, philosophy, and linguistics. Through these disciplines, we intend to raise and pursue questions concerning the nature of language, its structure and function, its relation to man's perception of reality, and its relation to the mind. Prerequisites: COM 102, any PLY 100 level course, or permission of the instructor. Cr 3.

COM 280 Mass Media and Human Interaction

Mass Media and Human Interaction concentrates on the history and effects of mass communication in our society. Through readings and independent research, the student will explore the content and social consequences of our rapidly changing telecommunication technology. Media to be discussed include print, broadcasting, and cable. Cr 3.

COM 290 Small Group Communication

A discussion-participation course designed to familiarize students with the theories and techniques of small-group communication. Students will examine role behavior, group norms, conflict, group development, problem solving, communication flow, and other variables relevant to actual small-group interactions. Cr 3.

COM 295 Communication Development in Children

This course will examine the structural and the functional development of children's communication behavior. Syntactic, semantic, and pragmatic aspects of communication development will be explored from both learning and acquisition theory perspectives. This course includes a final project of the student's creation. Freshmen must have instructor's permission. Cr 3.

COM 310 Nonverbal Communication

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

COM 320 Intercultural Communication

A study of communication as an agent of cooperation/conflict between cultures, such as between nations, races, and societies. Focus is upon institutional agencies, such as the U.N., and upon simulations of intercultural communication, such as R.B. Fuller's *World Game*, the *Geophysical Year*, and others. Appropriate consideration is given to intercultural communication, such as cultural exchanges, diplomacy performing groups, lecturers, consultants and similar cross-cultural relationships. Cr 3.

COM 330 Interpersonal Communication Theories

A study of the current thinking in interpersonal communication with emphasis upon specific theories of human interaction. Students will engage in behavioral observations, experiential learning activities, group research projects, individual study, and will complete a final project on a selected topic in interpersonal communication. Prerequisite: COM 102 or COM 290. Offered each spring semester. Cr 3.

COM 390 Organizational Communication

A lecture-discussion course with a practical field study required. The class will examine factors relevant to communication within organizations and will discuss such topics as organizational roles, information flow, decisionmaking, leadership, and the nature of organizational change. Prerequisite: COM 290 or permission of the instructor. Cr 3.

COM 420 Communication and Cognition

A seminar designed to explore the relationship between communication and thought processes. The nature of consciousness is explored through a consideration of the acquisition, retention, and retrieval of information. Special attention is given to experimental analysis of thought processes. Prerequisites: junior, senior or permission of the instructor. Cr 3.

COM 430 Communication Internship

An in-depth study of experiences in specific areas of communication which is conducted in the field. Students will focus their efforts in an area related to their choice of communication expertise (i.e. organizational communication, mass communication, intercultural communication). Prerequisite: a precise definition of the project, and director's consent. Cr var.

COM 490 Theories of Mass Communication

A discussion of significant factors related to communication theory. Contemporary theo-

ries 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 which is of interest to them, and present their findings in research papers and projects. Prerequisite: COM 280 or permission of the instructor. 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. Enrollment by permission of faculty sponsor only. Cr 3-6.

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 concerned with whether or not males and females differ in their actions of sending,

receiving and interpreting messages. The course examines gender-role stereotyping, empirical findings on sex-related differences in communication behavior (e.g., talking, interpersonal style, touching, eye contact, etc.), and explanations for sex differences. Critiques of some major theoretical positions are discussed (e.g., sex differences in dominance, aggression, cognition, and brain organization. Prerequisite: Junior or senior standing. Cr 3.

COM 495 Theories of Communication: Seminar

This course is designed for upperclass students who are majoring or minoring in communication studies. Based on a seminar format, students in this course will explore in depth several advanced theories of communication, mechanistic thorough interactive, with examples and application for each. Open to juniors and seniors having at least 12 credit hours of communication coursework. Cr 3.

Criminology

Coordinator: Piers Beirne, 120 Bedford Street, Portland

The bachelor of arts in criminology is a four-year degree offered by the Department of Sociology. Criminology is the study of the complex relations among crime, law, and society. Traditionally, criminologists have sought to understand why particular individuals or groups engage in criminal activities. Recently, however, the study of crime has been expanded to include the structures and processes whereby certain behavior is defined as criminal. This includes examination of the ideas, ideals, and ideologies embedded in definitions of crime and expressed in our everyday perceptions of crime and criminality.

The curriculum in criminology is a rigorous series of courses that provides students with a comprehensive knowledge of traditional and modern criminological thought. The core of the curriculum is an integrated set of required courses. These courses are designed as a cumulative set of experiences and must therefore be taken in sequence. Elective courses enable students to place their criminological interests in a broader sociological perspective.

Many students in the program are interested in law studies or in social service occupations related to criminal or juvenile justice. The program also prepares students for a wide variety of other career options and provides an excellent basis for graduate study in criminology, other social sciences, and law.

Continuing students in criminal justice should consult the degree requirements in the catalog at the time of their formal declaration of major as well as arranging to meet with the program coordinator, Professor Beirne, as soon as possible.

Programs and Requirements

Bachelor of Arts

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 40.

The criminology major consists of 28 hours in required courses, 9 hours of sociology electives, and 3 hours of cognate electives.

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

Required Courses

CRIM	215	Criminology
SOC	205	Methods of Social Research
SOC	300	Sociological Theory I
CRIM	301	Criminological Theory I
CRIM	302	Punishment and Discipline
SOC	336	Law and Society
SOC	375	Deviance
CRIM	401	Comparative Criminology
PLY	240	Political Philosophy
OR		
PLY	260	Philosophy of Law

Sociology Electives (select 9 hours)

SOC	310	Social Change
SOC	312	Class and Inequality
SOC	315	Self and Society
SOC	350	Urban Sociology
SOC	353	Social Movements
SOC	355	Social Structure and Politics
SOC	356	Order and Control
SOC	357	Bureaucracy in Modern Society

Cognate Electives

An advanced level course in a related discipline to be selected in consultation with the student's advisor.

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 credit. Courses taken pass/fail are not acceptable. The coordinator of the program routinely requests faculty teaching major courses to submit a list of those students doing less than C work at mid-semester. These students are strongly encouraged to meet with their professor, and may be required to meet with the coordinator for counseling.

Curriculum Summary and Guide

The curriculum is a series of structured and integrated core experiences for the student. The Criminology and Law and Society courses introduce students to some of the basic concepts, theories, and perspectives in the field, and convey basic empirical knowledge about the structure and processes of American law and the agencies of control in modern society. The Criminology course primarily focuses on the sources of crime data, the reasons why certain behavior is defined as criminal, and the consequences of criminal labeling.

The Law and Society course focuses on the features that distinguish law from other rules of social behavior, with particular emphasis on the doctrinal

and institutional aspects of American criminal law. The Methods and Research course provides students with the elementary investigative tools of social inquiry. These three courses should be taken during the second year of a student's career at the University.

The theory sequence of Sociological Theory and Criminological Theory forms the core of the third year of study. The Deviance course, also taken during the third year, provides an added dimension to the social nature of rule creation, deviation, and enforcement. These core courses are complemented, in the third year, by elective courses.

The fourth year includes a sequence of Punishment and Discipline and Comparative Criminology. Together, these serve as a senior experience for students. During this year students will complete elective requirements.

Summary

Year I:

SOC 100, Core curriculum requirements

Year II:

Complete University Core curriculum requirements

Criminology (fall or spring)

Methods of Research (fall or spring)

Law and Society (spring)

Year III:

Sociological Theory (fall)

Criminological Theory (spring)

Deviance (spring)

PLY 240 or 260 and electives

Year IV:

Punishment and Discipline (fall)

Comparative Criminology (spring)

Complete elective and cognate requirements

Declaration of Major

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

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

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

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

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

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

Transfer Students

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

CRIM 215 Criminology

An analytic survey of theoretical orientations which contribute to a sociological understanding of the interrelationships among crime, law, and punishment; emphasis given to analysis of fundamental conflicts between law and social order as manifested in the organization and operation of the American criminal justice system. Also listed as SOC 215. Prerequisite: SOC 100 or SOC 170. Cr 3.

CRIM 301 Criminological Theory

This course focuses on the development of criminological theory from 1930 to the present. The course is historical in nature and addresses such fundamental problems as why certain behavior is defined as criminal, the causes of crime, and the consequences for the individual of being labeled as a criminal. Offered spring semesters. Prerequisite: SOC 300 and CRIM 215. Cr 3.

CRIM 302 Punishment and Discipline

This course distinguishes between different forms of discipline, such as punishment, therapy, conciliation, and repression. It traces the development of punishment as the definitive style of discipline in modern societies. Specific historical emphasis is given to the emergence of the doctrine of the rule of law. The development of the modern police and the modern prison are traced as responses both to the necessity of social control and to crises generated by social disorder and political instability. Offered fall semesters. First offered Fall 1984. Prerequisite: CRIM 301. Cr 3.

CRIM 401 Comparative Criminology

This course focuses on the application of American criminological theory in cross-cultural contexts. Specific emphasis is given to the problems of cultural relativism and intellectual imperialism while providing an integrative senior experience for majors. Offered spring semesters. First offered Spring 1985. Prerequisite: CRIM 301 and CRIM 302. Cr 3.

CRIM 390 Independent Projects

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

CRIM 395 Internship

An opportunity for criminology majors to apply theoretical perspectives to actual field experience. Students will choose a topic for investigation with the advice, and under the direction of, a faculty member in the Criminology program and will be expected to submit to the program coordinator both a research proposal and a final report on their activities. Prerequisite: Advanced standing and permission of program coordinator. Cr 3.

CRIM 412 Research In Criminology

Independent or group-organized research project or activity under the direction of a faculty member. Open to advanced students with some training or experience in research methods. Apply to the program coordinator. Cr 3.

Economics

Coordinator: Robert C. McMahon, 227 Luther Bonney, Portland

The undergraduate program in economics is designed to prepare students broadly for careers such as civil service, law, management, public affairs, and labor relations. Economics is a social science and as such must be studied in the perspective of a broad training in the liberal arts and sciences. Many students who plan to attend graduate and professional schools will find the undergraduate economics program to be valuable training for advanced academic work. Within the economics program, courses are available in such fields as: microeconomic analysis, money and banking, macroeconomic analysis, international trade, comparative economic systems, public finance, and economic development.

Bachelor of Arts

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 77.

Students interested in receiving a bachelor of arts degree in economics may not take more than 42 hours of economics courses or 21 hours of business courses for credit toward a bachelor of arts degree.

Students in this program are required to take the following mathematics courses: MS 109, MS 110, MS 211, and MS 212.

Successful completion of any of these courses satisfies the Core curriculum requirement for Basic Competence in Quantitative Decision Making. An optional, more rigorous mathematics sequence is available to those students who desire it. Students who wish to take MS 152 Calculus A and MS 153 Calculus B can substitute those two courses for MS 109 and MS 110. They must still take MS 211 and MS 212. An optional minor in mathematics also is available.

In fulfilling the Core social science requirement, students may not take an ECON course. Students who fulfill the English Composition Competency requirement of the Core curriculum without earning academic credit must complete three credits of humanities electives (CLS, ENG, FRE, GMN, GRK, LAT, PLY, or SPN).

Requirements in Economics and Business (36 credits)

Business

ACC 201 Principles of Financial Accounting

Economics

ECON 201 Principles of Economics I

ECON 202 Principles of Economics II

ECON 301 Macroeconomic Analysis

ECON 302 Microeconomic Analysis

ECON electives which may include GEOG 303 and HIST 338
Electives (41 credits)

Economics course description may be found in the School of Business, Economics and Management section of this catalog.

English

Chair of the Department: L. Morrill Burke, 321 Luther Bonney, Portland
Professors: Hanna, Jaques, Rosen, Rutherford, Slavick; *Associate Professors:* Ashley, Baier, Burke, Carner, Carper, Coffin, Gish, Reuter, Selkin; *Assistant Professor:* Abrams

In the study of literature, students learn to appreciate the possibilities of language for serious and often moving expression. Through writing practice, students learn to use language effectively. The understanding of language is fundamental to an understanding of what we do, and the quality of language in a society determines and reflects its moral and political condition.

The English major serves those interested in preparing for any profession or vocation where an understanding of experience is important, from the law and medicine to social work and politics. The range of English courses is large, and will prepare the student to think and write clearly and creatively, talents vital to success in any field. For information and counsel regarding the major

or appropriate courses for non-majors, students should visit English offices in Corham (200 Bailey Hall) or Portland (411 Luther Bonney Hall).

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

Programs and Requirements

Bachelor of Arts

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

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

While the Department does not require courses in other disciplines, majors are strongly advised to develop a reading proficiency in a foreign language and to elect or satisfy Core requirements with History of Western Civilization I and II (HIST 101 and 102), History of England (HIST 261), a course in American history (HIST 131, 132, 133, or 134), a lower-level philosophy course (PLY 101, 102, 103, 104, 106, 109), one or more history of philosophy courses (PLY 310, 320, 330, 340, 350, 360), an art course (ARTH 101, 111, or 112), a music course (MUS 100, 120, or 121), and one or more theatre courses (THE 101, 340, 341, 361, or 362).

English majors must meet the following English Department requirements. All courses must be passed with a grade of C – or better and six hours with a grade of B or better; at least nine hours must be taken from the 300-400 level offerings.

1. ENG 100 or 101 or waiver; ENG 120 (0 credits toward major)

A student may, with an advisor's approval, substitute the third Introduction for Majors course, or a second Classical and Biblical Backgrounds course for ENG 120.

2. Introduction for Majors (6 credits required)
ENG 160 Poetry (required of all majors)
ENG 161 Fiction
ENG 162 Drama

Majors who do not take the Fiction course (161) or the Drama course (162) must take an upper-level course in the omitted genre. For Drama, a course other than Shakespeare must be selected.

3. Writing Courses (3 credits required)
ENG 209 Business and Report Writing may not be used to satisfy this requirement.
4. Classical and Biblical Backgrounds (3 credits required)
5. Linguistics and Related Courses (3 credits required)
6. Criticism Courses (3 credits required)
7. Major Figures (6 credits required)

The two major figures courses should be selected as follows:
3 or 6 credits from Chaucer (ENG 250), Shakespeare (ENG 260 or 261), or Milton (ENG 356); 0 or 3 credits from another major figure or major figures seminar.

8. Periods of Literature Courses (15 credits required)
At least one course from *five* of the following six areas is required:

Continental and World Literature; Medieval Period; Renaissance; Neoclassical and Romantic Periods; 19th Century British and American Literature; Modern British and American Literature.

Major figure courses other than Shakespeare also fulfill Periods of Literature requirements.

9. Electives. (credits in courses numbered above 160 to complete the 48-credit major required)

Note: The requirements of the English major program may be waived in favor of a self-designed major that is approved in advance by the English Department Curriculum Committee.

Prerequisites and Course Waivers

ENG 100 or 101, or an equivalent or waiver, is a prerequisite for any English language or literature course, including ENG 120. For English-major and general-interest courses numbered 130 to 199, ENG 100 or 101 (or an equivalent or waiver) and ENG 120 or permission of the instructor are prerequisites. For courses numbered 200 to 499, prerequisites are ENG 100 or 101 (or an equivalent or waiver), and ENG 120. Certain advanced courses, as indicated in the course listings, and all Independent Study courses, require the instructor's permission.

Note: Non-majors and students with special interests are encouraged to seek the instructor's permission to take any course for which they feel qualified. ENG 120 may be waived for a few exceptional students who pass a qualifying examination administered by the English Department, and for transfer students with certain literature course credits. English majors may, with their advisor's approval, substitute a third genre course (ENG 161 or 162) or a second Classical and Biblical Backgrounds course for ENG 120.

The Honors Degree in English

For a B.A. degree in English with honors, a student must achieve a B+ or better average, and he or she must successfully complete a seminar where a major paper is required (or a department-approved Independent Study course if a suitable seminar is not being offered).

Minor in English

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

The Department offers an English minor which requires 18 credits of upper-level (160 and above) courses in a program planned with an English faculty advisor and approved by the director of English Minor Programs. The goal of the program is to give students not simply a collection of courses, but a coherent experience with English courses chosen to suit their needs and interest, whether in literature generally, creative writing, American literature, language and composition, or another area of study.

Each program must meet these specific requirements beyond ENG 100/101 and ENG 120/122 (or waivers): a 200-level writing or language/linguistics course; three 200-level literature courses (one must be selected from those numbered 220 to 265, one from 270 to 291); one 300- or 400-level course.

Further information about the minor is available in the English Department offices.

Teaching Specialties for Early Childhood and Elementary Education

Students in early childhood or elementary education in the College of Education may complete 30 hours of English in an approved program for an academic major or 18 approved hours for an academic minor. Details of such programs may be obtained from the appropriate faculty advisors in the College of Education.

Internships, Job Opportunities, and Exchange Programs

Students of English are encouraged to take advantage of a variety of intern-

ship opportunities as part of their program. Internships allow academic credit for work experiences that use and enhance English skills. Also, students are invited to discuss job opportunities for those with training in English, and to examine pamphlets and books on the subject, in the English office at Gorham.

English majors are encouraged to apply for semester or year-long exchanges in English departments at Whitelands College, London, and Nijmegen University, The Netherlands.

100-Level Courses

ENG 100 College Writing

Classes meet regularly to analyze professional and student writing as a way of sharpening awareness of how to use language effectively. The writing assignments encourage students to apply the principles discussed in class to their own work. To complete the course successfully, the student must pass a departmental exit examination. Passing the departmental examination does not, however, guarantee that the student will pass the course. Each instructor has his or her own standards. Students may not take both ENG 100 and 101 for credit. This course cannot be used to satisfy a humanities requirement. (Every semester). Prerequisite: writing proficiency. Cr 3.

ENG 101 Independent Writing

A course especially designed for the mature student who has been well prepared in writing by high school or previous experience and who has the discipline to work independently. The course is conducted primarily in individual weekly conferences, though classes meet occasionally. Independent Writing focuses on problems of style, presentation, and minor mechanical difficulties. To complete the course successfully, the student must pass a departmental exit examination as well as satisfy the requirements of the instructor. Student may not take both ENG 100 and 101 for credit. This course cannot be used to satisfy a humanities requirement. (Every semester). Prerequisite: writing proficiency. Cr 3.

ENG 102 Term Paper Writing

This course will teach the student to write a research paper. The choice of subjects will be worked out by instructor and student. The student will learn how to develop a topic, prepare a working bibliography, become familiar with library resources, take notes in an orderly and meaningful fashion, and then write a final paper after having polished a number of rough drafts. Cr 1.

ENG 103 Basic Grammar and Usage

This course is designed to teach the student current practice in grammar and usage as

opposed to formal grammar. The student will master the many matters of agreement, punctuation, etc., needed in writing college papers. Cr 1.

ENG 110 Straight and Crooked Thinking

The analysis, interpretation, and evaluation of various kinds of arguments and ways to reach logical decisions, with a first-hand study of the reasoning found in editorials, political tracts, speeches, literary essays, scientific papers, and magazine articles. This basic course employs a new non-symbolic approach to practical reasoning expressed in natural language; its emphasis is on direct application to realistic cases. Exercises and readings are designed to aid undergraduates in reports, essays, and term papers. The materials for critical analysis have a broad appeal for future lawyers, administrators, executives, business people, and scholars. Regular oral reports; brief written exercises in critical reasoning and analysis; final examination based on actual specimens of contemporary argument. Prerequisite: ENG 100/101 or permission of instructor. Cr 3.

ENG 120 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. (Every semester). Prerequisite: ENG 100 or 101 or waiver. Cr 3.

ENG 130 The Literature of Sport

Contemporary fiction, poetry, and drama on The Game, its players and watchers, its heroes and losers, its joy and sadness reflected in the works of such writers as Cheever, Updike, Algren, Wain, Roth, Shaw, Schulberg, Wright, Ellison, McCullers, Dickey, Williams, Moore, Ferlinghetti, Sillitoe, and many others. The social and cultural implications of sports, now and in the immediate future, will also be weighed. These include the ritualistic side of competition and spectacle; the blurring of "professional" and "amateur" flaws in America's hero image; kid teams and adult ambitions; college con-

ferences and academic standards; racism and nationalism in the Olympics; thrills, violence and gate receipts; winner-loser psychology; sex stereotypes; mass versus elite leisure; machismo politics and femlib. Readings will include two anthologies, a novel, a play, a collection of recent essays by social anthropologists. Cr 3.

ENG 131 The Literature of Business

The drama of business as reflected in the fiction of important writers like Twain, Norris, Dreiser, and Warren. The course will focus on significant moments and problems in America's economic history and on the way these have been represented by writers who have concerned themselves with subjects like the exploitation of the West, the Robber Barons, manipulation in the stock market, and cycles of economic euphoria and disillusionment. Cr 3.

Eng 150 Topics in Literature

A selection of courses varying in content from term to term. Under consideration for coming semesters: Utopian Literature, Radicalism and Revolt in Fiction, Feminism in the World Novel, Native American Literature, and Popular Semantics. Descriptions of current offerings are available in the English offices. More than one section may be taken for credit. Cr 3.

ENG 160 Poetry

An intensive course in the close reading of many of the most significant poems in English. Attention will be given to important elements of poetry, including versification and the use of metaphor; characteristics and conventions of poetry written in different periods, early and contemporary, will also be explored. Required of English majors and recommended for all students seeking to understand a principal area of our cultural heritage. Cr 3.

ENG 161 Fiction

An intensive course in the close reading of many kinds of fiction, with an emphasis on the tradition of psychological realism. The different styles and approaches to narrative that characterize writing by men and women in different eras, and the qualities that give superior writing its position of esteem in our culture, will be studied. Cr 3.

ENG 162 Drama

Significant representative plays from several periods, including the contemporary, will be studied. Conventions of stagecraft at different points in the drama's history will be explored, and attention will be given to how dramatic and literary techniques, like the use of action, stage effects, and dialogue, contribute to the often profound meanings that plays can convey. Cr 3.

Writing Courses

ENG 200 Advanced Essay Writing

Study of various forms of discourse with concentration on exposition. Provides experience in logical analysis and in the uses of persona, appeals to the reader, stylistic and fictional devices, and other strategies. (Every spring). Prerequisite: a grade of B in ENG 100 or 101, or permission of the instructor. Cr 3.

ENG 201 Creative Writing

An introduction to the principles and practice of writing fiction, poetry, and drama. Emphasis is on fresh observation and meaningful selection of concrete details and their uses in the different genres. Recommended for beginners. (Every fall). Prerequisites: ENG 100 or 101 and ENG 120. Cr 3.

ENG 202 Fiction Writing

A course for those who have already, in a course such as Creative Writing or on their own, written several pieces of fiction and are ready for more advanced work. Emphasis will be on writing well-developed short sto-

ries and on understanding the basic elements of fiction. A better-than-average competence in using English is required. Suggested preparation: ENG 201. Cr 3.

ENG 203 Poetry Writing

A course for those who, in a creative writing course or on their own, have developed basic skills of careful, thoughtful observation and a preference for concrete details to convey emotional meanings, and who are interested in developing a sense of how poetry has been written in the past by major poets and how it is being created in the present. Emphasis will be on imitation of past and present writers and exercises that stress the elements of poetry, as well as on the development of personal approaches. Suggested preparation: ENG 201. Cr 3.

ENG 204 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 com-

plete a series of creative exercises culminating with writing a one-act play. Prerequisites: THE 101 and THE 361 or 362 or 363. This course is also listed as THE 335. Cr 3.

ENG 209 Business and Report Writing

Primarily for juniors and seniors majoring in business administration. Training in clear and effective writing of formal reports, business communications, and related materials. (Every semester). Cr 3.

ENG 302 Fiction Workshop

An advanced course requiring the completion of short stories or a substantial part of a novel. Prerequisites: ENG 202 and instructor's permission. May be repeated for 3 addi-

tional credits with instructor's permission. Cr 3.

ENG 303 Poetry Workshop

A course for advanced students who, after experimenting with different approaches and styles, are developing their own themes and voices as poets. Work toward a completed chapbook-length manuscript of high-quality work will be the basis for the course grade. Prerequisites: ENG 203 and instructor's permission. May be repeated for 3 additional credits with instructor's permission. Cr 3.

ENG 400 Independent Study in Creative or Expository Writing

Cr var.

Journalism Courses

ENG 210 Newswriting

This course includes news and feature writing with intensive practice in journalistic-writing techniques, accuracy, judgment, and style. (Every fall). Prerequisite: ENG 100/101. Cr 3.

ENG 310 Advanced Newswriting

A continuation of Newswriting. (Every spring). Cr 3.

ENG 410 Independent Study in Journalism

Cr var.

Classical and Biblical Backgrounds

ENG 220 Ancient Masterpieces

A study of selected major works of classical times which will provide students with a background for understanding the most influential books of our culture. Included are Homer, Plato, Greek dramas, Virgil. Cr 3.

ENG 222 The Bible

The Bible, the single most influential work (or group of works) in Western culture, will be considered as a literary text. Under such headings as plot, character, genre, theme, and symbol, the Old and New Testaments in the Authorized or King James translation will be examined, with emphasis on the books which have had the greatest literary influence (e.g., Genesis, Exodus, Job, Matthew, Luke, Revelation). The course will also discuss the history of the text, translation, and influence. Cr 3.

ENG 223 The Epic Hero in Ancient Literature

Intensive readings in English translations of *Gilgamesh*, *Iliad*, *Odyssey*, *Argonautica*, *Aeneid*; discussion, papers. (Also listed as Classics CLS 283.) Cr 3.

ENG 224 The Tragic Hero in Ancient Literature

Intensive reading of selected plays in English

translation by Aeschylus, Sophocles, Euripides, Seneca; discussion, papers. (Also listed as Classics CLS 284.) Cr 3.

The following Foreign Languages and Classics courses carry English major credit as electives. Note that these courses cannot count both toward the English major and toward the Core curriculum requirements.

CLS	291	The Golden Age of Greece
CLS	292	Rome, from Republic to Empire
FRE	281	Masterpieces of French Literature I
FRE	282	Masterpieces of French Literature II
FRE	283	Contemporary French Thinkers
FRE	284	Avant-Garde Theatre in France
FRE	285	18th Century Literature in France and England
GMN	281	The German Novelle
SPN	281	Masterpieces of Spanish Literature

For descriptions, see Foreign Languages and Classics section of this catalog.

Up to six hours of specific courses offered by such other CAS departments as History, Theatre, and Philosophy may be elected for English major credit.

Linguistics and Related Courses

ENG 230 History of the English Language

This course includes a survey of the prehistory of the language as well as a detailed study of the Old, Middle, and Modern English and the forces which shaped these stages. Some methods of modern linguistic science are utilized in examining current usage. Change and development of the language are emphasized. (Every fall). Cr 3.

ENG 231 Modern Grammars

Designed to acquaint students with the three most common forms of English grammatical analysis: traditional, structural, and transformational. The mechanics of the various analyses will be examined, and comparisons will be made to determine what tentative combination best explains the structure of English. Cr 3.

ENG 232 Introduction to Linguistics

A general introduction to modern linguistic science, including studies in the development of language, phonology, morphology, the dictionary, and varieties of English usage. Also examined are the various grammatical philosophies and their methods - traditional, structural, and transformational. Cr 3.

ENG 233 Structural Linguistics

The course first analyzes the structure of

many languages: i.e., Mexican and Central American Indian languages, including dialects of Chontal, Aztec, Mayan. The course uses the acquired analytical skills to explore the nature of language itself. Cr 3.

ENG 234 Semantics

Interpretation of literature by means of analysis of the language used. Recommended for prospective teachers of literature and English. Cr 3.

ENG 333 Structural Linguistics and Culture

The course analyzes the languages and culture (art, religion, poetry) of pre-literate societies, particularly the American Indian. Cr 3.

ENG 430 Independent Study in Linguistics

Cr var.

ENG 431 Seminar in Linguistics

An advanced course focusing on specialized problems in language study, including Old English. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Typical subjects: Old English, Beowulf, Modern Linguistic Theorists. Cr 3.

Criticism Courses

ENG 240 History of Literary Criticism

A study of the great literary critics, their methods and approaches, from Plato and Aristotle to the present day. Among the many figures included are Sidney, Johnson, Coleridge, Arnold, and T.S. Eliot. Cr 3.

ENG 341 Critical Approaches to Literature

This course will provide a basic introduction to the major critical interpretive perspectives indispensable for the sensitive reader (moral-philosophical, formalistic, psychological, mythological, archetypal, and exponential). It will be structured around a close reading of specific works from several genres. It will

also study literary terms, prosody, prose style, and the relation of literature to the other arts. Cr 3.

ENG 440 Independent Study in Criticism

Cr var.

ENG 441 Seminar in Literary Criticism

An advanced course focusing on specific problems or historical movements in literary criticism. Emphasis is on applying various scholarly approaches to important, limited subjects. Typical subjects: myth and myth criticism, psychoanalytic theory as myth. Cr 3.

Continental and World Literature

ENG 225 Continental Masterpieces

A study of some of the masterworks of medieval and renaissance culture, including Dante's *Divine Comedy* and Cervantes' *Don Quixote*. Cr 3.

ENG 325 Medieval Epic and Romance

The development of medieval traditions of epic and romance with readings of major works from England, Germany, France, Spain, and Italy (in translation). Focus of the

course varies; it may be taught as an Arthurian literature course, for example. Cr 3.

ENG 326 Satire

A thorough exploration of its backgrounds in Classical literature and an attempt to define satire as a mode will be followed by discussion of important satires in English and other languages. Cr 3.

ENG 327 Modern Short Story: Themes and Methods

Detailed consideration of from six to ten short story collections reflecting contemporary themes and narrative methods. Although selections will vary, the recent reading list has included Jorge Luis Borges, Franz Kafka, Anton Chekhov, James Joyce, Thomas Mann, Virginia Woolf, and Isaac Babel. A necessarily wide range of themes are 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. Students are responsible for a term paper, a classroom report, and weekly review of some critical article. Prerequisite: junior class standing or permission of the instructor. Cr 3.

ENG 328 Modern Novel: Themes and Methods

Works by six or more distinguished novelists expressing contemporary subject matter and technique. Among representative themes students will consider those of dream and illusion, revolution and personal revolt, alienation and anxiety, crime and self-assertion; among narrative techniques, ellipsis and adaptations of stream-of-consciousness. The list of novelists will vary, but recent assignments include Knut Hamsun, Franz Kafka, Thomas Mann, Herman Hesse, Andre Malraux, D. H. Lawrence, James Joyce, and Christina Stead. Students are responsible for a term paper, a classroom report, and a weekly review of some critical article. Prerequisite: junior class standing or permission of the instructor. Cr 3.

ENG 420 Independent Study in Comparative Literature

Cr var.

ENG 421 Seminar in Comparative Literature

An advanced course focusing on individual writers or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Typical subjects: Continental humanism, Dante, Continental influences on English literature. Cr 3.

Medieval Period

ENG 250 Chaucer and the Medieval World

An exploration of Chaucer's historical, philosophical, and literary world through his major comic narrative, *Canterbury Tales*. Cr 3.

ENG 350 Medieval English Literature

A survey of genres popular from the twelfth to the fifteenth centuries (including debates, lyrics, romances, allegories, drama), with emphasis on the literature of fourteenth-century England. Major readings will include Chaucer's *Troilus*, the *Pearl*, and *Sir Gawain and the Green Knight*. Cr 3.

ENG 352 Medieval Drama

This course will introduce the theatre of the medieval world, which ranges from the liturgical, ritual drama of the church, to the

morality plays, performed by traveling companies, and the mystery cycles, produced by civic and guild pride in the 15th century. Attention will be paid to the aesthetic and theological principles underlying this conjunction of farce and high seriousness in the plays as well as to distinctly medieval techniques of staging and production. Cr 3.

ENG 450 Independent Study in Medieval Literature

Cr var.

ENG 451 Seminar in Medieval Studies

An advanced course focusing on individual writers or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Cr 3.

Renaissance

ENG 255 The English Renaissance

A study of the principal writers of the English Renaissance exclusive of Shakespeare,

with emphasis on major figures like Spenser, Donne, and Milton, but with some attention to other figures. Cr 3.

ENG 356 Milton

Study of Milton's major poetry and selected prose with attention to critical and historical background. Cr 3.

ENG 357 British Drama to 1642

Shakespeare's predecessors, contemporaries, and followers to 1642. (Fall 1983). Cr 3.

ENG 455 Independent Study in Renaissance Literature

Cr var.

*Shakespeare***ENG 260, 261 Shakespeare**

ENG 260 and 261 each feature close readings of approximately seven of Shakespeare's plays, and focus attention both on philosophical and theatrical meanings. The division of plays within the two courses is largely arbitrary. Its intent is to permit students to take a second course in Shakespeare without repeating the readings of the first course. Neither course is introductory or prerequisite to the other. The main difference is that ENG 260 will include a section on the major history plays (*Richard II*; 1, 2 *Henry IV*); ENG 261 will include a section on the dramatic fairytales or "romances" that Shakespeare wrote at the end of his career (*The Winter's Tale*; *The Tempest*). Beyond that the courses will

ENG 456 Seminar in Renaissance Studies

An advanced course focusing on individual writers, or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Typical subjects: the metaphysical poets, Elizabethan prose fiction. Cr 3.

include the following major plays assigned to each course:

ENG 260: *As You Like It*, *Twelfth Night*, *Hamlet*, *Macbeth*. ENG 261: *Romeo and Juliet*, *Midsummer Night's Dream*, *Othello*, *King Lear*. Each course: Cr 3.

ENG 460 Independent Study in Shakespeare

Cr var.

ENG 461 Seminar in Shakespeare Studies

An advanced course in Shakespeare which emphasizes the application of various critical and scholarly approaches to important aspects of the poet and dramatist's work. Typical subjects: allegorical elements in Shakespeare's plays, Shakespeare and the daemonic. Cr 3.

*Neoclassical and Romantic Periods***ENG 265 The Neoclassical Age**

The principal writers from the Restoration to the Romantic Period are studied. Emphasis is on the achievements of major figures, including Dryden, Pope, Swift, and Johnson. Cr 3.

ENG 366 Restoration and 18th-Century Drama

A study of Restoration and early 18th century drama with emphasis on innovations in the post-Elizabethan theatre and on changing definitions of the tragic and comic hero. Playwrights studied will include Davenant, Dryden, Otway, Etherege, Shadwell, Cibber, Wycherley, Congreve, Farquhar. Cr 3.

ENG 369 The Earlier English Novel

The principal novelists from Defoe through Smollett. (Fall 1983). Cr 3.

ENG 465 Independent Study in the Neoclassical Period

Cr var.

ENG 466 Seminar in Neoclassical Studies

An advanced course focusing on individual

writers or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Typical subjects: Swift, the poetry of Alexander Pope, Thomas Gray and the poets of sensibility. Cr 3.

ENG 270 Major Romantic Writers

A study of the major British poets and essayists of the Romantic period (approximately 1785-1832) and of the nature of the Romantic movement. Readings selected from among Blake, Burns, Wordsworth, Coleridge, Keats, Byron, Shelley, Lamb, DeQuincey, Beddoes, Hunt, Peacock, etc.; also Mary Shelley's *Frankenstein*. Cr 3.

ENG 370 Fiction of the Romantic Period

The novels of Jane Austen; readings in Maturing, Peacock, Edgeworth, Lewis, Godwin, Mary Shelley, Scott. Cr 3.

ENG 470 Independent Study in the Romantic Period

Cr var.

ENG 471 Seminar in Romantic Studies

An advanced course focusing on individual writers or particular literary themes or problems. Emphasis is on applying various criti-

cal and scholarly approaches to important, limited subjects. Typical subjects: William Blake, the gothic novel, Wordsworth and Coleridge. Cr var.

Nineteenth-Century British and American Literature

ENG 275 Eminent Victorian Writers

Major writers of the Victorian era, including Tennyson, Browning, Arnold, George Elliot, Harriet Martineau, Thackeray, and Dickens are studied; attention is given to Victorian controversies; emphasis is on the novel as the greatest achievement of the period. Cr 3.

ENG 285 Earlier Women Writers

The aim of this course is twofold, to introduce students to the wealth of major works by women writers and to consider in detail the voices of women on women and society. Women novelists and poets have explored the entire range of human experience, of social, political, and philosophical issues as well as personal experience. This course will discuss the ways in which they have treated such issues as they relate to women's own lives. Although specific content may vary from semester to semester, the course will introduce students to the wealth of major works by women writers and consider the voices of women on women and society. Readings are likely to emphasize nineteenth-century writers like Jane Austen, George Eliot, Charlotte Bronte, and Elizabeth Gaskell. Cr 3.

ENG 375 The Victorian Novel

The principal novelists from Austen to Hardy. Cr 3.

ENG 377 Victorian Poetry

Extensive reading in the poetry of Tennyson, Browning, Arnold, Swinburne, Clough, the Rossetts, Meredith, Morris, Hardy, Hopkins, and Housman. Lectures and class discussions will involve several critical approaches -- biographical, sociological, psychological, archetypal, symbolical, formalistic and exponential. Collateral readings in 19th century intellectual history -- the Romantic revolt, the Industrial Revolution, the science-religion debate, aestheticism, artistic alienation, Utilitarianism, and Darwinism. Brief oral reports and two short papers. Cr 3.

ENG 475 Independent Study in the Victorian Period Cr var.

ENG 476 Seminar in Victorian Studies

An advanced course focusing on individual

writers or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Cr 3.

ENG 280 The American Renaissance

Major American writers of the mid-19th century. Includes critical study of major works by Emerson, Thoreau, Hawthorne, Melville, Whitman, and Dickinson with attention to the social and literary backgrounds. Cr 3.

ENG 381 Colonial American Literature

A study of early American writers of religious prose, fiction, and poetry. A course in early American history is recommended background. Cr 3.

ENG 382 The Earlier American Novel

An historical survey of the American novel from Charles Brockton Brown to Henry James. In Professor Burke's sections a term paper is required for an honor grade. (Fall 1983). Cr 3.

ENG 389 Writers of Maine

Historical and literary analysis of writers in and about Maine. The emphasis will be on the literary quality of the best-known men and women writers and the place in history both past and present of the lesser-known writers. Extra credit in the course will be given for a report about any off-campus project related to an author and a particular locality in Maine. English majors should have already taken a survey of American literature; prospective teachers will prepare an annotated bibliography of one author of their choice. Cr 3.

ENG 480 Independent Study in American Literature Cr var.

ENG 481 Seminar in Earlier American Literature

An advanced course focusing on individual writers or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Typical subjects: backgrounds of American thought, Hawthorne and Melville, Twain and James, Thoreau. Cr 3.

ENG 290 The Modern Age: British

The purpose of this course is to define and discuss the nature of Modernism as it developed in 20th-century Britain. Both technical change and innovation and changes in themes and attitudes will be considered. What kind of world, for example, does a poem like *The Waste Land* or a novella like *Heart of Darkness* portray? What assumptions underlie them? What changes in poetic narrative form do they demand? The class will emphasize early Modern (pre-World War II) but will attempt to discover, as well, how contemporary British literature has developed since then. The course will include such writers as Joyce, Conrad, Yeats, MacDiarmid, Woolf, Lessing, and Beckett. Cr 3.

ENG 291 The Modern Age: American

The purpose of this course is to examine the nature of Modernism as it developed in 20th-century America. Early precursors such as Whitman and Twain will be considered with a view to determining what special issues and techniques developed to express an American Experience. Emphasis, however, will be on major recent writers such as Faulkner, Hemingway, Fitzgerald, Pound, Williams, Katherine Anne Porter, Flannery O'Connor, and selected contemporary poets. Cr 3.

ENG 295 Contemporary Women Writers

The focus of the course is on twentieth-century novelists and/or poets. Specific readings and thematic approaches will vary depending on instructor. The course has been taught, for example, with an emphasis on the regional and ethnic cultures from which American women writers come, reading works by Kate Chopin, Willa Cather, Eudora Welty, Alice Walker, Toni Morrison, Maya Angelou, Leslie Silks, Maxine Kingston, Grace Paley, and Anne Sexton. Cr 3.

ENG 390 Modern British Poetry

Modern British poetry has taken diverse forms and concerned itself with a wide range of themes. This course, however, will focus on two or three selected major figures such as Hardy, Yeats, Eliot, MacDiarmid, Auden, and Thomas with the aim of placing them in the larger context. The class will examine and discuss early changes in poetic forms, the impact of World War I poets and the Georgians, the developments in contemporary Britain. The primary focus will then be to

consider in depth the two or three major figures, defining what determines their particular voice and vision of reality. The selected poets will vary with the semester. Cr 3.

ENG 391 Modern American Poetry

This course will focus on two or three major poets such as Stevens, Frost, Marianne Moore, Pound, and Williams. The course will also, however, seek to place them in a historical perspective, both in technical development and specifically American themes and conceptions of reality. There will be some examination of poets like Whitman and Dickinson, who stand at the beginning of modern American poetry, as well as contemporary poets like Strand, Snyder, Kinnell, and Bly. The primary focus will then be to examine the selected figures against the broader context, with the purpose of defining their unique voices and forms. The selected poets will vary with the semester. Cr 3.

ENG 392 Twentieth-Century British Novels

Selected novels from the late 19th century to the present. Cr 3.

ENG 393 Twentieth-Century American Novels

An historical survey of American novels beginning around 1900. In Professor Burke's sections a term paper is required for an honor grade. Cr 3.

ENG 394 Experimentation in Modern Poetry

This course explores the tradition of experimentation in modern poetry from Rimbaud to the present day. It draws from a range of figures such as Cavafy, Ponge, and Calvino in an effort to bring into focus the achievement of such English and American figures as Eliot, Williams, Auden, Moore, and contemporaries like Dorn and Berryman. Cr 3.

ENG 397 American Drama

A study of the drama in the United States. A brief history of early American playwrights followed by a close study of major figures, with O'Neill as the center. Others: Maxwell Anderson, Robert Sherwood, Tennessee Williams, Arthur Miller, and Edward Albee. (This course is also listed as THE 460). Cr 3.

ENG 398 The Southern Renaissance

The post-World War I flowering in Southern letters, with emphasis on the fiction of Wolfe, Faulkner, Elizabeth Madox Roberts, Tate, Gordon, Porter, Warren, Welty, Peter

Taylor, Flannery O'Connor, and Walker Percy. Cr 3.

ENG 490 Independent Study in Modern Literature Cr var.

ENG 491 Seminar in Modern British Literature

An advanced course focusing on individual writers or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important,

limited subjects. Typical subjects: Joyce's *Ulysses*, modern Scottish literature. Cr 3.

ENG 492 Seminar in Modern American Literature

An advanced course focusing on individual writers or particular literary themes or problems. Emphasis is on applying various critical and scholarly approaches to important, limited subjects. Typical subjects: the image of Blacks in American literature, the fugitive poets, Fitzgerald, Hemingway, and Faulkner. Cr 3.

Experimental Courses

Occasionally the English Department offers special courses not listed individually in the catalog. They appear in the current Schedule of Courses under the designation 199, 299, 399, or 499. Such courses will usually be experimen-

tal: pursuing original research, testing new alignments of figures or materials, or trying out courses before including them in the department curriculum.

Foreign Languages and Classics

Chair of the Department: Mara Ubans, 514 Luther Bonney Hall, Portland
Professor Duclos; *Associate Professors:* Crochet, Dalvet, di Benedetto, Lepelley, Rolfe, Ubans; *Assistant Professor Plasencia*

A foreign language major offers a uniquely rich and diverse humanities background. The study of languages sensitizes us to other cultures and the relativity of values, it frees us from the confines of monolingualism and provincialism, it increases our understanding of and competence in our native language and, most important, it is an inquiry into language as language: the structure, system, code by which we interpret the world to ourselves and others. Through in-depth study of literature we develop skills of close reading and literary analysis, and in composition courses we hone our writing skills.

A foreign language is also a valuable and marketable skill in many professions, especially international relations and trade, government service, travel, social services, the arts, and teaching.

Programs and Requirements

The Department offers a major in French and broader, self-designed majors in classical studies, French studies, German studies, and Hispanic studies. Also classics, French, German, and Spanish minors are available which augment other majors in the College of Arts and Sciences. Courses in Italian are offered on a regular basis.

The Department also offers a number of courses in English translation requiring no knowledge of a foreign language and open to any student interested in foreign or classical literature and civilization. These courses are numbered 281-299.

Independent study courses, numbered 470, are available to qualified students with the permission of the instructor and the department chair.

Policies

Beginner courses (101-102) are for students who have never studied the language. Courses numbered 103 are a review of this beginner's level. Intermediate level courses (201-202 for modern languages, 251-252 for the ancient languages) are for students with two successful years of high school language study. Those whose background does not fit any of these categories, especially Franco-Americans and students with Hispanic, German, or Italian backgrounds, should consult an instructor in the language before registering. Courses numbered 105-206 give students a reading proficiency in French or German for research in their field, graduate school language requirements, or cultural enjoyment.

It is the policy of the Department that a student may receive 6 credits but no more for the elementary and intermediate levels each. The courses can be taken in any combination. (This does not apply to students in FRE 107-108.) Elementary level: any two courses from 101, 102, 103, or 105. Intermediate level: any two from 201, 202, or 206.

The Department grants credit in French, German, Greek, Latin, and Spanish to an enrolled student who presents evidence of competency in one of those languages by completing the appropriate Advanced Placement Examination of the College Entrance Examination Board. For more details, contact the chair of the Department.

Language Laboratory

The language laboratory is located on the Portland campus in Payson Smith Hall, Room 203, and is open every weekday from 9 a.m. to 3 p.m. Students enrolled in beginner's or 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 also 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, and Spanish 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 in Luther Bonney 411.

All major programs in the Department of Foreign Languages and Classics require that the student fulfill the requirements of the Core curriculum.

Bachelor of Arts in French

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

Core Course (to be announced by the Department)

Language

FRE	321	French Composition/ Workshop in Writing French
FRE	323	French Conversation/Workshop in Speaking French
FRE	305	Phonetics

Civilization

FRE	291	Civilization, historical approach
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OR

FRE	292	Contemporary France
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Literature (any two)

FRE	361	The Novel
FRE	362	Poetry

FRE	363	Theatre
Any two		
FRE	460	Quebecer Literature
FRE	461	17th Century Literature
FRE	462	18th Century Literature
FRE	463	19th Century Literature
FRE	464	20th Century Literature
FRE	465	Survey of French Literature
Electives (any of the courses above or)		
FRE	221	Practice in Writing
FRE	223	Practice in Conversation

Summer and junior year studies in France or French Canada are encouraged and acknowledged by transfer of credits.

All majors already engaged in studies of French literature should maintain an active effort to reach fluency in speaking French through constant practice, use of the language laboratory, and participation in informal conversation tables. They are expected to have reached proficiency in speaking and writing French before their graduation.

Each student's progress will be reviewed periodically by the French faculty. All majors must achieve at least 12 credits of B or better grades in their major courses. No grade of D will count toward fulfillment of a French major.

Bachelor of Arts, Self-Designed Majors

The self-designed major 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. In order to help students prepare their application for approval by the self-designed major committee, we present five possible models.

Major in Foreign Languages

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

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

Spanish: SPN 321, 322, 351, 352, 281

German: GMN 321, 322, 351, 352, 281

French: FRE 321, 323, 291, or 292; any two of 361, 362, or 363.

Classical Languages: GRK 251, 252, LAT 251, 252, and either GRK 470 or LAT 470

In addition, the student is required to take two foreign language Core courses bringing the total of credits required to 36.

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

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

Core Course

Language and Literature

Concentration in Greek

GRK 251 Introduction to Literature

GRK 252 Introduction to Literature

GRK 470 Independent Study

LAT 251 Introduction to Literature

LAT 252 Introduction to Literature

Civilization and Literature in Translation

CLS 281 Epic

CLS 282 Tragedy

CLS 291 5th Century Athens

Related Courses (electives)

ARTH 111 History of Art I

ARTH	212	Classical Art
HIST	231	Ancient History I
HIST	232	Ancient History II
PLY	310	Ancient Philosophy
POL	289	Political & Social Thought I
<i>Concentration in Latin</i>		
LAT	251	Introduction to Literature
LAT	252	Introduction to Literature
LAT	470	Independent Study
GRK	251	Introduction to Literature
GRK	252	Introduction to Literature
Civilization and Literature in Translation		
CLS	281	Epic
CLS	282	Tragedy
CLS	292	Rome

Major in French Studies

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

Core Course

French Language and Literature

Any two

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

Any two

FRE	361	The French Novel
FRE	362	French Poetry
FRE	363	The French Theatre

One French literature course from the 400 level.

French Civilization and Literature in Translation

FRE	291	and 292	French Civilization
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Select one

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

Electives (any three)

LAT	101-	Beginning Latin
	102	
HIST	242	French Revolution and Napoleon
HIST	244	20th Century Europe
POL	235	Democratic Governments of Europe
ARTH	316	Modern Art
MUS	203	Music in the 20th Century
SOC	361	Sociology of Franco-Americans

Major in German Studies

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

Core Course

German Language and Literature

GMN	321-	Composition/Conversation
	322	
GMN	351-	Survey of Literature
	352	
GMN	281	The German Novelle
GMN	470	Independent Study

Social Sciences (any three)

HIST	244	20th Century Europe
HIST	256	World War I and World War II: European War and Diplomacy

HIST	272	Germany to 1945
HIST	273	Germany since Hitler
HIST	412	Totalitarianism: Nazism and Communism
Humanities (any two)		
PLY	340	History of Late Modern Philosophy
PLY	275	Theories of Language
ARTH	411	Philosophy of Art
MUS	220	History of Music III
ENG	341	Critical Approaches to Literature
ENG	396	Modern Novel: Themes and Methods

Major in Hispanic Studies

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

Core Course

Spanish Language and Literature

SPN	321-	Composition/Conversation I & II
	322	
SPN	351-	Survey of Hispanic Literature I & II
	352	
SPN	281	Masterpieces of Hispanic Literature
SPN	470	Independent Study

History

HIST	181-	Latin America I & II
	182	

Social Sciences (any two)

HIST	381	Latin America and the United States
HIST	383	The Society and Culture of Latin America
ANY	221	South American Indian

Humanities (select one)

ARTH	311	Topics in Art History
ARTH	315	Western Art (1790-1880)
PLY	275	Theories of Language

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

Minors

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 9.

Since the knowledge of a foreign language, or languages, is valuable to all majors in other CAS disciplines, the Department offers minor programs in Classics (Latin or Greek), French, German, and Spanish. A given program consists of nine credits at the 300 level (200 level in Classics) or above, selected from the following courses:

Classics Minor (Greek)

GRK 251, 252; 316; CLS 291

Classics Minor (Latin)

LAT 251, 252; 310; CLS 292

French Minor

FRE 321; 323; 305; 361, 362 or 363

German Minor

GMN 321, 322; 351, 352; 281

Spanish Minor

SPN 321, 322; 351, 352

CLS 283 The Epic Hero in Ancient Literature

Intensive readings in English translations of *Gilgamesh*, *Iliad*, *Odyssey*, *Argonautica*, *Aeneid*; discussion, papers. Cr 3.

CLS 284 The Tragic Hero in Ancient Literature

Intensive reading of selected plays in English translation by Aeschylus, Sophocles, Euripides, Seneca; discussion, papers. Cr 3.

CLS 291 The Golden Age of Greece

The literature, history, politics, philosophy, art, and architecture of the fifth century B.C. with particular attention to the achievements of Athens. Lectures, discussion, papers, museum trip. Cr 3.

CLS 292 Rome, from Republic to Empire

The literature, history, politics, philosophy, art, and architecture of Rome in the first century B.C. Lectures, discussion, papers, museum trip. Cr 3.

FRE 281 Masterpieces of French Literature I (in English Translation)

Novels and plays representative of French literature from the beginning of the XIXth century to the present. No knowledge of French is necessary. Cr 3.

FRE 282 Masterpieces of French Literature II

(in English Translation)
Novels and plays representative of French literature from the Middle Ages to the end of the 18th century. No knowledge of French is necessary. Cr 3.

FRE 283 Contemporary French Thinkers (in English Translation)

Readings and discussion of recent works of French literature selected for their philosophical and ethical importance: Saint-Exupery, Sartre, Camus, de Beauvoir, Teilhard de Chardin and others. No knowledge of French is necessary. Cr 3.

FRE 284 Avant-Garde Theatre in France (in English Translation)

Study of plays and theoretical texts in English translation from Jarry to Beckett. No knowledge of French is necessary. Cr 3.

FRE 285 18th Century Literature in France and England

A study of the emergence of the bourgeoisie and its relationship to literature in 18th century France and neighboring countries. The social and moral evolution of the family, sentimentalism, and middle class revolt will be discussed. Special attention will be paid to the literary interchange between France and England. Readings in Prevost, Marivaux, Rousseau, Diderot, Richardson, Goldsmith, Sterne, Goldoni. In English. Cr 3.

FRE 291 French Civilization: An Historical Approach

Aspects of the society, institutions, arts, literature, and religion of France, from the origins to the end of the XIX century. No French is spoken in the classroom. Cr 3.

FRE 292 French Civilization: Contemporary France

Institutions, education, society, economy, politics of France. No French is spoken in the classroom. Cr 3.

GMN 258 The German Novelle (in English Translation)

The study of the genre of the novelle and its development through the major literary movements from the early nineteenth century to the present. Authors read vary, but normally include Goethe, Tieck, E.T.A. Hoffmann, Kleist, C.F. Meyer, Storm, Musil and Mann. No knowledge of German is necessary. Cr 3.

SPN 281 Masterpieces of Spanish Literature (in English Translation)

The study of fiction, poetry, and essays representative of Hispanic literature of the 19th and 20th centuries. No knowledge of Spanish is necessary. Cr 3.

Classics: Greek and Latin

GRK 101 Beginning Greek I

Fundamentals of classical Greek. Emphasis upon acquisition of reading knowledge. Cr 3.

GRK 102 Beginning Greek II

Selections from Euripides' *Alcesteis*. Prerequisite: GRK 101. Cr 3.

GRK 251 Introduction to Greek Literature I

A study of Plato's *Apology*, *Crito* and selections from the *Phaedo*. Prerequisite: GRK 102 or equivalent. Cr 3.

GRK 252 Introduction to Greek Literature II

A study of selected books from Homer's *Iliad* or *Odyssey*. Prerequisite: GRK 251. Cr 3.

GRK 310 Seminar in Greek Literature
Readings in Greek prose and poetry; a different author will be read each semester. Translation, supplementary reading, paper. Prerequisite: GRK 252. Cr 3

GRK 470 Independent Study.

LAT 101 Beginning Latin I
Fundamentals of the Latin language. Cr 3.

LAT 102 Beginning Latin II
Continuation of LAT 101. Cr 3.

LAT 251 Introduction to Latin Literature I
Selected readings from masters of Latin prose and poetry. Prerequisite: LAT 102 or equivalent. Cr 3.

LAT 252 Introduction to Latin Literature II
Continuation of LAT 251. Cr 3.

LAT 310 Seminar in Latin Literature
Readings in Latin prose and poetry; a different author will be read each semester. Translation, supplementary reading paper. Prerequisite: LAT 252. Cr 3.

LAT 470 Independent Study.

French

FRE 101 Beginning French I
Beginner's course in French. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. Students are encouraged to register also for laboratory practice (one more credit). Cr 3. (With lab, Cr 4.)

FRE 102 Beginning French II Continuation of FRE 101. Cr 3. (With lab, Cr 4.)

FRE 103 Review of Elementary French
Elementary French for students with some previous study of the language who feel the need for a refresher course before entering FRE 201. Cr 3.

FRE 105 Reading French
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 206 Readings in French
Further practice of the skill acquired in FRE 105 through an accelerated reading of books on various topics (fiction, history, science, etc.). Prerequisite: FRE 105, 102, 103, or instructor's permission. Cr 3.

FRE 107-108 Intensive Beginning French
Intensive beginner's course, in the four skills of language learning: listening comprehension, speaking, reading and writing, with abundant opportunity for conversation in the classroom and for laboratory practice. The course meets every weekday for a 50-minute period. Cr 5.

FRE 201 Intermediate French I
Review of grammatical structures. Further development of listening comprehension, speaking, reading and writing skills. Students are encouraged to register also for laboratory practice (one more credit). Prerequisite:

site: FRE 102, FRE 103, or two years of high school French. Cr 3. (With lab, Cr. 4.)

FRE 202 Intermediate French II
Continuation of FRE 201. Cr 3. (With lab, Cr. 4.)

FRE 221 Practice in Writing
Advanced study of the French language. Proficiency in writing, vocabulary development and idiomatic expression are the objectives of the course. Prerequisite: FRE 202 or equivalent. Cr 3.

FRE 223 Practice in Conversation
Intensive oral practice, expository reports, debates, class discussions. Prerequisite: FRE 202 or equivalent. Cr 3.

FRE 251 Introduction to French Literature
Reading and discussion of representative literary works in the major genres (novel, drama, poetry). Techniques of close reading and explication de texte are studied. Designed to give a general background for the major as well as to provide a representative sampling for the non-major. Prerequisite: FRE 201 or equivalent. Cr 3.

FRE 305 French Phonetics
A formal study of the French sound system and an initiation into phonetic transcription with practical and remedial work in pronunciation. Prerequisite: FRE 202 or equivalent. Cr 3.

FRE 321 Workshop in Writing French
Practice of free composition and translation. Prerequisite FRE 221 or equivalent. Cr 3.

FRE 323 Workshop in Speaking French
Practice of French conversation for advanced students. Prerequisite: FRE 223 or equivalent. Cr 3.

FRE 361 The French Novel
A study of novels and short stories, especially

of the 19th and 20th centuries, and of the various critical approaches to fiction. Prerequisite - FRE 251 or equivalent. Cr 3.

FRE 362 French Poetry

A study of works by famous French poets and of the critical approaches to French poetry. Prerequisite - FRE 251 or equivalent. Cr 3.

FRE 363 The French Theatre

A study of representative works by the major playwrights of France in the classical, romantic and modern periods and of critical approaches to drama. Prerequisite - FRE 251 or equivalent. Cr 3.

FRE 460 Quebecer Literature

Reading and discussion of novels, short stories, poems, and plays by contemporary French Canadian writers Gabrielle Roy, Gerard Bessette, Jacques Godbout, M. Claire Blais, Marcel Dube, Saint-Denis Garneau, Alain Grandbois, and P.M. Lapointe. Prerequisite: FRE 231. Cr 3.

FRE 461 17th-Century Literature

A seminar in 17th-century French literature based on selected themes which will vary each time the seminar is offered. The theme will be announced the year that the course is given. Cr 3.

FRE 462 18th-Century Literature

A study of the critical and revolutionary thought of the major 18th-century French thinkers (Montesquieu, Voltaire, Rousseau, Diderot) in an attempt both to define the role of the Enlightenment in the downfall of the Ancien Regime and to determine its place in the history of ideas. (Fall '83) Cr 3.

FRE 463 19th-Century Literature

A seminar in 19th-century French literature based on selected themes which will vary each time the seminar is offered. The theme will be announced the year that the course is given. Cr 3.

FRE 464 20th-Century Literature

A seminar in 20th-century French literature based on selected themes which will vary each time the seminar is offered. The theme will be announced the year that the course is given. Cr 3.

FRE 465 Survey of Literature

An opportunity for senior students to review and complete their previous studies of French literature by surveying its development and styles through the centuries. Cr 3.

FRE 470 Independent Study

German

GMN 101 Beginning German I

Beginner's course in German. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. Students are encouraged to register also for laboratory practice (one more credit). Cr 3. (With lab, Cr 4.)

GMN 102 Beginning German II

Continuation of GMN 101. Cr 3. (With lab, Cr 4.)

GMN 103 Review of Elementary German

Elementary German for students with some previous study of the language who feel the need for a refresher course before entering GMN 201. If possible, register also for laboratory practice (one more credit). Cr 3. (With lab, Cr 4.)

GMN 105 Reading German I

Elementary course in German aiming exclusively at a reading knowledge of the language. No German spoken. Cr 3.

GMN 206 Reading German II

Further practice of the reading skill acquired in GMN 105. Recommended also as preparation for language tests required by graduate

schools. Prerequisite: GMN 105, 102, 103 or instructor's permission. Cr 3.

GMN 201 Intermediate German I

For students who have completed GMN 102 or 103 or the equivalent. Review of grammar. Classroom practice aiming at fluency in speaking and reading. Students are encouraged to register also for laboratory practice (one more credit). Prerequisite: GMN 102 or 103. Cr 3. (With lab, Cr 4.)

GMN 202 Intermediate German II

Continuation of GMN 201. Cr 3. (With lab, Cr 4.)

GMN 321 Composition and Conversation in German I

Systematic training in correct pronunciation and usage, and in vocabulary building, with written and oral practice. Prerequisite: GMN 202 or equivalent. Cr 3.

GMN 322 Composition and Conversation in German II

Continuation of GMN 321. Reading and discussion of historical, journalistic, and literary material covering life in Germany from

World War I to the present. Prerequisite: GMN 321 or equivalent. Cr 3.

GMN 351 Introduction to German Literature I

Reading and discussion of selected works representing the major literary movements from Enlightenment to Realism. Readings are in German; class discussions and exams are in English. Prerequisite: GMN 202 or GMN 106 or an equivalent reading ability of German. Cr 3.

GMN 352 Introduction to German Literature II

Reading and discussion of selected works representing the major literary movements from Naturalism to the present. Readings are in German; class discussions and exams are in English. Prerequisite: GMN 202 or GMN 106 or an equivalent reading ability of German. Cr 3.

GMN 470 Independent Study.

Italian

ITA 101 Beginning Italian I

Beginner's course in Italian. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. Cr 3.

ITA 102 Beginning Italian II

Continuation of ITA 101. Cr 3.

ITA 201 Intermediate Italian I

Reading of short stories and essays reflecting the wealth and variety of Italian culture. Classroom practice of conversation. Prerequisite: ITA 102. Cr 3.

ITA 202 Intermediate Italian II

Continuation of ITA 201. Cr 3.

Spanish

SPN 101 Beginning Spanish I

Beginner's course in Spanish. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. Students are encouraged to register at the same time for laboratory practice (one more credit). Cr 3. (With lab, Cr 4.)

SPN 102 Beginning Spanish II

Continuation of SPN 101. Cr 3. (With lab, Cr 4.)

SPN 103 Review of Elementary Spanish

Elementary Spanish for students with some previous study of the language who feel the need of a refresher course before entering SPN 201. If possible, register also for laboratory practice (one more credit). Cr 3. (With lab, Cr 4.)

SPN 201 Intermediate Spanish I

For students who have completed SPN 102 or the equivalent. Review of grammar. Classroom practice aiming at fluency in reading and speaking. Students are encouraged to register also for laboratory practice (one more credit). Prerequisite: SPN 102 or equivalent. Cr 3. (With lab, Cr 4)

SPN 202 Intermediate Spanish II

Continuation of SPN 201. Cr 3. (With lab, Cr 4.)

SPN 321 Composition and Conversation in Spanish I

Advanced study of the Spanish language. Frequent practice of composition. Conversation and oral reports. Prerequisite: SPN 202 or equivalent. Cr 3.

SPN 322 Composition and Conversation in Spanish II

Continuation of SPN 321. Cr 3.

SPN 351 Introduction to Hispanic Literature I

A survey of the important periods and trends in Spanish literature with reading of representative works. Prerequisite: SPN 202. Cr 3.

SPN 352 Introduction to Hispanic Literature II

Continuation of SPN 351. Cr 3.

SPN 470 Independent Study.

Geography-Anthropology

Chair of the Department: Franklin D. Hodges, 300a Bailey Hall, Gorham
Associate Professors: French, Hodges, Tizon, Yesner

The program leading to a major in geography-anthropology emphasizes the integration of the two disciplines. The major is a 36-hour interdisciplinary program wherein students are expected to take courses from both geography and anthropology. It is possible to concentrate on either of the two subjects, or to achieve a balance, depending upon the student's interest. The program of study, beyond the basic requirements should be planned carefully, in close consultation with the student's departmental 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 department.

Programs and Requirements

The Department offers the following programs: bachelor of arts in geography-anthropology; applied geography minor in planning; and anthropology minor in health and human services.

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. 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. (These may be found on page 28 of this catalog.)

Bachelor of Arts in Geography-Anthropology

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

Students electing to concentrate in anthropology must take:

ANY	101	Anthropology: The Cultural View
ANY	102	Biological Anthropology
ANY	103	Introduction to Archaeology
ANY	210	Culture Theory

OR

ANY	305	Models in Archaeology
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Students electing to concentrate in geography must take:

GEOG	101	Principles of Geography
GEOG	102	Physical Geography
GEOG	104	Cartography I
GEOG	201	Cultural Geography

Additionally, all geography-anthropology majors are required to take: three hours of research writing or the equivalent; three hours of quantitative methods or the equivalent; at least six hours in each discipline; and at least three hours in courses with a GYAY prefix.

Beyond these basic requirements, the student must set up a program of geography-anthropology courses to fulfill the remaining credits of the total 36 credits for the major with his/her advisor. All courses in that program must be approved in advance by the advisor.

Applied Geography Minor in Planning

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

Required courses: GEOG 101, GEOG 104, GEOG 311
Choice of one from: GYAY 350-351, GEOG 400

Choice of one from: GEOG 204, GEOG 205

Choice of one from: GEOG 209, GEOG 210

Anthropology Minor in Health and Human Services

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

Required courses: ANY 101, ANY 102, ANY 302, ANY 303, GEOG 401

Choice of one from: GYAY 350-351, ANY 400

Archaeology Laboratory

The Archaeology Laboratory located in 317 Bailey Hall provides facilities for research in archaeology and related areas. Current facilities include human skeletons, fossil human skulls, a comparative faunal collection, and various research collections, primarily from Maine and Alaska. The Archaeology Laboratory also houses a small library including books, journals, slides, and maps. Opportunities are available for independent student research projects, and work-study positions are available in the laboratory each semester.

Cartography Laboratory

The Cartography Laboratory located in 323 Bailey Hall provides facilities for map making and air photo interpretation. The room is open for faculty and student use daily. There is a map collection available including Maine maps, topographic maps, and various world regional maps. Student proctors are present at most hours of the day to offer assistance.

Geography-Anthropology

GYAY 100 Museum Aide

Museum aides serve on volunteer projects relating to research classification, maintenance and display of artifactual materials. Since the museum solicits input from students, their contributions are expected to show originality and complement the goals of the Museum of Man. A minimum of thirty (30) hours of service each semester is required for credit.

Cr 1.

GYAY 106 The Local Environment

This is a field-oriented course that deals with the application of fundamental geographic concepts in the interpretation of areal development. The local area serves as the "laboratory" and provides models of geographic interaction that have applications on a broader scale.

Cr 3-6.

GYAY 300 Archaeology Field School

The summer field school is designed to combine training in research methods of archaeology and geography. Students will receive intensive training in methods of site survey excavation and materials analysis. Several weeks will be spent at selected areas of coastal Maine involved in survey and excavation of sites, mapping sites and landscape features, and investigating potential food resources in site areas. This will be followed by some laboratory analysis of recovered materials. This course may be repeated up to

twice with the permission of the instructor.

Cr 4-6.

GYAY 321 Historic Material Analysis

This lab/discussion course involves the analysis of materials derived from field survey and archaeological investigation of selected historic period North American sites. Activities include the chronological and distributional analysis of ceramics, glass, metal and other artifacts of the historic period. Students are encouraged to pursue specific research topics using documentary sources as well as assist in the curation of artifacts in the Museum of Man.

Cr 3.

GYAY 350-351 Internship in Applied Geography-Anthropology

Internships offer the student practical experience in working with public agencies, private firms, and municipalities engaged in applied geographical-anthropological activities including, but not limited to, planning, transportation, delivery of human services, and natural resources.

A written contract will be drawn up by advisor and student for each internship, specifying the number of credits sought and work required for these credits. As a general rule, internships will require at least eight hours of actual work per week. Interns will be expected to meet at least once every two

weeks with instructor to discuss experiences and/or problems.

In addition, a major paper will be required from each student intern discussing an aspect of the internship or the work performed during the internship. The paper will be presented by the student at the end of the semester to a departmental seminar on applied geography-anthropology.

Prerequisites: junior or senior standing in geography-anthropology. Cr 1-6.

GYAY 421 Energy and Society

This course examines the relationship between energy forms and social types, through a unique synthesis of geographic and anthropological approaches. The range from very simple to modern, complex, industrial society is analyzed in terms of energy forms, supplies, and consumption patterns. Special emphasis is given to the evolution of energy use and social forms in the United States, and to possible future alternatives. Prerequisite: introductory courses in geography or anthropology or permission of instructor. Cr 3.

Anthropology

ANY 101 Anthropology: The Cultural View
This course is a basic introductory survey of cultural anthropology. It examines the differences between cultures as well as cultural universals, and the relationship between social organization, ideology, economics, and political structure in different types of societies. It reviews the various theoretical approaches in cultural anthropology's attempt to explain human behavior, presenting examples from "primitive," intermediate, and complex cultures through readings and films. This course is required for all majors concentrating in anthropology. Cr 3.

ANY 102 Biological Anthropology
Man's place in nature; the relationship between human biology and culture; the relevance of primate behavior and human evolution to understanding contemporary human society; human biological adaptations, including a discussion of population and nutrition; and contemporary human variation with an evaluation of the concept of race. Cr 3.

ANY 103 Introduction to Archaeology
Introduction to Archaeology describes the methods and theories used by modern archaeologists to uncover information about past human lifeways. 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.

ANY 202 Origins of Civilization
This course traces the evolution of human culture from the origins of farming and domestication, to the development of complex societies. General processes of urbanization and social stratification will be investi-

gated, 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. This course is designed as a sequel to ANY 201. No prerequisites. Cr 3.

ANY 210 Culture Theory

This course is an historical survey of theory in anthropology from the early classical evolutionists to contemporary materialist and idealist approaches. It will examine the various theories in terms of their level of analysis, explanatory value, and relationship to the western society from which they emerged. This course is a requirement for those concentrating in anthropology. Prerequisite: ANY 101 or permission. Cr 3.

ANY 213 Cultural Ecology

This course examines interactions between human societies and their natural environments. One part of the framework of the course is historical, seeking the roots of our current energy-related and ecological crisis through the study of simple human societies. A second part of the course involves mastering the methodology that anthropologists use in studying the interrelationships between human groups and their environments. Prerequisite: ANY 101 or permission of instructor. Cr 3.

ANY 220 North American Indians

This course combines an ethnographic and archaeological perspective on the culture history and traditional cultures of native North Americans. Emphasis is placed on the relationship of aboriginal native cultures to their environments, and the evolution of complex societies in certain regions of North America. Also included is discussion of the fragmentation of Indian societies that followed the

European invasion of North America. No prerequisites. Cr 3.

ANY 221 South American Indians

This course presents a survey of the indigenous cultures of South America, from the earliest signs of human population on that continent, through the rise of Incan civilization and the European conquest, to the condition of the contemporary indigenous peoples remaining, primarily, in the Andes highlands and the Amazon tropical forest. No prerequisites. Cr 3.

ANY 222 Peoples of the North

This course is designed as a comprehensive summary of the prehistory, traditional culture, and contemporary lifeways of peoples living in the northern hemispheres of both the Old and New Worlds - from Maine to Alaska, and from Siberia to Lapland. Special attention will be given to the origins of these peoples; the problems of living in cold, northern environments; the effects of European contact; and the modern problems that they face ranging from the effects of urbanization to land claim disputes. Prerequisites: ANY 101 or 103 or permission of the instructor. Cr 3.

ANY 232 Women in Cross-Cultural Perspective

Anthropologists have long considered a division of labor and status on the basis of sex a universal practice throughout most if not all of civilization's history. There has, however, been a great deal of controversy regarding the nature, origin, and future of sexual stratification. Is the superior status of men cross-culturally "only in the eye of the beholder?" If not, why does it exist? Are its roots biological or cultural; is it inevitable? This course examines these provocative questions by looking at the range of women's roles in a variety of cultures, through readings, films, and slides. No prerequisites. Cr 3.

ANY 301 Victims of Progress: Primitive Peoples in the Modern World

This course examines the disappearance of simpler societies as a result of the expansion of industrial society, and the implications of such a process for the future of humanity, from both a scientific and humanistic point of view. It also discusses the role of anthropology in explaining and promoting culture change, and reviews the various philosophies of development exhibited in modern society. Prerequisite: ANY 101. Cr 3.

ANY 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: ANY 101 or permission of instructor. Cr 3.

ANY 303 Food and Nutrition: An Anthropological Perspective

The purpose of this course is to examine the relationship between human population and their subsistence base, as a part of the larger study of human ecology. Although the fundamental purpose of the course is to understand prehistoric human diets, much attention will be given to examining dietary variation in modern human societies in order to gain insights into past societies. To that end, biological and demographic as well as cultural adaptations to different dietary regimes will be analyzed. Various human subsistence types will be examined (hunting and gathering, horticulture, pastoralism, etc.), and detailed attention will be given to methods for reconstructing prehistoric diets. Although previous anthropological and/or biological background may be useful, neither are required for mastering the concepts developed in this course. Cr 3.

ANY 305 Models in Archaeology

Using archaeological data, archaeological anthropology tests a wide range of hypotheses about human society. The introduction of the hypothesis testing approach into archaeology is the result of recent expansions in theory and methodology. The literature discussing those theoretical and methodological developments will be critically evaluated by the student. Special attention will be given to reconstruction of prehistoric subsistence and settlement, and application of theory to public (conservation) archaeology. Prerequisite: ANY 103. Cr 3.

ANY 306 Archaeological Laboratory Analysis
Students will be introduced to the analysis of materials collected on an archaeological site. Their work will be centered around the

results of previous summers' archaeological excavations. Research projects will be associated with the same materials. Lecture material will center around environmental archaeology, with special attention given to topics such as faunal analysis. This course may be repeated up to twice with the permission of the instructor. Prerequisite: ANY 103. Cr 4.

ANY 333 Structural Linguistics and Culture
(cross-listed with ENG 333)

This course analyzes the language and cul-

ture (art, religion, poetry) of pre-literate societies, particularly the American Indian. Cr 3.

ANY 400 Independent Study in Anthropology

The department faculty offers independent study in a topic in anthropology for upper-level students (junior and senior status). Individuals wishing to take advantage of this option should secure a faculty sponsor and departmental approval. Variable credits will be offered.

Geography

GEOG 101 Principles of Geography

This course applies a problem-solving approach to the learning of basic geographic skills and concepts. Cultural factors are emphasized in presenting man/environment relationships as seen from the geographer's point of view. The course is a prerequisite for most upper level geography courses and required for all majors concentrating in geography. It also provides models and concepts useful in many other disciplines. Cr 3.

GEOG 102 Physical Geography

This course examines the interrelationships between people and the physical environment. Climate, soil, vegetation, landforms, water and mineral resources are the topics which are covered in this introductory course. This course is required for all majors concentrating in geography. Cr 3.

GEOG 104 Cartography I

Mapping the landscape: principles of cartographic design. An introductory course in cartography focused on developing basic mapping and graphic communication skills essential to a wide variety of disciplines. The course will be flexible and adjusted to individual needs. Familiarization with basic charting technology and cartographic tools will be included. This course is required for all majors concentrating in geography. Cr 3.

GEOG 201 Cultural Geography

This course revolves around such components of culture as religion, art, music, settlement, economy type and their relation to one another. Concepts include spread, integration and landscapes of culture. A problem oriented discussion format is used to relate the ideas of other cultures with our own. Prerequisite: GEOG 101. This course is required for all majors concentrating in geography. Cr 3.

GEOG 202 Geomorphology (also GEOL 202)

Description and interpretation of landform development in terms of geologic structure, process, and stage. One, possibly two, weekend field trips. Prerequisite: GEOL 113 or 114 or permission of instructor. Two hours lecture, three hours lab. Fall semester. Cr 3.

GEOG 204 Advanced Cartography (Cartography II)

This course is intended to build upon the basic cartographic skills introduced in GEOG 104 and to develop new, more advanced skills in cartographic design and communication. The course will be tailored around individual student's needs and interests, and will include fundamental aspects and use of major types of map projections, statistical mapping, landform representation, and mapping point, volume and linear data. A laboratory fee is required. Prerequisite: GEOG 104 or permission of instructor. Cr 3.

GEOG 205 Air Photo Interpretation

Deals with the earth as perceived from the air and space. "Hands-on" analysis of various types of imagery includes basic photogrammetry plus air photo and satellite remote sensing interpretation. Applications to land use planning, archaeology, geology and military science are among the topics covered. Recommended as a companion course to Cartography 204. Cr 3.

GEOG 206 Field Camp in Geography (also Farmington GUY 206)

This system-wide offering brings students and teachers of several campuses together to participate in a geographic field experience of regional focus. A University of Maine system host campus is selected on a rotating basis and an appropriate theme developed to integrate the field studies in time and space.

Various methods of geographic field analysis, mapping and site interpretation are employed. Recommended for all majors concentrating in geography. No prerequisite. Cr 3.

GEOG 209 Introduction to Land Use Planning

This course offers an overview of man/land relationships as they influence contemporary patterns of settlement and use of the land. It will discuss the logic of a planning process as a method of decision making, the formulation of goals and evaluation of alternative courses of action, standards and requirements for specific planning objectives (such as land use, energy, recreation, transportation), and the place of the planning function in government and the role of citizens and private groups. Introduction to basic planning tools and techniques including PERT, aerial photography, and methods of land inventory and classification will be presented. No prerequisite. Cr 3.

GEOG 210 Planning Maine Communities: Current Issues and Directions

This course will examine the issues facing Maine communities such as providing affordable housing, maintaining and improving the community's physical facilities such as streets, sewers, playgrounds, etc., disposing of solid and hazardous wastes, stimulating jobs and economic development, providing adequate transportation facilities, and preserving Maine's environment and lifestyle in the face of growth. It will also address how these issues can be addressed through the use of the planning process and sound planning techniques. Cr 3.

GEOG 303 Economic Geography

Economic Geography presents an examination of classes of economic activities and explains the reasons for their location. There are two major objectives: to make available to the student the skills which allow him to interpret and understand the present economic landscapes, and to critically evaluate the factors and trends which anticipate the future. Prerequisite: GEOG 101 or ANY 101 or permission of instructor. Cr 3.

GEOG 311 Spatial Organization

Involves the use of computer algorithms and other simulation devices to help solve various

location problems such as where to build a fire station or how to assess health care delivery. Concepts of spatial efficiency, geographic predictive approaches and field plotter techniques are involved. Programs have obvious real world applications and students are encouraged to relate them to areas of their own interest. Prerequisites: GEOG 101 and GEOG 102 or permission of instructor. Cr 3.

GEOG 325 Lands and Peoples of Asia

The course examines the regions of South Asia and East Asia. Monsoon Asia is regional in approach and all aspects of the environment are presented. Physical, cultural, economic, and political factors are examined in an integrative analysis to allow an understanding of some of the reasons for conditions in this part of the world. Prerequisite: GEOG 101 or GEOG 102 and ANY 101 or ANY 102 or permission of instructor. Cr 3.

GEOG 400 Independent Study in Geography

The department faculty offers independent study in a topic in geography for upper-level students (junior and senior status). Individuals wishing to take advantage of this option should secure a faculty sponsor and department approval. Variable credits will be offered. Cr 1-6.

GEOG 401 Food and Hunger

The course will examine agricultural systems in different parts of the world in terms of productivity, trade, economy and ecology. Physical and cultural inputs will be considered for each system. Trends and problems within the United States will be examined, with special emphasis given to the region of New England and the State of Maine. Prerequisite: GEOG 101 and GEOG 102 or ANY 101 or ANY 102 or permission of instructor. Cr 3.

GEOG 402 Urban Geography

Deals with the American city as a type. Urban centers are dealt with at two levels -- as whole entities in which location, characteristics, growth, and relations with the countryside are explored, and as complex nodal regions in which the internal variations of the city are examined. Prerequisite: GEOG 101 and 201 or permission of instructor. Cr 3.

The Museum of Culture Change provides a unique experience for students and the community. It is designed to tell the story of human culture through works created by man through the ages. The museum collection is visited each year by students, faculty, and the surrounding community. Field expeditions, materials, and facilities are also available to those interested in

museum activities. Further information about the Museum of Culture Change may be obtained from Director Robert French, Department of Geography-Anthropology, or from the office of the Dean of CAS. The Geography-Anthropology Department offers GYAY 100 Museum Aide for one credit hour in conjunction with this project.

Geosciences

Chair of the Department: Irwin D. Novak, 112a Bailey Hall, Gorham
Associate Professors: Ayers, Hare, Novak, Pendleton; *Assistant Professor* Pollock

Programs and Requirements

Courses offered by the Department of Geosciences are grouped under the following headings: Astronomy; Earth Science (including Meteorology and Oceanography); Geology; Physical Science.

Degree programs in earth science and geology are offered in the College of Arts and Sciences. A student majoring in earth science or geology must achieve a 2.0 grade point average and no Ds in the major courses.

Students in the early childhood or elementary education programs in the College of Education may select an academic major requiring 30 credit hours of approved biological and physical science courses in the science area, but the science area minor of 18 credit hours is more commonly selected by such students. The latter program is outlined later in this section.

The Earth Science Programs

Two four-year programs are offered in the department. The earth science major is designed so that upon completion a student may enter graduate school, or seek work in conservation, state and federal parks and planning agencies, and in industry. The second is a geology major and is available for those students intending to go to graduate school or to pursue a professional career in geology.

Geology or earth science majors intending to pursue graduate work are urged to determine graduate school foreign language requirements. Students are also encouraged to consider concentrations in allied areas such as biology, chemistry, computer science, economics, geography, and statistics if their interests are in the wider aspects of earth sciences.

Bachelor of Arts in Earth Science

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

GEOL	111, 112	Physical Geology
GEOL	113, 114	Historical Geology
CHEM	113, 114	Principles of Chemistry I

OR

CHEM	115, 116	Principles of Chemistry II
PHYS	121, 122	General Physics
ASTR	100	Astronomy
MET	100	Meteorology
OCN	100	Oceanography

A minimum of 6 credits of mathematics selected from MS 120, 140, 152 or courses with second digit higher than 5.

Of the following courses, Arts and Sciences majors are required to take 29-30 credits, including at least 15 credits of 200 level and 9 credits of 300 level and PSCI 498, Independent Study.

ASTR	103	Astronomy Lab
ASTR	210	Observational Astronomy
ESCI	110	Environmental Science
ESCI	160	Soil Science
ESCI	202	Conservation
ESCI	260	Soil Formation and Classifications
GEOL	116	Environmental Geology
GEOL	202	Geomorphology (also GEOG 202)
GEOL	203	Mineralogy
GEOL	205	Geological Oceanography (also OCN 205)
GEOL	206	Paleontology
GEOL	301	Structural Geology
GEOL	302	Sedimentology and Stratigraphy
GEOL	310	Glacial and Pleistocene
OCN	101	Oceanography Lab
PSCI	498	Independent Study

Bachelor of Arts in Geology

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 71.

Chemistry and Physics

CHEM	113, 114	Principles of Chemistry I
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AND

CHEM	115, 116	Principles of Chemistry II
PHYS	121-122	General Physics

Mathematics

MS	120	Introduction to Statistics
MS	152	Calculus A

It is recommended that freshmen in the geology major who lack at least two years of high school algebra and a semester each of geometry and trigonometry, take MS 140, Precalculus Mathematics.

Geology

GEOL	111, 112	Physical Geology
GEOL	113, 114	Historical Geology
GEOL	202	Geomorphology
GEOL	203	Mineralogy
GEOL	204	Optical Mineralogy
GEOL	206	Paleontology
GEOL	301	Structural Geology
GEOL	302	Sedimentation and Stratigraphy
GEOL	303	Igneous and Metamorphic Petrology
GEOL	491, 492	Senior Thesis in Geology

OR

GEOL	498	Independent Study in Geology
GEOL	495, 496	Geology Seminar I, II

Elective Courses: In addition to those courses listed above students are required to take six credit hours from the remaining electives.

GEOL	205	Geological Oceanography (also OCN 205)
GEOL	304	Sedimentary Petrology
GEOL	310	Glacial and Pleistocene Geology

GEOL	350	Geological Field Methods
GEOL	401	Advanced Petrology
GEOL	405	Tectonics

Students planning to attend graduate school are strongly recommended to include a course(s) in computer science, languages, and additional courses in mathematics and chemistry.

To be retained in the geology major program, students are required to maintain a minimum grade point average (GPA) of 2.0 in geology courses.

Minor in Geology

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 20.

Required courses: GEOL 111/112; GEOL 113/114; GEOL 203; GEOL 301; GEOL 202/GEOG 202, or GEOL 302.

Astronomy

ASTR 100 Astronomy

A descriptive survey of modern astronomy. Topics include theories about the origin and development of the universe, stellar evolution, the solar system, galaxies, observation methods and recent discoveries. Optional planetarium sessions and optional evening observations with telescopes are included. No prerequisites. Offered fall and spring semesters. Cr 3.

ASTR 103 Activities and Experiments

A one credit course meeting weekly for two hours. May be taken concurrently with ASTR 100 to fulfill requirements for a science laboratory experience. Includes principles of telescope and spectroscopy, prediction of rising and setting times of planets and stars, measuring latitude and longitude, a study of the moon's orbit, Earth's orbital motion, proper motion of stars, spectral classifica-

tion, rotation of Saturn's rings, the Crab Nebula, Variable stars, Pulsars and Hubble's Law. Prerequisite: ASTR 100 (may be taken concurrently). Offered spring semester. Cr 1.

ASTR 105 Astronomy in the Planetarium

For non-science majors. Includes apparent stellar movement and planetary motions, star names and constellation study, stellar magnitudes, stellar navigation and celestial coordinate systems. No prerequisites. Offered fall and spring semesters. Cr 3.

ASTR 210 Observational Astronomy

Star charts, atlases, binoculars, cameras and telescopes are used to make observations of constellations, sun-spot activity, the moon, the planets and their satellites, star clusters, nebulae, double and variable stars. Prerequisite: ASTR 100 or equivalent. Fall semester only. Cr 3.

Earth Science

ESCI 110 Environmental Science

A descriptive study of the basic physical relationships between man and the aquatic and atmospheric environment. This will include man's influence on surface and ground water quality to encompass agricultural, domestic, industrial and municipal realms. The atmosphere will be discussed in terms of geologic origin, natural evolutionary changes, global circulation patterns, and the effect of modern industrial society upon its composition and quality. Background in high school chemistry, mathematics and physics is desired. Three hours lecture. Cr 3.

ESCI 140 Energy, Man and Environment

This course will present a study of man's energy needs, and the alternative energy sources available. In addition, the impact on the environment of the utilization of the various energy sources will be considered. Cr 3.

ESCI 160 Soil Science

An introductory course delving into the science of soil development, soil classification and soil use. The course is intended to meet the needs of beginning as well as experienced students in the earth sciences and related fields. Topics considered are soil make-up and morphology,

soil chemical and physical properties, soil genesis, soil organic matter, soil mineralogy, soil ecology land use and Maine soils. Three hour lecture, two hour lab. Prerequisites: Physical Geology or permission of the instructor. Cr 4.

ESCI 202 Conservation

A study of man's use of the environment. Topics include the resources of mineral, soil, forests, water, air, wildlife, and man himself. Consideration is given to the issues and problems developing from the interaction of management of these resources. Weekly field trips when weather permits. Two hours lecture, two hours lab. Cr 3.

ESCI 260 Soil Formation and Classifications

The course delves into the macromorphology and micromorphology of the soil body, as well as the overall soil formation processes. Soil Formation and Classifications studies the reasoning behind soil development and soil diversification. Major problem features such as: mottling, pans, organic fraction, clay minerals, etc., are studied in detail. The second portion of the course studies the 7th approximation and the overall world-wide systems for classifying pedons (soil bodies) as a useable, necessary art. Three hour lecture, two hour lab. Prerequisite: ESCI 160, one semester of chemistry or permission of the instructor. Cr 4.

ESCE 300-301, 400-401 Cooperative Education in Earth Sciences

The student has the opportunity to relate academic knowledge to practical experience in a job situation. The University makes arrangements with certain institutions, businesses, and industries to employ qualified students for specific jobs for a set time period. The student's work is ordinarily in a related field and the work experiences increase in difficulty and responsibility as the student progresses through the sequence of

courses. The experiences are approved on a case-by-case basis by the department. Evaluation is done through a written report done by the student together with the employer and a faculty supervisor. Prerequisite: junior class standing and a major in earth science. Each semester students may take each course only once. Cr 1-5.

MET 100 Meteorology

A basic introduction to meteorological phenomena. The atmosphere; its characteristics, composition, and structure; cloud types; circulation of air currents and winds; air masses. Analysis of weather reports, weather forecasting, and weather maps. Three hours lecture. Cr 3.

OCN 100 Introduction to Oceanography

Origin and extent of the oceans; nature of the sea bottom; causes and effects of currents and tides; chemical and physical properties of sea water; animal and plant life in the sea. Three hours lecture. Each semester. Cr 3.

OCN 101 Oceanographic Laboratory

A laboratory course in which the student is introduced to some of the techniques and technical processes involved in oceanic measurements and data reduction. Prerequisite: OCN 100 which may be taken concurrently. One two hour laboratory session each week. Cr 1.

OCN 205 Geological Oceanography (also GEOL 205)

The origin and structure of the continental shelves and ocean basins. Coastal and oceanic processes; geomorphic development of the marine environment. Special emphasis on the evolution of the New England coast through examination of salt marshes, estuaries, and beaches. Prerequisite: GEOL 111, 112 or OCN 100 or permission of the instructor. Three hours lecture. Fall semester. Cr 3.

Geology

GEOL 111 Physical Geology

A study of the ever-changing earth by wind, water, volcanism, crustal movement and glaciation. Three hours of lecture. Each fall and spring. GEOL 111 may be taken without GEOL 112. Cr 3.

GEOL 112 Physical Geology Lab

Identification of common rocks and minerals, further development of the processes covered in lecture; field trips when weather

permits. Each fall and spring. To be taken concurrently with GEOL 111. Lab two hours. Cr 1.

GEOL 113 Historical Geology

Study of the earth's history in terms of physical, chemical and biological change from its origin to the present time, stressing the methods of determining chronology and conditions through fossils and structural characteristics. Prerequisites: GEOL 111, 112. Two hours of lecture. Cr 4.

GEOL 114 Historical Geology Lab
A study of rocks, minerals and fossils to determine the geological conditions at some ancient time. Introduction to paleogeographic and geologic maps. Field trips. To be taken concurrently with GEOL 113. Three hours. Each spring. Cr 0.

GEOL 116 Environmental Geology
Application of the science of geology to environmental problems resulting from man's intense use of the earth and its natural resources. Prerequisites: GEOL 111, 112 or permission of the instructor. Two 75-minute lecture sessions. One two-hour lab. Cr 4.

GEOL 202 Geomorphology (Also GEOG 202)
Description and interpretation of landform development in terms of geologic structure, process, and stage. One, possibly two weekend field trips. Prerequisite: GEOL 113, 114. Two hours lecture. Two hours lab. Fall semester. Cr 4.

GEOL 203 Mineralogy
An introduction to crystallography and a study of the physical properties and chemical structures of common rock-forming minerals. Laboratory analysis is an important part of the course. Two hours lecture. One hour recitation. Four hours lab. Prerequisite: GEOL 111, 112. CHEM 113, 114 (may be taken concurrently). Fall semester. Cr 4.

GEOL 204 Optical Mineralogy
The principles of crystallography and crystal optics are presented as the basis of a practical approach to the identification of minerals with a petrographic microscope. The laboratory is an important part of the course, providing practical applications of the theory and methods covered in the lecture. Prerequisite: GEOL 203. Lecture two hours. Lab four hours. Spring semester. Cr 4.

GEOL 205 Geological Oceanography (Also OCN 205)
The origin and structure of the continental shelves and ocean basins. Coastal and oceanic processes; geomorphic development of the marine environment. Prerequisite: GEOL 111, 112 or OCN 100 or permission of the instructor. Three hours lecture. Fall semester. Cr 3.

GEOL 206 Paleontology
A description and classification of the important phyla of the fossil invertebrates and a survey of their use in biostratigraphic, evolutionary and paleoecologic studies. One weekend field trip. Prerequisites: GEOL

113, 114. Two one-hour lectures and one two-hour lab per week. Each fall. Cr 3.

GEOL 301 Structural Geology
An introduction to the mechanics of rock deformation, faulting, jointing, top-bottom criteria and metamorphic foliations. The lab includes problems in descriptive geometry, stereonet, the Brunton compass, geologic maps and cross sections, and analysis of polyphase folding. Prerequisites: GEOL 111, 112 and GEOL 113, 114. Field trips. Two hours lecture, one hour recitation, two hours lab. Cr 4.

GEOL 302 Sedimentation and Stratigraphy
Principles of stratigraphy and sedimentation including correlation, facies, stratigraphic nomenclature, and sedimentary processes and environments. Students will analyze common problems in applied fields associated with these areas. Prerequisite: GEOL 203. GEOL 202 recommended. Some weekend field trips. Two hours lecture, three hours lab. Spring semester. Cr 4.

GEOL 303 Igneous and Metamorphic Petrology
The study of the origin of igneous and metamorphic rocks. Topics include operational thermodynamics as applied to igneous and metamorphic rocks, crystallization of silicate systems, mineral equilibria and paragenesis. Laboratory studies include work with hand specimens and thin sections. One or more day or weekend field trips. Prerequisite: GEOL 204. Two hours lecture; four hours laboratory. Fall semester. Cr 4.

GEOL 304 Sedimentary Petrology
The study of the origin of sedimentary rocks to include clastic, carbonate and chemical sediments. Topics discussed cover chemical and physical changes from the time of deposition to the beginning of very low grade metamorphism. Laboratory work stresses petrography and classification of sedimentary rocks and closely follows classroom topics. One or more day or weekend field trips. Prerequisite: GEOL 204. (May be taken concurrently). One hour lecture; two hours laboratory. Offered spring semester. Cr 2.

GEOL 310 Glacial and Pleistocene Geology
Glacial processes, deposits and the stratigraphy of the Pleistocene Epoch. Emphasis on the erosional and depositional features of glacial events in Maine. One, possibly two, weekend field trips. Prerequisite: GEOL 202. Two hours lecture, two hours lab. Spring semester. Cr 3.

GEOL 350 Geological Field Methods

A course in geological field methods intended to introduce to the student the tools and practical techniques used in collecting, compiling and analyzing geological data. Students will have assignments in the igneous/metamorphic and surficial terrain of Southern Coastal Maine and sedimentary and volcanic terrain in Eastern Coastal Maine. Summer. Five weeks. Prerequisites: GEOL 111, 112 and GEOL 113, 114. GEOL 203, GEOL 301. Recommended: GEOL 302, GEOL 303, GEOL 202. Cr 6.

GEOL 401 Advanced Petrology

The course expands upon material covered in GEOL 303 to include a rigorous discussion of thermodynamics and applications to petrology. Topics covered include chemical and experimental petrology, generation and evolution of magmas, physical conditions of metamorphism, geothermometry and geobarometry. Laboratory work stresses petrology of selected igneous and metamorphic rock suites. One or more day or weekend field trips. Prerequisites: MS 152, GEOL 303. Offered spring semester even years or on demand. Two hours lecture, four hours lab. Cr 4.

GEOL 405 Tectonics

Major topics include the nature of the earth's crust and interior, continental drift, seafloor spreading and plate tectonics. The evolution of mountain ranges, continents, and ocean

basins will be studied on a global scale. Current articles in scientific journals will be discussed. Prerequisite: GEOL 301 or 303 or permission of instructor. Three hours lecture. Cr 3.

GEOL 490/491 Senior Thesis

The Senior Thesis is designed for the senior level student to pursue independent research in geology. The thesis is designed to be a scholarly effort in culmination of the student's baccalaureate program. Cr 3.

GEOL 495 Geology Seminar I

The seminar is meant to provide the geology major with an overall view of the discipline as well as the opportunity to discuss, read and report about specific topics in the field. Current problems, research and philosophy of geology will be included. Prerequisite: senior standing. Each fall. Cr 1.

GEOL 496 Geology Seminar II

A continuation of GEOL 495. Prerequisite: senior standing. Each spring. Cr 1.

GEOL 498 Independent Study in Geology

To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a library, laboratory, and/or field project independently. Topic selection to be arranged mutually between student and faculty in the semester preceding planned registration. Prerequisite: junior or senior standing. On demand. Cr 1-3.

Physical Science

PSCI 400 Science and Society

Readings and discussions concerning the relationships between science and society. The tactics and strategy of science and the philosophical and social implications of present scientific theories are considered with the aim of promoting understanding of the role of science in modern life. The interactions between scientists and society and the relationship between research and technology are also examined. Not offered every year. Senior students and others by instructor's permission. Cr 3.

PSCI 498 Independent Study in the Physical Sciences

To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, selecting a problem and exploring an area of interest in the physical sciences, bringing to it previous experiences and emerging with an intellectually sound, coherent synthesis or technical creation reflecting a high caliber of performance. Cr 1-3.

History

Chair of the Department: Joel W. Eastman, 325 Bonney Hall, Portland
Professors: Cole, Emerson, Hunt, Schleh, Young, York; *Associate Professors:* Albee, Bibber, Connick, Dietrich, Eastman, Padula, Ventresco, Whitmore

History remains a venerable and enduring academic discipline because of the nature of time and the human need to gain perspective and direction by recovering a sense of the past. To do this requires the techniques of collecting, evaluating, organizing, and interpreting historical evidence. The history curriculum offers students the opportunity to learn the historian's craft through lectures, discussions, research, and writing.

History is one of the classic liberal arts disciplines that prepares students for a full and satisfying life as well as for careers in business, government, and nonprofit organizations. More particularly, history is widely recommended as preparation for graduate studies in business, law, and library science. Besides teaching, specific careers include service with federal, state, and local governments; archival and library work; social science research; editing of documents; publishing; writing and research for historical presentations on television and radio; and many others.

Programs and Requirements

The Department of History offers a 39 credit-hour major which leads to a bachelor of arts in history; an 18-hour minor for students majoring in other disciplines; and an honors program for outstanding majors, which offers students an opportunity to undertake an independent research project in their junior or senior year under the guidance of a member of the Department. In addition, the Department offers an exchange program with King Alfred's College in Winchester, England, and an internship program in cooperation with area historical societies, museums, libraries, and other institutions. Departmental offices have information on all of these programs.

Majors are encouraged to select history electives that focus on a particular country, continent, or era, and to pick courses from other departments which complement this concentration. It is strongly recommended that majors, especially those expecting to undertake graduate study, acquire proficiency in a foreign language.

A history major or minor must achieve at least six credits of B or better grades in history courses. No grade of D will count toward fulfillment of a history major or minor. No required course may be repeated more than once. Unusually well-prepared entering students may, upon passing an examination, gain exemption from any of the required courses. College Level Equivalency Program (CLEP) examinations are available in Western Civilization and United States history, and a department examination has been prepared for HIST 200 Reference, Research and Report Writing. See the Department chair for details. Majors and minors are reminded that, in addition to Department requirements, they must also meet those of the University Core curriculum.

Other courses in the College of Arts and Sciences have historical interest. Although they do not count for history credit, the major may wish to take some of them as supplementary electives.

Bachelor of Arts in History

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

HIST	101	Western Civilization I
HIST	102	Western Civilization II
HIST	131	United States History to 1877
HIST	132	United States History Since 1877
Third World survey courses (select two)		
HIST	161	African History to Partition
HIST	162	African History Since Partition

HIST	171	Traditional East Asia
HIST	172	Modern East Asia
HIST	181	Latin America I
HIST	182	Latin America II
HIST	200	Reference, Research, and Report Writing

Elective advanced history courses (select six in consultation with your major advisor)

Minor in History

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

Students majoring in CAS disciplines who desire a concentration in history may develop an 18 credit-hour minor. The program of study must focus on an area, a chronological period, or methodological approach. The program must be developed in cooperation with a member of the history faculty, include the two-semester survey sequence appropriate to the area, period, or topic, and be approved by the chair of the department.

Requirements: appropriate two-semester survey sequence (approved by the advisor and department chair); and elective advanced history courses (four courses approved by advisor and department chair)

HIST 101 Western Civilization I

A basic survey and introduction to the heritage of Western man from ancient to early-modern times. Particular attention is given to the ancient civilizations of Egypt, Greece and Rome. Medieval civilization is explored with a focus on the institutions it bequeathed to the modern world. The Renaissance and Reformation and the rise of the great nation-states are studied. Throughout the course important individuals are considered such as Alexander the Great, Caesar, Charlemagne, Michaelangelo, and Elizabeth I. The course also introduces students to historical method. Cr 3.

HIST 102 Western Civilization II

A basic survey and introduction to the heritage of Western man from early modern times to the atomic age. Particular attention is given to the Enlightenment, the French Revolution, the rise of the industrial era, the growth of nationalism, and the World Wars. Personalities such as those of Napoleon, Hitler, and Stalin are studied. The course also introduces students to historical method. Cr 3.

***HIST 131 United States History to 1877**

A basic survey and introduction to the field of American history, covering the political, social, and economic development of the United States through Reconstruction. Cr 3.

***HIST 132 United States History Since 1877**

The course is a continuation of HIST 131. A survey of American political, social, and economic development since about 1877. Cr 3.

***HIST 133 American History I**

A survey of United States History which examines institutional development and change in major areas of American society and culture before 1900 by means of lecture case studies, a variety of paperbound readings, films, slides, music, and small-group discussions. (This course may not be used to fulfill requirements for major, minor or concentration as of September, 1976). Cr 3.

***HIST 134 American History II**

A continuation of HIST 133 which examines institutional change and development in modern American urban industrial society and culture since 1900. (This course may not be used to fulfill requirements for major, minor or concentration as of September, 1976). Cr 3.

*HIST 131-132 and HIST 133-134 are both introductory courses, although their organization and emphasis differ. History majors may take HIST 133-134 only for general elective credit.

HIST 161 Introduction to African History to Partition

A survey of African history from early migrations to the beginning of the Colonial era. The approach is both regional, stressing selected countries representative of their regions, and topical, cutting across political boundaries. Topics include the states of the Sudan, city states of East Africa, Islam, the slave trade, exploration, and partition. Cr 3.

HIST 162 Introduction to African History Since Partition

A survey of the Colonial era, the transforma-

tion of African societies, the rise of nationalistic movements, wars of liberation, and early years of the new era of independence. Cr 3.

HIST 163 Africa Through Its Literature

An examination of how African history has been portrayed through novels. Both historical re-creation novels and books reflective of the societies which produced them are used, with particular emphasis on English-speaking Africa. (Offered every other year.) Cr 3.

HIST 171 Traditional East Asia

The history and culture of China and Japan from earliest times to about 1700, with emphasis on the composition of the "traditional" societies. Cr 3.

HIST 172 Modern East Asia

China and Japan since about 1700, emphasizing contrasting moves toward modernization in two traditional societies. Cr 3.

HIST 181 Latin America I

This survey outlines the nature of the pre-Columbian Indian civilizations, their conquest by the European powers and the creation of the Hispanic and Portuguese empires in America. Cr 3.

HIST 182 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.

HIST 200 Reference, Research and Report Writing

An introduction to research and writing, designed to prepare undergraduates for the requirements of upper-level courses in history and the social sciences with emphasis on practical methods of utilizing a library, locating materials, taking and organizing notes, and writing and rewriting research papers and reports. Cr 3.

HIST 231 Ancient History I

The political, social, and economic history of the civilizations of the ancient Mediterranean world, with Egypt, the Near East, and Greece being studied. (Offered occasionally.) Cr 3.

HIST 232 Ancient History II

A continuation of HIST 231 concentrating upon an examination of ancient Rome. (Offered occasionally.) Cr 3.

HIST 235 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: HIST 101 or permission. Cr 3.

HIST 241 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 which engendered the religious wars and the Counter Reformation. Prerequisite: HIST 101 or permission. Cr 3.

HIST 242 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: HIST 102 or permission. Cr 3.

HIST 243 Europe at the Turn of the Century (1871-1913)

This course concentrates on the culture and politics of fin de siècle Europe. The pre-World War I society will be viewed from a variety of perspectives, and will focus on various individuals who helped shape the times. Of particular interest will be the views and impact of Marx, Darwin and Wagner within the framework of the Industrial Revolution and imperialism. Prerequisite: HIST 102 or permission. Cr 3.

HIST 244 20th Century Europe

An intensive survey of European developments in the 20th century. The course deals with such intellectual trends as the revolt against positivism, Freudian psychology, expressionism and surrealism in the arts as well as with such phenomena as totalitarianism in its various forms (Nazism, Fascism, Soviet Communism). World Wars I and II and the post-1945 evolution of Europe are thoroughly analyzed. Prerequisite: HIST 102 or permission. Cr 3.

HIST 256 World Wars I and II: European War and Diplomacy

A study of the origins, course, and consequences of the First and Second World Wars. The questions of inevitability and responsi-

bility, the nature of total war, the workings of alliances, the effect of the military upon politics, the wisdom of the peace settlements, and the impact of war upon European society are among the subjects to be considered. Prerequisite: HIST 102, 132 or permission. Cr 3.

HIST 261 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: HIST 101 or permission. Cr 3.

HIST 263 Britain in the 20th Century

A study including the Victorian and Edwardian Age, Imperialism, the Monarchy, the Depression, appeasement, the English people in two World Wars, the question of Ireland, and the leadership of Lloyd George and Churchill. Prerequisite: HIST 102 or permission. Cr 3.

HIST 265 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: HIST 101 and HIST 102 or permission. Cr 3.

HIST 266 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: HIST 102 or permission. Cr 3.

HIST 272 Germany To 1945

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: HIST 102 or permission. Cr 3.

HIST 273 Germany Since Hitler

After intensive analysis of the impact of the

Nazi era and World War II on Germans, the course analyzes the two German states in terms of: (a) their emergence, 1945-1949, and effects of the Cold War and occupation on each; (b) their political, economic, and social development since 1949; (c) the role of the Federal Republic of Germany in relation to the West and the role of the German Democratic Republic in the Communist bloc; (d) their relations with each other; (e) intellectual and cultural developments in both. Prerequisites: six hours of European history or international relations. HIST 272 desirable. Cr 3.

HIST 275 Russia to 1861

A survey of political, social, cultural and economic history of the Russian people to the emancipation of the serfs. The course surveys geographic factors, influence of Byzantine civilization, the impact of invasions, and the development of Russia's unique problems. Prerequisite: one history survey or permission. Cr 3.

HIST 276 Russia Since 1861

A survey of political, social, cultural, and economic history from the emancipation of the serfs to today. The course deals with Tsarist autocracy and its weaknesses, pressures for reform, the intelligentsia, revolutionary parties, the Bolshevik Revolution, and Communist Russia since 1917. Prerequisite: one history survey or permission. Cr 3.

HIST 290 China and Cuba Under Communism

This is a course in comparative history, focusing on developments in China and Cuba since the assumption of power by communist regimes in 1949 and 1959 respectively. The principal topics dealt with include political events, the organization of power, economic and social development, and relations with the outside world. Cr 3.

HIST 300 History Internship

Professional experience in one of a variety of positions in public and private institutions which utilize the knowledge and research skills of historians. Students work one day per week, keep a journal, write an evaluation, and are visited on the job by a faculty member. Open to selected students; see department chair for details. Graded pass/fail, so does not count for major credit. Can be taken twice. Cr 3.

HIST 301 American Colonial History

The first half of the semester is devoted to the discovery, exploration and colonization of the American colonies. The second half con-

centrates on the social and political development of these colonies, touching upon various aspects of colonial life and emphasizing the growing maturation of society. Prerequisite: HIST 131 or permission. (Offered every other year.) Cr 3.

HIST 302 The American Revolution

A study of the 1763-1789 period, stressing the breakdown of Anglo-American relations; American independence and its ideological underpinnings; the Revolutionary War; the postwar struggle to strike a balance between too much government and too little; and the drafting and ratification of the U.S. Constitution. Prerequisite: HIST 131 or permission. (Offered every other year.) Cr 3.

HIST 305 Hamilton and Jefferson

A study of Hamilton and Jefferson including biographical information and the Jefferson-Hamilton political dichotomy and its subsequent influence. Following this, the course will present a general analysis of social, intellectual, political, economic, and diplomatic problems facing the "New Nation" between 1789-1815. Prerequisite: HIST 131 or permission. (Offered every other year.) Cr 3.

HIST 306 The Age of Jackson, 1815-1850

A consideration of American political, cultural, social, and economic development in the first half of the 19th century. Specific topics will include the controversies surrounding Jacksonian democracy, the Bank of the United States, internal improvements, the tariff, "Manifest Destiny," and the sectional-slavery issue. Prerequisite: HIST 131 or permission. (Offered every other year.) Cr 3.

HIST 307 Civil War and Reconstruction

An examination of the period 1850-1877, dealing with the background and causation of the war; Lincoln and the secession crisis; the military, political, diplomatic, and economic aspects of the Civil War; and the challenges and ultimate failure of reconstruction after 1865. Prerequisite: HIST 131 or permission. Cr 3.

HIST 308 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: HIST 132 or permission. Cr 3.

HIST 309 Early 20th Century America, 1898-1938

The United States in the first four decades of the twentieth century with coverage of the Spanish-American War, the progressive movement, American entry into World War I, the Roaring Twenties, the Great Depression, and the domestic programs of the New Deal. Prerequisite: HIST 132 or permission. Cr 3.

HIST 310 America Since 1938

The United States since the Great Depression with coverage of the foreign policy of the New Deal, the background to Pearl Harbor, World War II, the Fair Deal, the Cold War, the Eisenhower years, the New Frontier, and the Great Society. Prerequisite: HIST 132 or permission. Cr 3.

HIST 321 History of Maine

A survey of Maine's social, economic and political life from exploration and early settlement to the present. Cr 3.

HIST 325 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: HIST 131 and 132 or permission. (Offered every other year.) Cr 3.

HIST 331 History of Black Americans

An examination of the interaction of black people with American social, political, cultural, and economic institutions. Major topics include the African heritage, components of slavery, abolitionism, segregation, programs of race advancement, and the modern search for identity. Prerequisites: HIST 131 and 132 or permission. Cr 3.

HIST 333 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.

HIST 335 American Urban History

A survey of the American city: social, political, intellectual, and cultural components; the changing nature of "community;" the course of urban development; and the emergence of urban life styles. Special attention is

focused on the population movement to the city; the development of slums, ghettos, and suburbs; the growth of municipal institutions and services; the relationship of city dwellers and government; and the emergence of "Megalopolis." Prerequisite: HIST 131 or permission. (Offered every other year.) Cr 3.

HIST 337 American Economic and Business History, 1607-1860

Economic and business developments in the United States from the first settlements to the Civil War. The course covers the British mercantile system, the colonial economy, the transportation revolution, the Southern plantation system, and the beginnings of American industrialization. Prerequisite: HIST 131 or permission. (Offered occasionally.) Cr 3.

HIST 338 American Economic and Business History Since 1860

Economic and business developments in the United States from the Civil War to the present. The course covers the growth of a national market and distribution system, the revolution in agriculture, the rise of big business, the organization of labor, and the growing involvement of the federal government in business and the economy. Prerequisites: HIST 132 or permission. (Offered occasionally.) Cr 3.

HIST 339 American Labor in the Twentieth Century

A chronological examination of the efforts of workers to adjust to our corporate industrial society. Topics will include the emergence of the AFL, labor radicalism, the role of labor leadership, racketeering, labor and the New Deal, and labor theory. The focus will be on unions, but attention will be given to nonunion segments of the labor force as well. Prerequisite: HIST 132 or permission. (Offered every other year.) Cr 3.

HIST 341 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: HIST 131 or permission. (Offered every other year.) Cr 3.

HIST 342 American Social and Intellectual History II

A continuation of HIST 341 from 1865 to the present. Prerequisite: HIST 132 or permission. (Offered every other year.) Cr 3.

HIST 343 Diplomatic History of the United States I

This course covers the development of key United States foreign policies from the Revolution to the Spanish-American War. Prerequisite: HIST 131 or permission. Cr 3.

HIST 344 Diplomatic History of the United States II

The chief emphasis is placed on the causes and results of World Wars I and II, the nature of the Cold War, and the character of our present commitments. Prerequisite: HIST 132 or permission. Cr 3.

HIST 345 American Character

A course focusing on a particular problem of historical analysis: the interpretation of the national character as revealed in sources ranging from the earliest accounts of foreign travelers to the most recent works of social psychologists. Authors to be considered in discussions, reports, and papers include Tocqueville, Bryce, Adams, Turner, Siegfried, Mead, Potter, Riesman, and others. Prerequisite: HIST 131 or permission. (Offered every other year.) Cr 3.

HIST 346 History of Sport in America

A course for everyone interested in the impact of sport on the American society, it surveys the origin and development of sport from colonial times to the present with emphasis on the years since the Civil War. A major concern will be to examine the way in which sport relates to and reflects major historical themes, issues, and values. Lectures and discussion with a text, readings, reports, and papers. No prerequisite but some history is recommended. Cr 3.

HIST 347 Viewpoints in American History

A seminar involving discussions of selected topics in United States history, with emphasis on varying interpretations of trends and events. Students will read and analyze both traditional and more recent views, noting changes in frames of reference, methodology, and general approach. Prerequisite: 12 hours of U.S. history. (Offered occasionally.) Cr 3.

HIST 348 A History of Religion in America

A history of religion in American society from the colonial era to the present, examining theology, organization, leaders, critics, and the religious contribution to the Ameri-

can heritage. Prerequisites: HIST 131 and 132 or permission. (Offered every other year.) Cr 3.

HIST 349 American Military History

An examination of American military experience from the colonial era to the present. Causes, impact, and conduct of conflicts from the Revolution to Vietnam will be considered as well as roles of the military in American society. Prerequisites: HIST 131 and 132 recommended. Cr 3.

HIST 350 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 US foreign relations. Prerequisite: six hours of history or social science or permission. Cr 3.

HIST 362 Contemporary Africa

An interdisciplinary seminar on contemporary Africa examining literature and the arts, social change, development and adaption in African politics, economic development, race relations, and international politics. (Offered every other year.) Cr 3.

HIST 371 The United States and Asia

A history of the United States' interests in the Far East from 1789 to the present, considering economic and social contacts as well as diplomatic. Prerequisites: HIST 131 and 132. HIST 172 strongly recommended. Cr 3.

HIST 373 History of Late Traditional China

Before the nineteenth century no Chinese doubted--and few outsiders who saw it disagreed--that the "Middle Kingdom" was the greatest of the world's civilizations. No society was larger, had stronger ties to its past, or had contributed more to the development of human culture. This course will explore the institutions and values of China in the period from 800 to 1800, and its relationships with other societies. Prerequisite: HIST 171 recommended. Cr 3.

HIST 374 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: HIST 172 recommended. Cr 3.

HIST 376 History of Modern Japan

This course will explore what Japan was like when Perry "opened" it in 1854 and will deal with the rapid social changes which made Japan the outstanding example of modernization among non-western nations. The problems which this development has created will also be considered. Prerequisite: HIST 172 recommended. Cr 3.

HIST 377 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: HIST 171 recommended. Cr 3.

HIST 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.

HIST 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.

HIST 386 Modern War and Its Images

An examination of twentieth century warfare stressing the ways in which it has been portrayed to mass audiences. Particular use is made of film, both documentary and feature, and continuing attention is given to the uses of film in the study and teaching of history. Fiction, reporting, and survey histories will also be used, as well as occasional participation by guest discussants. (Offered occasionally.) Cr 3.

HIST 392 Problems in Contemporary History

An analysis of a selected controversial and contemporary problem. The topic to be studied and the method of approaching it will be chosen jointly by interested students and the staff. Prerequisite: permission of the instructor. (Offered occasionally.) Cr 3.

HIST 394 Selected Topics in History

An analysis of a selected controversial histor-

ical problem. The topic to be studied and the method of approaching it will be chosen jointly by interested students and the staff. Prerequisite: permission of the instructor. (Offered occasionally.) Cr 3.

HIST 410 The European Revolutionary Tradition Since 1789

A seminar analyzing modern European revolutions, revolutionary leadership, and the dynamics of revolution, including the role of the revolutionary crowd. Revolutions analyzed range from the French Revolution to the Bolshevik Revolution and include 20th century fascist revolutions. Open to seniors and others by permission. Prerequisite: at least six hours of European history or equivalent in unusual cases. Cr 3.

HIST 412 Totalitarianism: Nazism and Soviet Communism

A seminar which seeks to analyze and understand the 20th century phenomenon of totalitarianism by in-depth historical case studies of Nazism and Soviet Communism. Such topics as the leader (Hitler/Stalin), the party (Nazi/Communist), the enforcement operation (SS/NKVD), concentration camps and "Gulag Archipelago," propaganda techniques and results, internal administrative organization, and war machines (Wehrmacht/Red Army) will be included. Open to juniors, seniors, and graduate students with background in 20th century European history and political science. Cr 3.

HIST 415 Recent Literature in European History

A survey of the most important recent literature in the field of European history. Designed to inform the public school teacher and advanced undergraduate of the newest publications and historical controversies. Annotated bibliographies will be prepared. Emphasis will be placed on reading and discussing books and articles which have applicability to secondary education programs. Prerequisite: six hours of European history or permission. (Offered occasionally.) Cr 3.

HIST 445 Recent Literature in United States History

A survey of the most important recent literature in the field of U.S. history. Designed to inform the public school teacher and advanced undergraduate of the newest publications and historical controversies. Annotated bibliographies will be prepared. Emphasis will be placed on reading and discussing books and articles which have applicability to secondary education programs. Prerequisites: twelve hours of U.S. history or permission. (Offered occasionally.) Cr 3.

HIST 493 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.

HIST 495 Historiography

A survey of the principal schools of historical writing and of their products, with a detailed analysis of the philosophical principles, specific purposes, and research and writing techniques of selected major historians. Prerequisite: senior history majors only. (Offered occasionally.) Cr 3.

HIST 498 Independent Study in History

To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest within their major field, bearing upon it previous course experiences, and emerging with an intellectually sound, coherent synthesis reflecting a high caliber of performance. Prerequisite: permission. Cr 1-3.

Other courses in the College of Arts and Sciences have historical interest. Although they do not count for history credit, the major may wish to take some of them as supplementary electives. A current list may be obtained from the history chairman.

Mathematics and Computer Science

Chair of the Department: Maurice J. Chabot, 230 Science Building, Portland
Professors: Estes, Fish, Guay, Kratzer, Mainville, Rogers; *Associate Professors:* Brown, Chabot, Foster, Heath, Irish, MacDonald, Welty; *Assistant Professor* Soychak

The Department of Mathematics and Computer Science offers four-year programs leading to a B.A. in mathematics or a B.S. in computer science. The Department also provides the mathematics major courses for a B.S. in education (see College of Education). All students are reminded that, in addition to meeting departmental requirements for a major, they must also meet the requirements of the school or college involved, as well as the University Core curriculum requirements.

Programs and Requirements

Bachelor of Arts in Mathematics

As a mathematics major, a student may select one of the three options described below. However, as a prerequisite to other courses, all majors are required to complete successfully the calculus sequence (MS 152, 153, 252), a foundation course (MS 290), and a computer science course (CS 160). 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.

Option I

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

Mathematics majors intending to pursue graduate work should choose this option. Those intending to teach at the secondary level should choose this option or the area major described below. Prospective graduate students are urged to take Real Analysis I and II, Abstract Algebra, Topology, and one year of French or German; those interested in teaching should take Abstract Algebra, College Geometry, Probability and Statistics I. To be eligible for student teaching in secondary mathematics, a student must have completed 30 hours of mathematics courses having a second digit 5 or greater, with an accumulative grade point average of at least 2.0 in these courses and have successfully completed MSED 345.

A. Successful completion of one of the courses listed in each of the following four areas is required:

1) Algebra

MS 382 Abstract Algebra
MS 380 Linear Algebra

2) Analysis

MS 352 Real Analysis I
MS 354 Topics in Advanced Calculus
MS 355 Complex Analysis
MS 490 Topology

3) Applied Mathematics

MS 350 Differential Equations
MS 362 Probability and Statistics I
MS 364 Numerical Analysis
MS 366 Linear Programming
MS 460 Mathematical Modeling
MS 461 Introduction to Operations Research

4) Geometry

MS	370	College Geometry
MS	372	Non-Euclidean Geometry
MS	371	Projective Geometry

B. Successful completion of at least nine additional hours of approved mathematics courses with second digit 5 or greater.

Option II

The minimum number of credits (exclusive of the University's Core curriculum) required for this option: 57.

Those majors intending to enter industry or other applied fields should seriously consider this option or Option III. Majors who plan to prepare for the actuarial profession should be certain to include in their programs Linear Algebra, Probability and Statistics I and II, Numerical Analysis, and the appropriate courses in the School of Business, Economics and Management.

A. Successful completion of:

MS	350	Differential Equations
MS	362	Probability and Statistics I
MS	363	Probability and Statistics II
MS	380	Linear Algebra
MS	460	Mathematical Modeling

B. Successful completion of two of the following:

MS	354	Topics in Advanced Calculus
MS	364	Numerical Analysis I
MS	366	Linear Programming
MS	461	Introduction to Operations Research
MS	492	Graph Theory and Finite Combinations

C. Successful completion of at least 18 hours in allied disciplines, outside the Department, which utilize mathematical techniques. The particular program of courses must be approved in writing by the Department.

Option III

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

This option is designed for those students who wish to combine mathematical expertise with a knowledge of computer science.

A. Successful completion of five of the following courses:

MS	350	Differential Equations
MS	366	Linear Programming
MS	354	Topics in Advanced Calculus
MS	380	Linear Algebra
MS	355	Complex Analysis
MS	450	Partial Differential Equations
MS	362	Probability and Statistics I
MS	460	Mathematical Modeling
MS	363	Probability and Statistics II
MS	461	Introduction to Operations Research
MS	364	Numerical Analysis

B. Successful completion of five additional approved computer science courses with second digit 5 or higher.

Minor in Mathematics

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 20.

An accumulative grade point average of at least 2.0 in these courses must be maintained, and successful completion of the following courses: MS 152; MS 153; MS 290; CS 160; plus two additional MS courses with second digit 5 or greater.

Bachelor of Science in Computer Science

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 44.

The program in computer science offers a background in digital computing together with special courses designed to prepare the undergraduate for a career in computer programming or for further study in computer science. 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 computer science.

Computer science courses have been made available to visually handicapped or legally blind students. The adapting hardware and software is not braille oriented, per se, but enlarges computer input and output to increase accessibility. Visually handicapped students interested in computer courses or majors must contact the coordinator of handicap services to verify accessibility.

A. Successful completion of the following courses:

CS	160	Structured Problem Solving - PASCAL
CS	161	Algorithms in Programming
CS	250	Introduction to Computer Systems
CS	280	Discrete Structures
CS	358	Data Structures
MS	152	Calculus A
MS	153	Calculus B
MS	362	Probability and Statistics I

B. Successful completion of four of the following courses:

CS	350	Systems Programming
CS	355	Computer Architecture
CS	360	Concepts of Higher Level Programming Language
CS	370	Topics in Computer Science
CS	374	Numerical Analysis I
CS	375	Numerical Analysis II
CS	380	Introduction to the Theory of Computing
CS	458	Advanced Data Structures
CS	469	Introduction to Compiler Construction
CS	472	Artificial Intelligence
CS	497	Independent Study in Computer Science

C. Successful completion of two mathematics courses with second digits 5 or greater, excluding MS 290.

Double Major in Mathematics and Computer Science

The minimum number of credits (exclusive of the University's Core curriculum) required for the double major: 54.

Each student must have an accumulative grade point average of at least 2.0 in the major courses before being considered for a baccalaureate degree.

A. Successful completion of the following courses:

MS	152	Calculus A
MS	153	Calculus B
MS	252	Calculus C
CS	160	Structured Problem Solving - PASCAL
CS	161	Algorithms in Programming
CS	250	Introduction to Computer Systems
CS	358	Data Structures
MS	290	Foundations of Mathematics

OR

CS	280	Discrete Structures (but not both)
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B. Successful completion of one course from each of the following areas:

1) Algebra

MS	380	Linear Algebra
MS	382	Abstract Algebra

2) Analysis

MS	352	Real Analysis
MS	354	Topics in Advanced Calculus
MS	355	Complex Analysis
MS	490	Topology

3) Applied Mathematics

MS	350	Differential Equations
MS	362	Probability and Statistics I
MS	364	Numerical Analysis I
MS	366	Linear Programming
MS	460	Mathematical Modeling
MS	461	Introduction to Operations Research

4) Geometry

MS	370	College Geometry
MS	371	Projective Geometry
MS	372	Non-Euclidean Geometry

C. Successful completion of three of the following computer science courses, to include at least one 400 level course:

CS	350	Systems Programming
CS	355	Computer Architecture
CS	360	Concepts of Higher Level Programming Language
CS	370	Topics in Computer Science
CS	374	Numerical Analysis (not to be taken in addition to MS 364)
CS	450	Operating Systems
CS	458	Advanced Data Structures
CS	469	Introduction to Compiler Construction
CS	472	Artificial Intelligence

D. Successful completion of six additional hours of electives in mathematics or computer science with second digit 5 or greater.

Minor in Computer Science

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

A minor in computer science may be obtained by successfully completing the courses listed below with an accumulative grade point average of 2.0 in these courses: CS 160; CS 161; CS 250; CS 280; and two additional CS courses with first digit 2 or greater.

Computer Science and Mathematics for Education Majors

The Department of Mathematics and Computer Science, in cooperation with the College of Education offers an area major of 51 hours of mathematics and computer science courses for students majoring in secondary education; the program consists of the following courses.

I. Successful completion of the following:

MS	152	Calculus A
MS	153	Calculus B
MS	252	Calculus C
MS	290	Foundations of Mathematics

OR

CS	280	Discrete Structures
CS	160	Structured Problem Solving

II. Successful completion of one course from each of the following areas:

Algebra

MS	380	Linear Algebra
MS	382	Abstract Algebra

Analysis

MS	352	Real Analysis I
MS	354	Topics in Advanced Calculus
MS	355	Complex Analysis
MS	490	Topology

Applied Mathematics

MS	350	Differential Equations
MS	362	Probability and Statistics I
MS	364	Numerical Analysis I

Geometry

MS	370	College Geometry
MS	371	Projective Geometry
MS	372	Non-Euclidean Geometry

III. Successful completion of five of the following computer science courses:

CS	161	Algorithms in Programming
CS	250	Introduction to Computer Systems
CS	350	Systems Programming
CS	355	Computer Architecture
CS	358	Data Structures
CS	360	Concepts of Higher Level Programming Languages
CS	370	Topics in Computer Science
CS	374	Numerical Analysis I (not to be taken in addition to MS 364)

IV. Successful completion of six additional hours of electives in mathematics or computer science with second digit 5 or greater.

V. The following professional education courses:

EDU	100	Exploring Teaching as a Profession
EDU	200	Foundations of Education
HRD	333	Human Growth and Development
MSED	345	Teaching Mathematics in the Secondary School
EDU	324	Student Teaching

Electives

To be eligible for student teaching in secondary mathematics, a student must have completed 30 hours of mathematics courses having second digit 5 or greater with a grade point average of at least 2.0 in these courses and have successfully completed MSED 345.

It is also recommended that CSED 345 Teaching Computer Science in the Secondary School be taken as an elective in the completion of the overall 120 credits required for graduation.

A *minor in computer science* may be obtained by successfully completing 21 hours of the following computer science courses: CS 160; CS 161; CS 280; CSED 345; and two courses from the following: CS 250; CS 350; CS 358; CS 374, or CS 370.

A *minor in mathematics* may be obtained by successfully completing 18 hours of mathematics courses in which the second digit is 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 MS 104. 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: MS 109; MS 110 (or MS 152 and MS 153 for greater depth in calculus); CS 100 (or CS 140 for greater depth in computer programming); or MS 120 (or MS 211 and MS 212 for greater depth in probability and statistics).

CS 100 Introduction to Computer Science
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.

CS 140 Programming in FORTRAN
A study of programming techniques and applications using FORTRAN. Prerequisite: Two years of high school algebra or equivalent. Cr 3.

CS 160 Structured Problem Solving: PASCAL
A study of problem-solving techniques and applications using PASCAL. This course is primarily for students with a computer science major or minor or a strong serious interest in computer science. Prerequisite: two years of high school algebra or equivalent. Cr 3.

CS 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. Prerequisite: CS 160 (PASCAL). Cr 3.

CS 230 Programming in COBOL
A study of the programming language used primarily in business. Prerequisite: CS 140 or CS 160. Cr 3.

CS 234 Computer Programming for Elementary Teachers
The course introduces the Elementary Education major to programming techniques and applications using the BASIC language. No programming skills will be assumed. Prerequisite: MS 131. Cr 3.

CS 240 Programming in PL/1
A continuation of the study of programming principles through study of the PL/1 language. Prerequisite: CS 140 or CS 160. Cr 3.

CS 250 Introduction to Computer Systems
An introduction to the structure and organization of digital computers and the use of assembly language programming systems. Prerequisite: CS 161. Cr 3.

CS 280 Discrete Structures
Concepts of modern algebra, set theory, Boolean algebra, elements of graph theory, and

their application to computer science. Prerequisite: CS 161. Cr 3.

CS 350 Systems Programming
An introduction to certain basic software components and hardware features of a computer system. Topics include assembly language macros and macro processors; assemblers, including related table management techniques; loaders; input/output handling, interrupt systems. Prerequisite: CS 250. Cr 3.

CS 355 Computer Architecture
Fundamentals of the design and organization of digital computers. Topics include applications of Boolean algebra to logical design; machine algorithms used in addition, subtraction, multiplication, etc.; types of memory; synchronous and asynchronous operation; minimization of logic circuits. Also, concepts from microprocessors and large parallel computers. Prerequisites: CS 280 or MS 290 and CS 250. Not given every year. Cr 3.

CS 358 Data Structures
Basic concepts of data, strings, stacks, arrays, and lists. Representations of trees and graphs. Storage systems and structures, searching and sorting techniques. Multi-linked structures. Prerequisite: CS 250 and CS 280. Cr 3.

CS 360 Concepts of Higher Level Programming Languages
An examination of basic concepts and special facilities in higher-level programming languages via the consideration of several representative languages. Emphasis on scope of declarations, storage allocation, data structure variety, binding time of constituents, and control organization. Introduction to the formal definition of programming languages. Prerequisite: CS 358. Cr 3.

CS 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: CS 250 or permission of the instructor. Cr 3.

CS 374 Numerical Analysis I
A study of the theory and application of computational algorithms for interpolation, equation solving, matrix methods, integration; error analysis. Prerequisites: MS 252, CS 160, and permission of instructor. Cr 3.

CS 375 Numerical Analysis II

(continuation of CS 374)

Ordinary differential equations, boundary value problems, interpolation and approximation, error analysis, large scale linear systems. Prerequisite: CS 374. Cr 3.

CS 380 Introduction to Theory of Computing

Introduction to the basic concepts of finite automata and Turing machines; finite state acceptors and regular sets; linear sequential circuits, complexity results for finite networks, elementary notions of recursive and recursively enumerable sets. Prerequisite: CS 280 or MS 290. Cr 3.

CS 450 Operating Systems

Computer resource management. Topics include an in-depth study of concurrent cooperating processes; virtual systems; segmentation and paging; I/O device handling; protection and security; deadlock; race conditions. Prerequisites: CS 350, CS 358. Cr 3.

CS 458 Advanced Data Structures

(continuation of CS 358)

Internal tables, external sorting, file organization, data base management systems and designs. Prerequisite: CS 358. Cr 3.

CS 469 Introduction to Compiler Construction

Definition of a language, context free grammars, rigorous definition of a typical small language in BNF, design and implementation of a compiler for programs within this language. Prerequisite: CS 358. Cr 3.

CS 472 Artificial Intelligence

An introduction to the underlying concepts and applications of intelligent systems. Topics include computer representations of knowledge; heuristic search techniques and computer problem solving; learning; game

playing; automatic theorem proving; pattern recognition; natural language question-answering. Prerequisites: CS 280, CS 358. Cr 3.

CS 497 Independent Study in Computer Science

An opportunity for juniors and seniors who have demonstrated critical and analytical capability to pursue a project independently, charting a course and exploring an area of interest within their major field. Prerequisites: junior or senior standing and permission of the department chairman and instructor. Cr 1-3.

CSED 345 Teaching Computer Science in the Secondary School

Critical study of programs and techniques for teaching secondary school courses in computer literacy, computer organization, and computer programming. Prerequisite: junior or senior standing. Cr 3.

CSCE 200-201, 300-301, 400-401 Cooperative Education in Computer Science

The student has the opportunity to relate academic knowledge to practical experience in a job situation. The University makes arrangements with certain institutions, businesses and industries to employ qualified students for specific jobs for a set time period. Students already employed may qualify. The student's work is ordinarily in a related field, and the work experiences increase in difficulty and responsibility as the student progresses through the sequence of courses. The experiences are approved on a case-by-case basis by the department. Evaluation is done with the employer and a faculty supervisor. Prerequisite: open to qualified students, subject to availability of suitable jobs. Cr 3.

Mathematics

It is expected that students will possess and be able to operate a calculator with memory and with at least the operations $+$, $-$, \times , \div , and $\sqrt{\quad}$ if they enroll in MS 120, MS 211, MS 362, or MS 363.

*Note that MS 010 and MS 011 carry credit only toward the associate degree.

MS 010 Elementary Algebra

The first course of a two-course sequence designed for students who are deficient in high school algebra. Topics covered include number systems, functions, graphs, the solution of equations, and the solution of prob-

lems with a business orientation. No prerequisites. Cr 3.*

MS 011 Intermediate Algebra

A continuation of MS 010. Prerequisite: MS 010 or one year of high school algebra. Cr 3.*

MS 100 College Algebra

The real number system, algebraic operations, sets, equations, inequalities and their graphs, functions and relations, quadratic functions, exponential and logarithmic functions, theory of equations, systems of equations, permutations, combinations, probability, sequences and series, matrices and

determinants, and mathematical induction. Prerequisite: two years high school algebra. Cr 3.

MS 101 Trigonometry

Functions of an acute angle, reference angles, graphs of trigonometric functions, identities and fundamental relations, trigonometric equations and inequalities, functions of the sum or difference of two angles, functions of a double angle, inverse trigonometric functions, trigonometry of a triangle, polar form of complex numbers. Prerequisite: two years of high school algebra. Cr 3.

MS 102 Basic Technical Mathematics I

This course, beginning with a review of basic algebra, includes the real number system, metric and British systems of measurements, geometry, and a study of functions. Topics are related to technical applications. Prerequisite: two years high school algebra and one year of geometry. Cr 3.

MS 103 Basic Technical Mathematics II

A continuation of MS 102 to include topics from geometry, determinants and matrices, analytic geometry, trigonometry and vector and polar coordinates. Topics are related to technical applications. Prerequisite: MS 102 or permission of the instructor. Cr 3.

MS 104 Topics in Mathematics

A general course designed for students not majoring in mathematics or computer science. The emphasis will be on the basic concepts encountered in mathematics as well as the applications of mathematics. The topics presented may be interdisciplinary in nature. A student may enroll twice, with the instructor's permission, for an additional three hours of credit not to exceed a total of six credit hours for the course. Prerequisites: two years of high school algebra and one year of geometry. Cr 3.

MS 109 Linear Systems

An introduction to vectors, matrices, and linear systems of algebraic equations and linear programming. Prerequisites: two years of high school algebra and one year of geometry. Cr 3.

MS 110 Elementary Mathematical Analysis

A unified treatment of the elementary functions of analysis; their analytical properties including derivatives, integrals, and series; introduction to multivariate calculus; applications. Prerequisites: two years of high school algebra and one year of geometry, and a passing grade on an algebra competency

test which will be administered at the first class meeting. Cr 3.

MS 120 Introduction to Statistics

An introductory course including basic probability, random variables, and their distributions; estimation and hypothesis testing; regression and correlation. Prerequisite: two years of high school algebra. Cr 3.

MS 131 Number Systems for Elementary Teachers

This is the first course in a three-course sequence in mathematics recommended by the Committee on the Undergraduate Mathematics Program of the Mathematical Association of America for prospective primary and elementary teachers. Major emphasis is placed on an intuitive approach to the real number system and its subsystems. Prerequisites: two years of high school algebra and one year of geometry. Cr 3.

MS 140 Pre-Calculus Mathematics

A brief review of elementary algebra followed by a study of the algebraic, exponential, logarithmic, and trigonometric functions. Prerequisites: two years of high school algebra and one year of geometry, and a passing grade on an algebra competency test which will be administered at the first class meeting. Cr 3.

MS 152 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. Prerequisites: two years of high school algebra plus geometry and trigonometry, or MS 140. Cr 4.

MS 153 Calculus B

A continuation of Calculus A. Calculus B will usually include infinite series and an introduction to vectors. Prerequisite: MS 140. Cr 4.

MS 211 Probability

Discrete and continuous sample spaces; common probability laws; expected values; sampling distributions. Prerequisites: MS 110 or MS 152. Cr 3.

MS 212 Statistics

Sampling distributions; estimation; hypothesis testing; introduction to regression analysis and analysis of variance. Applications primarily in business and economics. Prerequisite: MS 211. Cr 3.

MS 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: MS 131. Cr 3.

MS 232 Geometry for Elementary Teachers

The third course in a three-course sequence in mathematics recommended by the Committee on the Undergraduate Mathematics Program of the Mathematical Association of America for prospective primary and elementary teachers. Emphasis is upon constructions, congruence, parallelism, and similarity. Direct and indirect methods of proof are studied but the main approach is intuitive. Prerequisite: MS 131. Cr 3.

MS 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: MS 131. Cr 3.

MS 235 History of Mathematics for Elementary Teachers

A history of certain topics in number theory, geometry, and elementary algebra. Prerequisite: MS 131. Cr 3.

MS 252 Calculus C

Multivariate calculus and vector calculus. Prerequisite: MS 153. Cr 4.

MS 290 Foundations of Mathematics

Selected topics in set theory, symbolic logic, and methods of proofs needed in more advanced mathematics courses. Prerequisite: consent of the department. Cr 3.

MS 291 The Real Numbers

An axiomatic construction of the real number system. Prerequisite: CS 280 or MS 290 or permission of instructor. Cr 3.

MS 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: CS 280 or MS 290. Cr 3.

MS 350 Differential Equations

A study of various methods for solving ordi-

nary differential equations and initial value problems including transform, numerical, and series methods. Prerequisite: MS 252. Cr 3.

MS 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: MS 252, and CS 280 or MS 290. Cr 3.

MS 353 Real Analysis II

A continuation of Real Analysis I. Prerequisite: MS 352. Cr 3.

MS 354 Topics in Advanced Calculus

Selected topics on multivariate functions, vectors transformations, line integrals, and surface integrals. Prerequisites: MS 252, and CS 280 or MS 290. Cr 3.

MS 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: MS 252 or permission of instructor. Cr 3.

MS 362 Probability and Statistics I

Probability laws, random variables and distributions, estimation and hypothesis testing, regression, correlation, analysis of variance. Emphasis on applications. Prerequisite: MS 153. Cr 3.

MS 363 Probability and Statistics II

An analysis of some of the methods used in MS 362. Topics include moment generating functions. Functions of random variables, limit theorems, principles of estimation and hypothesis testing. Additional topics in regression and non-parametric methods. Prerequisites: MS 362 and MS 252. Cr 3.

MS 364 Numerical Analysis I

A study of the theory and application of computational algorithms for interpolation, equation solving, matrix methods, integration; error analysis. Prerequisites: MS 252, CS 160, and permission of instructor. Cr 3.

MS 365 Numerical Analysis II

(continuation of MS 364)
Ordinary differential equations, boundary value problems, interpolation and approximation, error analysis, large scale linear systems. Prerequisite: MS 364. Cr 3.

MS 366 Linear Programming

A study of matrix algebra applied to the problem of optimizing a linear function subject to linear inequality constraints, utilizing

the simplex procedure. Prerequisite: CS 280 or MS 290. Cr 3.

MS 370 College Geometry
Selected topics from Euclidean geometry. Prerequisite: CS 280 or MS 290. Cr 3.

MS 371 Projective Geometry
Synthetic and analytic projective geometry, including finite projective planes. Prerequisite: CS 280 or MS 290. Cr 3.

MS 372 Non-Euclidean Geometry
A development of one or more of the non-Euclidean geometries. Prerequisite: CS 280 or MS 290. Cr 3.

MS 380 Linear Algebra
An introduction to the theory of vector spaces and linear transformations. Prerequisite: CS 280 or MS 290. Cr 3.

MS 382 Abstract Algebra
Algebraic structures, such as groups, rings, integral domains, and fields. Prerequisite: CS 280 or MS 290. Cr 3.

MS 390 History of Mathematics
The development of mathematics from ancient to modern times. Prerequisites: MS 152 and CS 280 or MS 290. Cr 3.

MS 431 Selected Topics in Mathematics for Elementary Teachers
A course designed to provide enrichment topics for the elementary teacher. The course will include such topics as number theory, motion geometry, topology, projective geometry, graphs, and sets and logic. Prerequisites: junior Elementary Education major and permission of the instructor. Cr 3.

MS 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.

MS 450 Partial Differential Equations
An introduction to the general properties of partial differential equations followed by solutions of specific equations. The techniques include eigenfunction, expansions, operational methods, and conformal mapping. Prerequisite: MS 350. Cr 3.

MS 460 Mathematical Modeling
An introduction to the process of formulating problems in mathematical terms, solving the resulting mathematical model and interpreting the results and evaluating the solutions.

Examples will be chosen from the behavioral, biological, and physical sciences. This course and MS 461 complement each other. Prerequisites: junior or senior standing, some elementary calculus including differentiation and integration, elementary probability, and some computer programming experience. Cr 3.

MS 461 An Introduction to Operations Research
A study of some of the problem structures facing the decision maker in management and the social sciences and the methodologies used in reaching optimal solutions. Typical topics might be from among; allocation, scheduling, inventory, optimization, conflict resolution, game theory, waiting lines, decisions under uncertainty, simulation. This course and MS 460 complement each other. Prerequisites: junior or senior standing, some elementary calculus including differentiation and integration, elementary probability, and some computer programming experience. Cr 3.

MS 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: MS 252 and CS 280 or MS 290. Cr 3.

MS 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, and social sciences. Prerequisite: CS 280 or MS 290. Cr 3.

MS 497 Independent Study in Mathematics
An opportunity for juniors and seniors who have demonstrated critical and analytical capability to pursue a project independently, charting a course and exploring an area of interest within their major field. Prerequisites: junior or senior standing, permission of the instructor and permission of the department chairman. Cr 1-3.

MS 498 Topics
Selected topics in advanced mathematics. Prerequisite: permission of instructor. Cr 3.

MSCE 200-201, 300-301, 400-401 Cooperative Education in Mathematics
The student has the opportunity to relate academic knowledge to practical experience in a job situation. The University makes arrangements with certain institutions, busi-

nesses, and industries to employ qualified students for specific jobs for a set time period. The student's work is ordinarily in a related field, and the work experiences increase in difficulty and responsibility as the student progresses through the sequence of

courses. The experiences are approved on a case-by-case basis by the department. Evaluation is done with the employer and a faculty supervisor. Prerequisite: open to qualified students, subject to availability of suitable jobs. Cr 1-5.

Mathematics Education

MSED 345 Teaching Mathematics in the Secondary School

Critical study of programs and techniques for teaching and learning mathematics in grades

7-12 for the slow, average and advanced pupil, with the use of instructional media. Prerequisite: junior or senior standing. Cr 3.

Music

Chair of the Department: Jerry L. Bowder, 100 Corthell Hall, Gorham
Professor Bowder; *Associate Professor* Cole; *Assistant Professors:* Martin, Maxwell, Russell, Boden; *Lecturers:* Freeman, Jones; *Portland String Quartet in residence:* Kecskemethy, Lantz, Adams, Ross.

Applied Music Faculty *Piano:* Naydene Bowder, Thomas Bucci, Ronald Cole, Ocy Downs, Robert Glover, David Maxwell, Richard Roberts; *Voice:* Linda Freeman, Rhonda Martin, Robert Russell, Stewart Shuster; *Organ:* David Maxwell; *Violin:* Deidre Clark, Stephen Kecskemethy, Ronald Lantz; *Viola:* Julia Adams; *Cello:* Katherine Graffam, Paul Ross; *Bass:* Katherine Graffam; *Flute:* Frances Drinker, Rhonda Martin; *Oboe:* Neil Boyer; *Clarinet:* Robert Carabia, Eugene Jones; *Saxophone:* Bill Street; *Bassoon:* Ardith Freeman; *Trumpet:* Bruce Hall, John Schnell; *French Horn:* John Boden, Nina Allen Hangen; *Trombone:* James Bennett, Peter Sexauer; *Euphonium:* David Winer; *Tuba:* David Winer; *Percussion:* Henry Dempsey; *Harp:* Deidre Carr; *Classical Guitar:* Christopher Kane, Michael Katz

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 science in music education), in arts and sciences (bachelor of arts in music), or in music (bachelor of music in performance). In addition, minors in music are offered for students majoring in elementary education and in the College of Arts and Sciences. A master of science in education with a music concentration is available through the College of Education Graduate Division.

Music Fees

An applied music fee of \$48.00 per semester for hour lessons, or \$24.00 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 \$96.00 for half-hour lessons and \$192.00 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 profi-

ciency. The student will pay \$48.00 per semester for hour lessons and \$24.00 per semester for half-hour lessons in addition to the University tuition fee.

Students other than music majors or minors will be accommodated for applied music lessons if a teacher's time is available, but will be subject to a fee of \$92.00 for half-hour lessons or \$192.00 for hour lessons in addition to the University tuition fee.

Students registering for applied music must report to the chair of the Department for assignment to an applied music teacher and scheduling of lessons. All fees must be paid before lessons commence.

Admission Requirements

Admission to degree programs in music, major and minor, will be based on the following criteria: a) the applicant's high school record, including recommendations, and SAT achievement scores; b) an audition, which includes performance on the applicant's major instrument, and tests in aural comprehension, rhythmic recitation, and sight singing which are administered to each applicant individually by a member of the staff; and c) a written standardized musical achievement test.

Students who desire to apply for advanced standing in music curricula should apply to the chair of the Department for a special examination.

Department Standards

Each student enrolled in the performance and music education degree programs will play a jury exam on his or her major instrument at the end of each academic year. The jury panel will determine a level of performance and submit a written evaluation which will be included in the student's file. Students are required to perform at the appropriate level of competence as established by the music faculty.

Each student must earn grades of C or better in all courses which count toward fulfillment of major requirements. D and F grades do not fulfill prerequisite requirements. However, an exception will be made for the following sequence courses: Theory I, II, III, IV; Solfeggio I, II, III, IV; Basic Conducting; Instrumental Conducting; and Vocal Conducting. In these courses a grade of D will allow the student to progress to the next semester in the sequence. If a grade of C or better is earned in this next semester, the preceding semester need not be repeated. If a grade of D or F is earned in this next semester, both semesters must be satisfactorily repeated in proper sequence. No course may be repeated more than once.

Each student must attain a 2.25 minimum grade point average before being admitted to junior and 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.

Programs and Requirements

Bachelor of Science in Music Education

The minimum number of credits (exclusive of the University's Core curriculum) required for the major, instrumental emphasis: 94.5; vocal emphasis: 87.5; or general emphasis: 95.5.

All students are reminded that, in addition to meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's Core curriculum requirements and the College of Education's physical education requirements.

All music education majors are required to take the following 18 hours of professional education courses: EDU 324 Student Teaching; any HRD course; and either EDU 350 Modern Philosophies of Education or EDU 200 Studies in Educational Foundations.

Additionally, all music education majors will meet the following requirements:

1. Fulfillment of minimum requirements in both voice and piano, regardless of major instrument.
2. Beginning with the first semester of enrollment, participation in at least one major instrumental and one major vocal organization each semester. Students who are unable to meet the audition requirements of either Concert Band or Chamber Orchestra will be assigned to Percussion Ensemble. Pianists will satisfy one credit of this requirement through accompaniment of singers or instrumentalists.
3. Successful completion of seven semesters of major applied lessons.
4. Successful completion of recital class in each semester when registered for major applied lessons.
5. Presentation of a solo recital in the senior year (or junior year with special permission).

Piano Proficiency Requirement Each student must successfully complete the piano proficiency requirement by the end of the third week of the semester before student teaching. The student must enroll in applied piano each semester until the requirement is met. If the piano proficiency has not been met at the end of four credits of study, the student will continue applied piano at his or her own expense.

New students who feel prepared to meet the requirement may schedule an exam during the orientation period. Thereafter, exams will be offered at the end of each semester and may be taken whenever the student and the applied music teacher feel the student is qualified.

Requirements for the exam are as follows: a) play all major and minor scales (two octaves, hands together); b) play a prepared piece of the student's choice of at least the difficulty of a sonatina by Clementi or Kuhlau; c) offer evidence of study of a representative selection of piano literature; and d) sight read a melody with chord symbols and a hymn style composition.

Voice Proficiency Requirement All students in the music education program must complete at least one year of vocal study before student teaching. They must also pass the following requirements in a vocal proficiency examination before graduation:

1. Demonstrate and explain the principles of singing, including posture, breathing, tone production, and articulation.
2. Submit a list of 12 songs, including songs in English and at least one foreign language.
3. Perform from memory six songs, at least one of which is in a foreign language.

If the proficiency is not met after four credits of study, the student will continue to study for no credit at his or her own expense until this standard is met.

Student Teaching Student teaching is the culmination of a comprehensive, preprofessional, required sequence of activities that includes the following:

Freshman year: the equivalent of two days of directed observation of music education in cooperating schools in surrounding areas, as arranged by the Music Department.

Sophomore year: the equivalent of two days of assisting classroom teachers in music, serving in a capacity similar to teacher aides.

Junior year: elementary and secondary methods courses wherein students observe, plan, and teach using actual classroom situations.

Senior year: student teaching that encompasses both elementary and secondary as well as instrumental and vocal areas.

Professional Education: Music Education Courses

Courses marked with an asterisk (*) are offered on a rotating basis. Students should work closely with their advisors in planning their courses of study in the music education program.

Music education majors must complete the following courses:

*MUED 220 Woodwind Class

- *MUED 221 Brass Class
- *MUED 222 Percussion Class
- *MUED 320 String Class
- MUED 322 Elementary General Music Methods

For instrumental emphasis, these additional courses must be completed:

- *MUED 321 String Class
- *MUED 324 Instrumental Methods
- *MUED 420 Marching Band Techniques

For vocal emphasis, the student need select only one from *MUED 220, *MUED 221, and *MUED 222. Additionally, *MUED 323 Secondary Choral Methods must be completed.

For general emphasis, these additional courses must be completed:

- *MUED 324 Instrumental Methods
- *MUED 323 Secondary Choral Methods
- *MUED 321 String Class

OR

- *MUS 355 Vocal Pedagogy

Area Specialization: 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:

- MUS 120, 121, 220, 221 History of Music
- MUS 130, 131, 230, 231 Music Theory
- MUS 132, 133, 232, 233 Solfeggio
- MUS 160, 161, 260, 262, 360, 361, 460 Applied Music
- MUS 244 Basic Conducting
- MUS 442 Recital Class (seven semesters)
- MUS 401 and 400 Ensembles (seven semesters)
- OR** 402 Ensembles (seven semesters)

The following courses apply to each specialized music education curriculum.

Instrumental emphasis

- MUS 150, 151 Voice Lessons
- *MUS 344 Instrumental Conducting
- *MUS 240, 340 Instrumental Conducting Lab
- *MUS 420 Orchestration

Vocal Emphasis

- MUS 150, 151 Voice Lessons (not additionally required of voice majors)
- *MUS 255 Guitar
- *MUS 345 Vocal Conducting
- *MUS 241, 341 Vocal Conducting Lab
- *MUS 421 Choral Arrangiug
- *MUS 355 Vocal Pedagogy

General Emphasis

- MUS 150, 151 Voice Lessons (not additionally required of voice majors)
- *MUS 255 Guitar
- *MUS 344 Instrumental Conducting

*MUS	340	Instrumental Conducting Lab
*MUS	345	Vocal Conducting
*MUS	341	Vocal Conducting Lab
Either		
*MUS	420	Orchestration
OR		
*MUS	421	Choral Arranging
Either		
*MUS	355	Vocal Pedagogy
OR		
*MUED	321	String Class

Bachelor of Arts in Music

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 aim of the program is to instill a thorough understanding of the various aspects of music and the relationship to contemporary society. 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 (*) are offered on a rotating basis. Students should work closely with their advisors in planning their courses of study in this degree program.

MUS	120, 121, 220, 221	History of Music I, II, III, IV
MUS	130, 131, 230, 231	Theory I, II, III, IV
MUS	132, 133	Solfeggio I, II
*MUS	320	Seminar in Music History
*MUS	330, 331	Form and Analysis I, II
*MUS	332	Counterpoint

Applied Music

Ensembles

Music Electives

Electives (including language proficiency, but not music electives)

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 Arts in Music Performance

This degree program is designed to provide the opportunity for a study of music to meet the needs of those who wish to prepare themselves for a career in music performance, and those who plan to do graduate work in applied music. The aim of the program is to instill a thorough understanding of the various aspects of music and the relationship to contemporary society and performance skills on the student's major instrument or voice. Sufficient flexibility is built into the program to allow the individual student to establish secondary 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: 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 degree program.

MUS	120, 121, 220, 221	History of Music I, II, III, IV
MUS	130, 131, 230, 231	Theory I, II, III, IV

MUS	132, 133, 232, 233	Solfeggio I, II, III, IV
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)
MUS	170, 171, 270, 271, 370, 371, 470, 471	Applied Music, Major Instrument
MUS	372	Pedagogy of the Major Instrument
Music Electives		
Performance Ensembles		
Electives in any college		

Diction for Singers (MUS 356) is required of voice majors only and may be taken in lieu of three credits of music electives. Voice majors must meet a minimum proficiency in two foreign languages either by exam or through completion of the second semester of the basic course in the Department of Foreign Languages and Classics.

Performance majors must have a minimum of four credit hours of their ensemble requirements in the appropriate major ensemble. A student is expected to be enrolled in the appropriate major ensemble whenever registered as a full-time student. A minimum of two credit hours must be in Chamber Music.

All performance majors are required to pass a piano proficiency examination or to complete successfully two years of piano as a minor instrument. The content of the exam is appropriate to the student's major. In addition, performance majors must complete satisfactorily a short recital in the junior year and a full recital in the senior year.

Minor in Music Education

The minor program is designed to provide an opportunity for candidates for the degree of bachelor of science in elementary education who demonstrate interest and ability to continue music studies beyond the high school level and to equip them to implement successfully in their classrooms the planned programs recommended by music supervisors.

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

MUS 100; MUS 130, 131; MUS 132, 133; MUED 322; and MUS 150, 151 comprise the minor. Additionally, students must take an elective in music history and other music electives for two credits.

Minor in Music (Bachelor of Arts)

This minor program is designed to provide an opportunity for candidates for the degree of bachelor of arts who demonstrate interest and ability to continue music studies at the graduate level.

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 20.

The minor consists of elective courses in music and ensembles. However, MUS 100, MUS 110, and all MUED courses are not acceptable for the minor.

Applied music fees, to a maximum of eight credit hours, will be subsidized by the University only when the student demonstrates adequate proficiency.

MUS 100 Music Appreciation and History
A survey of music from the Gregorian Chant to the modern times, covering musical practices of the Renaissance, Baroque, Classical, Romantic, and Contemporary periods. Representative works by the outstanding composers of each period. Open to all students. Cr 3.

MUS 102 Music of the Portland Symphony
A course designed to increase the student's understanding and appreciation of the music scheduled for the Portland Symphony Orchestra's regular concerts of the semester. Attendance is required at the concerts in addition to regularly scheduled classes. Historical background, biography of composer, musical analysis, rehearsal and performance techniques, and music criticism. Open to all students. Cr 3.

MUS 103 Introduction to Jazz
A survey of Jazz from its inception to the present day. Involves a study of the origins and stylistic development of Jazz. Open to all students. Cr 3.

MUS 110 Fundamentals of Music
A background study of concepts and skills essential to an intelligent reading of music. The development of natural music abilities through participating in singing, rhythmic activities, and instrumental work. An appreciation of music through awareness of basic structures. Open to all students. Cr 3.

MUED 200 Music for the Classroom Teacher
An activities course combining the study of music fundamentals with the teaching of music skills through sequential grade-to-grade development. This course has no prerequisites and is designed primarily for the non-music major. Cr 3.

MUS 202 Music in America
A survey of the important trends in music from colonial days to the present. Emphasis will be placed on the role of the native American composer in the development of sacred music, concert music, jazz, musical comedy, and pop music. Open to all students. Cr 3.

MUS 203 Music in the Twentieth Century
A study of trends in European and American music from the beginning of the century to the present with emphasis on the literature of the major composers. Open to all students. Cr 3.

MUS 204 Symphonic Literature
A survey of music for the symphony orchestra from the Pre-Classical period of C.P.E. Bach to the present. Open to all students. Cr 3.

MUS 205 Chamber Music Literature: Portland String Quartet
A historical survey of the literature for chamber ensembles from the Classical period to the present. Recorded and live performances will be studied in class. Open to all students. Cr 3.

MUS 211 Class Piano
Practical class piano for the elementary teacher with little or no piano background. Course covers note reading, scales, accompaniment of simple songs, transposition and sight reading. Open to all students. Cr 2.

MUS 334 Electronic Music I
Lectures, discussions and exercises in sound generation and processing, with emphasis on voltage-controlled systems. The student's time will be divided between class sessions and actual work in the electronic studio. Open to all students. Cr 3.

Music Performance Groups
Major Ensembles

MUS 400 Chamber Orchestra Cr 0.5.

MUS 401 The University Chorale
A choral group of a hundred students from all departments; specializes in larger choral works with orchestral accompaniment; several campus performances and occasional tours. Cr 0.5.

MUS 402 University Concert Band
A wind and percussion ensemble open to all University students through audition. The ensemble focuses on the fundamentals of

ensemble performance dealing with a variety of literature. The University Concert Band performs at least one major concert per semester and is active in presenting school assembly programs. Cr 0.5.

MUS 405 The Chamber Singers
A select group of twenty-five singers specializing in music from the Renaissance to the Contemporary. Extensive touring throughout the state. Cr 0.5.

MUS 408 Wind Ensemble Cr 0.5.

MUS 403 Percussion Ensemble

A percussion ensemble open to all University students through audition. Cr 0.5.

MUS 404 Contemporary Singers

A ensemble of singers that specializes in twentieth-century music, with an emphasis on music of the last decade. Open to all University students through audition. Cr 0.5.

MUS 406 Chamber Music

A performance course open to all qualified students interested in forming chamber groups - duets, trios, quartets, quintets, etc., under faculty supervision. Cr 0.5.

MUS 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.

Courses for Majors

Music History and Theory

MUS 120 History of Music I

Medieval and Renaissance periods: historical development and music practices from the Gregorian Chant and early polyphony through the culmination of the madrigal in England. Musical examples of outstanding composers are played, analyzed, and discussed. Music majors only or permission of the instructor. Cr 3.

MUS 121 History of Music II

Baroque period; continuation of MUS 120, from the establishment of opera in Italy and the rise of instrumental music, to the culmination of polyphony in the works of J.S. Bach.

Music Majors only or permission of the instructor. Cr 3.

MUS 130 Music Theory I

Major and minor scales; intervals, triads, and chord connections; cadences; harmonization of soprano and bass lines utilizing primary triads.

Music Majors only or permission of the department. Cr 3.

MUS 131 Music Theory II

Triads in first and second inversion; modulation; non-harmonic tones (passing, auxiliary, appoggiature, suspension, and anticipation); dominant seventh chord (root position inversion, regular and irregular resolutions). Prerequisite: MUS 130. Cr 3.

MUS 132 Solfeggio I

A course in sight singing and ear training. Music majors and minors only. Cr 1.

MUS 133 Solfeggio II

A continuation of MUS 132. Prerequisite: MUS 132. Cr 1.

MUS 220 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. Representative of outstanding composers are played, analyzed, and discussed. Music majors only or permission of the instructor. Cr 3.

MUS 221 History of Music IV

Contemporary period; continuation of MUS 220, from Impressionism to recent tendencies. Melodic, harmonic, rhythmic, and structural features of twentieth century American and European music and their relationship to tradition.

Music majors only or permission of the instructor. Cr 3.

MUS 230 Music Theory III

Diatonic seventh chords; modulation; expansion of nonharmonic tones; altered chords; Neapolitan sixth; augmented sixth chords; chromatic alterations; chorales and their harmonizations; composition in simple forms of the 18th and the 19th centuries. Prerequisite: MUS 131. Cr 3.

MUS 231 Music Theory IV

Contemporary techniques of composition; 20th century harmony, theory, and related studies. Prerequisite: MUS 230. Cr 3.

MUS 232 Solfeggio III

An advanced course in sight singing and ear training.

Prerequisite: MUS 133. Cr 1.

MUS 233 Solfeggio 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.

Prerequisites: 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: Theory II. 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: Theory II. Cr 2.

MUS 332 Counterpoint

Tonal counterpoint. The process of invention and fugue as exemplified in the music of the Baroque Era. Prerequisite: Theory III. 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 421 Choral Arranging

A course designed to prepare students to arrange vocal music for a variety of combinations of voices in a variety of musical styles. Prerequisite: MUS 231. Cr 2.

MUS 498 Independent Study in Music

To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest within their major field. Music majors only. Departmental permission required. Cr1-3.

Music Performance

MUS 150 Applied Music for Freshmen I

May be taken in piano, voice, organ, guitar or any orchestra or band instrument. One half-hour lesson per week in the minor performance area (1 credit) in fulfillment of applied music requirements. Restricted to freshmen. Cr 1.

MUS 151 Applied Music for Freshmen II

A continuation of MUS 150. Cr 1.

MUS 160 Applied Music for Freshmen I

May be taken in piano, voice, organ, guitar or any orchestra or band instrument. A one-hour lesson per week in the major performance area (2 credits) in fulfillment of applied music requirements. Restricted to freshmen. Cr 2.

MUS 161 Applied Music for Freshmen II

A continuation of MUS 160. Cr 2.

MUS 170 Applied Music for Freshmen I

May be taken in piano, voice, organ, guitar or any orchestra or band instrument. A one-hour lesson per week in the major area, with three hours' practice daily, would grant 3 credits for the Performance major. Restricted to freshmen. Cr 3.

MUS 171 Applied Music for Freshmen II

A continuation of MUS 170. Cr 3.

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 Vocal Conducting Lab for Sophomores

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 244 Basic Conducting

Practical conducting experiences; score reading, basic beat patterns, gestures and interpretation. Prerequisite: MUS 230. Cr 2.

MUS 250 Applied Music for Sophomores I

May be taken in piano, voice, organ, guitar or any orchestra or band instrument. One half-hour lesson per week in the minor performance area (1 credit) in fulfillment of applied music requirements. Restricted to sophomores. Cr 1.

MUS 251 Applied Music for Sophomores II

A continuation of MUS 250. Cr 1.

MUS 255 Guitar

An introduction to basic guitar skills. Emphasis is placed upon those skills which

lead to playing effective accompaniments. Cr 1.

MUS 260 Applied Music for Sophomores I
May be taken in piano, voice, organ, guitar or any orchestra or band instrument. A one-hour lesson per week in the major performance area (2 credits) in fulfillment of applied music requirements. Restricted to sophomores. Cr 2.

MUS 261 Applied Music for Sophomores II
A continuation of MUS 260. Cr 2.

MUS 270 Applied Music for Sophomores I
May be taken in piano, voice, organ, guitar or any orchestra or band instrument. A one-hour lesson per week, with three hours' practice daily, would grant 3 credits for the Performance major. Restricted to sophomores. Cr 3.

MUS 271 Applied Music for Sophomores II
A continuation of MUS 270. 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 Vocal 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 Vocal Conducting
Organization, training, and directing of choruses and glee clubs in high schools and junior high schools. Study and practice in rehearsal techniques, problems of diction, and emphasis on repertoire and musical style. Prerequisite: MUS 244. Cr 2.

MUS 350 Applied Music for Juniors I
May be taken in piano, voice, organ, guitar or any orchestra or band instrument. One half-hour lesson per week in the minor performing area (1 credit) in fulfillment of

applied music requirements. Restricted to juniors. Cr 1.

MUS 351 Applied Music for Juniors II
A continuation of MUS 350. Cr 1.

MUS 355 Vocal Pedagogy
A study of basic principles of vocal production--breathing, phonation, registration, and resonance--and a discussion of the techniques used to teach voice. Cr 1.

MUS 360 Applied Music for Juniors I
May be taken in piano, voice, organ, guitar or any orchestra or band instrument. A one-hour lesson per week in the major performing area (2 credits) in fulfillment of applied music requirements. Restricted to juniors. Cr 2.

MUS 361 Applied Music for Juniors II
A continuation of MUS 360. Cr 1.

MUS 370 Applied Music for Juniors I
May be taken in piano, voice, organ, guitar or any orchestra or band instrument. A one-hour lesson per week, with three hours' practice daily, would grant 3 credits for the Performance major. Restricted to juniors. Cr 2.

MUS 371 Applied Music for Juniors II
A continuation of MUS 370. Cr 3.

MUS 372 Pedagogy of the Major Instrument
A study of the teaching methods and materials for voice or instruments. Except for piano and voice, which are offered in class sessions when the number of registrants warrants it, this will be scheduled as additional applied music time with an instrumental specialist. Normally the piano and voice sessions will be offered in alternate years. For performance majors. Other music majors only with permission of the department. Cr 2.

MUS 360 Applied Music for Juniors I
May be taken in piano, voice, organ, guitar or any orchestra or band instrument. A one-hour lesson per week in the major performing area (2 credits) in fulfillment of applied music requirements. Restricted to juniors. Cr 2.

MUS 361 Applied Music for Juniors II
A continuation of MUS 360. Cr 1.

MUS 370 Applied Music for Juniors I
May be taken in piano, voice, organ, guitar or any orchestra or band instrument. A one-hour lesson per week, with three hours' practice daily, would grant 3 credits for the Performance major. Restricted to juniors. Cr 2.

MUS 371 Applied Music for Juniors II
A continuation of MUS 370. Cr 3.

MUS 372 Pedagogy of the Major Instrument
A study of the teaching methods and materials for voice or instruments. Except for piano and voice, which are offered in class sessions when the number of registrants warrants it, this will be scheduled as additional applied music time with an instrumental specialist. Normally the piano and voice sessions will be offered in alternate years. For performance majors. Other music majors only with permission of the department. Cr 2.

MUS 442 Recital Class
Performance in major field, stage deportment, and evaluation of performances. May be repeated for credit. Cr 0.5.

MUS 450 Applied Music for Seniors I
May be taken in piano, voice, organ, guitar or any orchestra or band instrument. One half-hour lesson per week in the minor performing area (1 credit) in fulfillment of applied music requirements. Restricted to seniors. Cr 1.

MUS 451 Applied Music for Seniors II
A continuation of either MUS 450 or MUS 351. Cr 1.

MUS 452 Accompanying
A workshop course in applied accompanying under faculty supervision. One-half credit is awarded for each twenty hours of University-supervised accompanying, with a maximum of two credits in any academic year. Cr 0.5-2.

MUS 460 Applied Music for Seniors I
May be taken in piano, voice, organ, guitar or any orchestra or band instrument. A one-hour lesson per week in the major performing area (2 credits) in fulfillment of applied music requirements. Restricted to seniors. Cr 2.

MUS 461 Applied Music for Seniors II
A continuation of either MUS 460 or MUS 361. Cr 2.

MUS 470 Applied Music for Seniors I
May be taken in piano, voice, organ, guitar or any orchestra or band instrument. A one-hour lesson per week in the major area, with three hours' practice daily, would grant 3 credits for the Performance major. Restricted to seniors. Cr 3.

MUS 471 Applied Music for Seniors II
A continuation of MUS 470. Cr 3.

Music Education

MUED 220 Woodwind Class
Methods of teaching woodwind instruments; practical experience on various woodwinds; and elements of transposition. Prerequisite: MUS 131 and 133. Cr 1.

MUED 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.

MUED 222 Percussion Class
Practical experience on and methods of teaching percussion instruments. Prerequisite MUS 131 and 133. Cr 1.

MUED 320 String Class - Violin
Class methods and materials in teaching violin. Fundamentals of violin, including bowing, tone production, intonation, and fingering techniques extended into the third position. Prerequisite: MUS 131 and 133. Cr 1.

MUED 321 String Class - Viola, Cello and Bass
String methods and materials for beginning strings. Fundamentals of viola, cello and string bass. Rudiments of fingering, bowing,

and tone production. Prerequisite: MUED 320. Cr 1.

MUED 322 Elementary General Music Methods
Study of methods and materials in present elementary school music education, including those of Kodaly and Orff. Restricted to junior and senior music majors and minors. Cr 3.

MUED 323 Secondary Choral Methods
Techniques and procedures for teaching choral music in junior and senior high schools. Restricted to juniors and senior music majors. Cr 3.

MUED 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.

MUED 420 Marching Band Techniques

The course is designed to prepare the music educator to organize and effectively teach Marching Band in the public schools. 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. Cr1.

Philosophy

Chair of the Department: Jeremiah P. Conway, 47 Exeter St., Portland

Professors: Gavin, Grange, F. Schwanaeuer; *Associate Professor:* Conway;

Assistant Professor: Louden

“Philosophy unties knots in our thinking; hence its results must be simple, but philosophizing has to be as complicated as the knots it unties.”

Ludwig Wittgenstein, *Zettel #452*

The place of philosophy at the center of any educational endeavor is as true today as it ever was. The perennial questions that philosophy addresses, such as “Who I am 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 which underlie our thinking and which ordinarily are taken for granted. Much of what is learned in philosophy can be applied in virtually any endeavor. This is both because philosophy touches upon so many subjects and, especially, because many of its methods and analyses are usable in any field. The study of philosophy is beneficial in terms of achieving the following:

General Problem-Solving Ability. The study of philosophy enhances in a way no other activity does one’s problem-solving capacities. It helps one to analyze concepts, definitions, arguments, and problems. It contributes to one’s capacity to organize ideas and issues, to deal with questions of value, and to extract what is essential from masses of information.

Communication Skills. Philosophy provides some of the basic tools of self-expression, namely: skills in presenting ideas through well-constructed, systematic arguments. One learns to build and defend one’s own views, to appreciate competing positions.

Writing Skills. Writing is an important part of most philosophy courses. Philosophy teaches interpretive writing through its examination of challenging texts, comparative writing through emphasis on fairness to alternative positions, argumentative writing through developing students’ ability to establish their own views, and descriptive writing through detailed portrayal of concrete examples: the anchors to which generalizations must be tied.

The Understanding of Other Disciplines. Many important questions about a discipline, such as the nature of its concepts and its relation to other disciplines, do not belong to that discipline, are not usually pursued within a discipline, and are philosophical in nature. Philosophy of science, for instance, is needed to supplement the understanding of the natural and social sciences which one derives from scientific work itself. Philosophy of art, social and political philosophy, the philosophy of religion are of similar value in understanding the respective fields of art, sociology, politics, and religion.

Career Applications

Philosophers know, of course, that the important question is not what you can do with a field of study but rather what a field of study does with you. Nevertheless, it has been a welcome surprise within recent years to witness how many professions — business, law, nursing, for example, want and reward many of the capacities which 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.

Programs and Requirements

Bachelor of Arts in Philosophy

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 30.

Each major in philosophy will arrange a program of courses in conference with the chair or a member of the department assigned by him. The program will be designed in terms of the student's interests, needs, vocational plans, and the year in which the student declares a major. The major will require 30 hours of courses beyond a PLY 100-level course.

All philosophy majors must take four of the following history of philosophy courses offered by the department:

PLY	310	Ancient Philosophy
PLY	320	Medieval Philosophy
PLY	330	Early Modern Philosophy
PLY	340	Late Modern Philosophy
PLY	350	American Philosophy
PLY	360	Existentialism
PLY	370	Analytic Philosophy

In the last year a senior tutorial is required. This tutorial consists of a major paper on a topic selected by the student and directed by one member of the Department. The student will meet with the mentor on a regular basis during the semester of the senior tutorial. Upon completion of the paper, an oral examination will be conducted by the full department.

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. Any introductory philosophy course is a prerequisite to all other courses in philosophy.

Minor in Philosophy

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 15.

Students who wish to pursue a minor in philosophy are required to take five courses beyond the introductory level, that is, any PLY 100 course.

These should include two courses in the history of philosophy: PLY 310; PLY 320; PLY 330; PLY 340; PLY 350; PLY 360; PLY 370.

● One course which examines the foundations of philosophical inquiry: PLY 150; PLY 200; PLY 210; PLY 270.

Two courses which relate philosophical theories to contemporary problems: PLY 211; PLY 220; PLY 230; PLY 240; PLY 250; PLY 260; PLY 275; PLY 290; PLY 291.

PLY 101 Introduction to Philosophy: Man and His Will

Is there a human will at all? This course will concentrate on the issue of freedom vs.

determinism. The importance of the human will insofar as it influences views of experience, politics, society, etc., will also be considered. Cr 3.

PLY 102 Introduction to Philosophy: The Quest for Certainty

Philosophy has often been defined as the attempt to become aware of the hidden assumptions we make in our everyday outlooks on life. The present course will deal with one of the most pervasive of these assumptions - the thesis that human beings should pursue certainty and objectivity at any price. The history of philosophy will be utilized to trace and to criticize the identification of all true knowledge with certainty. Questions will be raised as to whether the quest for certainty is either feasible or beneficial to the human person. An analysis of some 20th century alternatives, including existentialism and pragmatism, will be undertaken. Cr 3.

PLY 103 Introduction to Philosophy: Human Alienation

Why does modern man picture himself as alienated from nature and his fellow man? How did the problem of alienation come about? What possibilities exist for overcoming it? This course will deal with these issues and attempt to suggest viable alternatives. Cr 3.

PLY 104 Introduction to Philosophy: Ways of Knowing

How much can we really know? Consideration will be given to some theories of knowledge and how they may be applied to science and human relations. Classic philosophical texts will be critically examined by way of illustration. Cr 3.

PLY 105 Introduction to Philosophy: Theories of Human Nature

A study of some influential theories of human nature in Western Culture. Among issues to be studied are: the question of method; freedom and determinism; materialism and dualism; and the nature of moral values. Cr 3.

PLY 106 Introduction to Philosophy: Why Philosophize?

The course centers about the exploration of a single question: what it means to think philosophically. In the context of this question, we will examine what are the sources of philosophical thought and whether philosophy can justify its claim to be the foundation of all reflective endeavor. Cr 3.

PLY 107 Introduction to Philosophy: The Search for Identity

What is it all about? Where do I fit in? Who am I? This course will explore these and other questions of human orientation and

self-awareness as they evolve through the history of Western philosophy. Selections from representative philosophical sources will be read and discussed. Cr 3.

PLY 150 Symbolic Logic

Techniques of modern deductive logic; properties of formal systems; logical implications and paradoxes of language. Cr 3.

PLY 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 PLY 100-level course. Cr 3.

PLY 210 Ethical Theories

Critical evaluation of major ethical theories and systems. Extensive reading in original texts. Analysis of contemporary ethical issues. Prerequisite: any PLY 100-level course. Cr 3.

PLY 211 Ethics in Business

This course will be an investigation of the wide range of ethical issues confronting business. It will study these issues primarily through an examination of specific case studies of business practices. It will also present various philosophical concepts of what constitutes right conduct and will attempt to see whether these concepts can assist the businessman in resolving the ethical problems with which business is faced. Cr 3.

PLY 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 PLY 100-level course. Cr 3.

PLY 230 Philosophy of Religion

Analysis of the nature of religious experience, knowledge, and language. Special attention given to problems, classical and contemporary, exhibited in religious experience, and relevant to areas of common concern in the sciences, humanities, and philosophy. Prerequisite: any PLY 100-level course. Cr 3.

PLY 240 Political Philosophy

Critical evaluation of political philosophies, classical and contemporary; extensive reading in original texts; analysis of contemporary political issues. Prerequisite: any PLY 100-level course. Cr 3.

PLY 250 Philosophy of Science

Nature of scientific explanation; relationship among facts, laws, and theories; clarification of methods and concepts in science, such as cause, determinism, teleology, theory, law, probability. Prerequisites: any PLY 100-level course. Cr 3.

PLY 260 Philosophy of Law

This course will deal with the philosophical foundations of law in the West. We will examine in detail the various schools of law beginning with the Greek view of law, mankind, and society, move up to the modern schools of Legal Positivism, Sociological Jurisprudence, and Natural Law, and attempt to delineate the strains of these positions within the American system of law. Prerequisite: any PLY 100-level course. Cr 3.

PLY 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 PLY 100-level course. Cr 3.

PLY 275 Theories of Language

This course examines the nature of language from an interdisciplinary perspective. Philosophy, linguistics and psycholinguistics will be employed to inquire into the structure and function of language, and its relation to perception and the human mind. Prerequisite: any PLY 100-level course. This course is also offered as COM 275. Cr 3.

PLY 290 Problems of Philosophy

An examination of the development of the idea of Atheism. Great classical texts of Western culture will be used to analyze the concept of God's existence and its consequences. Plato and Aristotle, Aquinas and Spinoza, Kant and Hegel, Whitehead and the Existentialists shall be studied in order to determine the personal, ethical and cultural consequences of Atheism and Theism. Prerequisite: any PLY 100-level course. Cr 3.

PLY 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 PLY 100-level course. Cr 3.

PLY 310 History of Ancient Philosophy

Philosophic thought from the pre-Socrates to the late Hellenistic period, with major emphasis on Plato and Aristotle. Prerequisite: any PLY 100-level course. Cr 3.

PLY 320 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 PLY 100 level course. Cr 3.

PLY 330 History of Early Modern Philosophy

Main currents of rationalism and empiricism are explored, as developed in major writings from Descartes to Hume. Prerequisite: any PLY 100-level course. Cr 3.

PLY 340 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 PLY 100-level course. Cr 3.

PLY 350 American Philosophy

History and background of the origin of philosophical ideas in America; particular emphasis given to Peirce, James, Royce, Dewey. Prerequisite: any PLY 100-level course. Cr 3.

PLY 360 Existentialism

An examination of the historical development and basic themes of existentialism as found in the writings of its major representatives: Kierkegaard, Nietzsche, Heidegger, Sartre, Buber, Marcel, and others. Prerequisite: any PLY 100-level course. Cr 3.

PLY 370 Analytic Philosophy

A historical approach to twentieth century linguistic philosophy. This course will begin with logical atomism, continue through the era of logical positivism, and end with ordinary language analysis. Extensive reading of primary sources and major commentators. Cr 3.

PLY 398 Independent Study

Independent study undertaken under the mentorship of a professor in the department. Prerequisite: a minimum of two (2) 300-level philosophy courses plus written permission of the instructor involved. Cr 3.

PLY 400, 401, 402 Seminar in Philosophy

These numbers are used to indicate seminar courses dealing with a specific topic or person in philosophy. Topics or individual philosophers will change from year to year and may

or may not be repeated. The prerequisite for any 400-level seminar course is two (2) 300-level courses in philosophy, or permission of the instructor.

as a philosophy major, and permission of the department. Cr 3.

PLY 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. Prerequisite: advanced standing

PLY 410 Senior Tutorial

Designed to furnish senior philosophy majors with extensive training, under tutorial supervision, in analysis of a philosophical problem or system or philosopher, with a view to producing and presenting a senior paper for oral defense. Prerequisites: advanced standing as a philosophy major, and permission of the department. Cr 3.

Physics and Engineering

Chair of the Department: Robert A. Walking, 270 Science Building, Portland
Associate Professors: Armentrout, Walking

The engineering section of the Department of Physics and Engineering coordinates and offers a first-year basic program that is applicable to continuing studies at the University of Maine at Orono (UMO) campus leading to degrees in various engineering curricula. All USM engineering students in good standing are eligible to transfer to UMO for their second, third, and fourth years.

The physics section of the Department of Physics and Engineering provides physics and related courses for the freshman and sophomore years. Students successfully completing these years may transfer in the junior year of their program to the Orono campus and may receive the degree from UMO in either physics (College of Arts and Sciences) or engineering physics (College of Engineering and Science).

Programs and Requirements

Engineering students should normally take the following courses in the first year: CHEM 113, 114, and 115, 116 Qualitative Principles of Chemistry I and II; MS 152 and 153 Calculus A and B; PHYS 121, 122, and 123, 124 General Physics I and II; CS 140 or 160 Computer Programming in FORTRAN or PASCAL; ENG 100 College Writing or a humanities or social sciences elective; IA 231 Technical Graphics may also be taken if desired.

The following curricula are offered by the College of Engineering and Science at the University of Maine at Orono: agricultural engineering; chemical engineering; chemistry; civil engineering; electrical engineering; engineering physics; forest engineering; mechanical engineering; pulp and paper technology; surveying engineering. Reference to the UMO catalog for details is advised.

Students desiring a program in either physics or engineering physics should normally follow the program outlined above for engineering students in the first year. Planning for the second year should be done in consultation with the departmental advisor. These programs are flexible and easily tailored to meet the goals of individual students.

GEE 101 Introduction to Engineering**Design I**

Principles of graphic science with illustrative exercises in multiview drawing using free-hand and instrumental techniques; lettering styles; charts and graphs. Not offered in 1983-84. Cr 3.

GEE 102 Introduction to Engineering**Design II**

A continuation of GEE 101, which is prerequisite. Applications of graphic science with creative problems in descriptive geometry, pictorial drawing, engineering design, and mapping. Not offered in 1983-1984. Cr 3.

MEE 212 Thermal Engineering

Elementary thermodynamics, mechanical apparatus, power plant equipment; engineering calculations relative to heat, power, work, and mechanical and electrical energy. Prerequisites: physics and chemistry one year each. Cr 3.

MEE 221 Materials Science

The principles of materials science as applied to the metallurgy of ferrous and non-ferrous metals and alloys with emphasis on the relationship between structure and properties and their control through composition, mechanical working, and thermal treatment. Prerequisites: PHYS 121, CHEM 113, MEE 255, or equivalent. Cr 3.

MEE 255 Statics and Strength of Materials

The basic principles of statics and their applications to strength of materials. Equilibrium of various systems including bridge trusses. Centroids and moments of inertia. Stresses and deformations of axially and transversely loaded members, connections, pressure vessels, shafts, beams, and columns. Prerequisites: MS 153 and PHYS 121. Cr 3.

PHYS 101 Introduction to Physics

A simple approach to the study of mechanics, heat, electricity, and light, intended for the student who desires a one-semester introduction to physics. Students in the industrial arts program must register concurrently in PHYS 102. This course is not recommended for students majoring in any of the natural sciences. Prerequisite: high school algebra. Cr 3.

PHYS 102 Introduction to Physics Laboratory

Laboratory experiments and additional material designed to supplement the topics considered in PHYS 101. Prerequisite: concurrent registration in PHYS 101 or permission of the instructor. Cr 1.

PHYS 105 Acoustics and Noise

A semi-descriptive course on sound, with emphasis on applications of interest to the scientist and non-scientist alike. Discussion will cover the questions: what is sound, how is it perceived, how is it measured, what are its benefits and liabilities? Particular topics may include: the ear and hearing, sound waves, musical acoustics, building acoustics, noise and the environment, legal aspects of noise, underwater sound, biological aspects of sound, and ultrasonics. Consideration will be given to the interests of the members of the class. Three hours of lecture and demonstration. Occasional laboratory or field experience may be provided. Prerequisite: a course in high school algebra. Cr 3.

PHYS 109 Radiation: Problems and Effects

An introduction to several current topics of vital importance such as the use of nuclear fission and fusion in power generation, radioactive materials and x-rays in medical diagnosis and treatment, measurement of radiation, safety considerations, and biological effects. Intended to aid the understanding of the non-scientific citizen. Student participation and discussion will be encouraged. Lecture with demonstration and occasional student use of radiation-related equipment, and maximum use of external resources. Text: Offprints, articles, pamphlets, references, government documents. Prerequisites: None; high school physics and chemistry helpful. One two and one-half hour sessions per week. Cr 3.

PHYS 111 Elements of Physics I

An introduction to the fundamental concepts of mechanics, sound and heat. Lectures, problem solving, demonstrations, laboratory exercises and visual aids will be used to develop an understanding of physical phenomena. Prerequisites: high school algebra. Lecture three hours, lab two hours, recitation one hour. Not offered in 1983-1984. Cr 4.5.

PHYS 112 Elements of Physics II

A continuation of Physics I considering the topics: optics, electricity and modern physics. Lecture three hours, lab two hours, recitation one hour. Not offered in 1983-1984. Cr 4.5.

PHYS 121 General Physics I

An introduction to the fundamental concepts of mechanics, sound and heat, using calculus where necessary at a level appropriate to the background of the student. This course is recommended for students who plan further study in science, mathematics, or engineer-

ing. It should be taken with PHYS 122. Prerequisite: prior or concurrent registration in MS 152 or equivalent experience. Three hours of lecture and two hours of recitation per week. Cr 4.

PHYS 122 General Physics II

Experiments designed to illustrate the concepts studied in PHYS 121. Prerequisite: concurrent registration in PHYS 121 or permission of the instructor. Two hours per week. Cr 1.

PHYS 123 General Physics II

A continuation of PHYS 121, introducing the concepts of electricity, magnetism, light, and atomic physics, using calculus where necessary at a level appropriate to the background of the student. This course is recommended for students who plan further study in science, mathematics, or engineering. It should be taken with PHYS 124. Prerequisite: PHYS 121 or equivalent and one semester of calculus. Three hours of lecture and two hours of recitation per week. Cr 4.

PHYS 124 General Physics Laboratory II

Experiments designed to illustrate the concepts studied in PHYS 123. Prerequisite: concurrent registration in PHYS 123 or permission of the instructor. Two hours per week. Cr 1.

PHYS 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. Prerequisite: PHYS 123, 124, and MS 152. Cr 3.

PHYS 212 Modern Physics Laboratory

A laboratory course designed to accompany

PHYS 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 PHYS 211 is required. Cr 1.

PHYS 221 Intermediate Mechanics

An intermediate treatment of classical mechanics and wave motion. Prerequisite: PHYS 121, 122, and MS 153. Cr 3.

PHYS 222 Mechanics Laboratory

A laboratory course designed to accompany PHYS 221. The experiments will illustrate linear and rotational accelerated motion, conservation of energy and momentum, oscillations, and evaluation of the gravitational constant. Concurrent registration in PHYS 221 is required. Cr 1.

PHYS 223 Intermediate Electricity and Magnetism

An intermediate treatment of static and current electricity and magnetism, leading to Maxwell's Equations and applications thereof. Prerequisite: PHYS 123, 124, and MS 153. Cr 3.

PHYS 224 Electricity and Magnetism Laboratory

A laboratory course designed to accompany PHYS 223. The experiments will illustrate the fundamental concepts of electrostatics, circuits, instruments, and electromagnetism, and will establish the values of the fundamental constants. Concurrent registration in PHYS 223 is required. Cr 1.

PHYS 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.

Political Science

Chair of the Department: John A. Peirce, 515 Luther Bonney, Portland
Professor: Peirce; *Associate Professors:* Coogan, Fisher, Maiman, Roberts, Massaro, Woshinsky

Political science is the systematic study of politics and government and is widely recognized as one of the core disciplines within the liberal arts curriculum. The study of political science does not prepare students directly for any

specific career, but it does provide substantive and analytic background which can lead to a variety of professions. Most obviously it serves those with an interest in entering politics and government. Political science majors go on to become town managers, city planners, budget specialists, foreign service officers, policy researchers, and hold a variety of management positions in local, state, national, and international organizations. Beyond government, a political science degree leads naturally to law school or other graduate training. Many journalists and broadcasters were political science majors. Business has recognized the analytic and management skills obtained through training in political science. Indeed, some studies have estimated that perhaps one-third of undergraduate majors undertake careers in business. Political science training is also useful in other rapidly developing fields such as polling, communications, campaign management, consulting, private and public interest group activity, and data analysis. College teaching has also been a traditional career for the political scientist. Demographics now suggest that entering freshmen can look forward to good job prospects by the time they have completed their graduate educations.

Programs and Requirements

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 POL 101, 102, and 103. A grade of C minus or better is required to receive major credit in the department. Each major must select the balance of required courses from the following, taking at least one course from each of the following five areas of the department:

Judicial Process: POL 283; POL 284; POL 286; Comparative Political Systems: POL 235; POL 236; POL 237; POL 238; POL 240; POL 245; POL 259; POL 332; Political Theory: POL 289; POL 290; POL 292; International Politics: POL 104; POL 239; POL 274; POL 275; POL 387; POL 388; American Political System: POL 120; POL 201; POL 210; POL 233; POL 251; POL 252; POL 257; POL 258; POL 357; POL 358.

Upper-level political science courses *all* require either POL 101 or POL 102 or the permission of the instructor. Note that POL 101 is *not* a prerequisite for POL 102.

In special cases the requirement of POL 101 may be waived if the student successfully completes an examination administered by the Department. In rare cases the Department may also grant credit for other political science courses. Students who wish to obtain the POL 101 waiver or receive credit for other departmental courses should petition the Department through its chair.

The Political Science Department offers students an opportunity to pursue a concentration in world affairs by selecting interdisciplinary courses from a recommended list. See Dr. Peirce for details.

The Department administers an elaborate, carefully structured internship program, open to majors and non-majors alike. Political science majors are especially encouraged to take advantage of the variety of internship opportunities as part of their undergraduate program.

The Political Science Department strongly urges its majors to take courses in economics, history, sociology, and computer science. For a number of majors, courses in geography-anthropology, psychology, philosophy, and communication would also be useful. All political science majors are encouraged to undertake at least one year of university level, foreign language study. Additional language study is recommended for those majors with an interest in comparative or international politics and for those considering graduate school.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the Core curriculum requirements.

Political science courses are normally offered on the following schedule:

Every semester: POL 101, 102 and internships.

Yearly: (Fall) POL 104, 233, 283, 289. (Spring) POL 284, 290. (Either semester) POL 103, 235, 236, 237, 251, 307, 357, 358.

Approximately once every two years: POL 120, 201, 210, 238, 239, 240, 245, 252, 253, 257, 258, 259, 274, 275, 286, 292, 302, 310, 332, 387, 388.

Note: POL 307 Statistical Methods for Social Research may be applied toward the Department's 36-hour major requirement, but may not be used to satisfy the distribution requirement.

Minor in Political Science

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

Students who wish to complete a political science minor should take the following courses: POL 101 and POL 102; 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.

POL 101 Introduction to American Government

This course focuses on the political institutions, processes, behavior, and problems of government in the United States. The national government is emphasized. Key topics include: the Constitution, Supreme Court, Congress, Presidency, political parties, public opinion, and interest groups. Cr 3.

POL 102 People and Politics

This course introduces the student to modern political analysis. It centers on basic questions in the study of political behavior: how people learn about politics, what kind of political system they adopt and support, who does and who does not participate in politics, how political conflict is expressed and resolved in various societies. The course aims at familiarizing the student with major approaches or methods which political scientists have found helpful for understanding real political behavior. Note: POL 101 is not a prerequisite for POL 102. Cr 3.

POL 103 Political Science Research Methods

An introduction to the way political scientists conceive and carry out research projects. Students will learn the scientific method: how to formulate theories, gather data, and test hypotheses. They will be taught how to find political science sources in the library, how to document sources in footnotes and bibliography, and how to conduct legal research in a law library. Students will eventually complete a major research project. This course is required for all political science majors; they are strongly urged to take it during their first or second semester after entering the Department. Cr 3.

POL 104 Introduction to International Relations

Examination of the relationships of nations in their efforts to deal with each other from differing political, economic and cultural bases. Cr 3.

POL 120 Government and Politics of Maine

This course concerns Maine State Government, including legislative, executive and judicial programs and powers as exercised within the system of Maine values, political parties, and interest groups. Open to political science majors and as an elective or special interest to the student who has an interest in the programs and politics of the State of Maine. Cr 3.

POL 201 Women and Politics

An introduction to the way gender affects political behavior. Special attention will be given to the social, psychological, and legal factors which, over the years, have inhibited women from engaging in full-scale political activity. Special consideration will also be given to the way the women's movement and the ideas of feminism have encouraged growing rates of political participation by women. The course will include a thorough review of the different behavior patterns of women and men in politics. Prerequisites: POL 101, POL 102, or permission of the instructor. Cr 3.

POL 210 Power and Change in American Society: Inter-governmental Relations

This course examines attempts to bring about social and economic changes through governmental action. Functional and dysfunctional aspects of the political, economic and social systems are considered. Attempts at intervention are examined through

selected case studies in inter-governmental relations. Cr 3.

POL 233 The American City

The city in American political life; types of municipal governments; developments in inter-governmental relations; metropolitan area problems; the future of the city. Students will participate in a task force on a selected urban program. Prerequisite: POL 101 or 102. Cr 3.

POL 235 Democratic Governments of Europe

An introduction to the parliamentary system, through a study of the governmental operations and politics of Britain, France, and the Federal Republic of Germany. Other topics covered: the Common Market and prospects for European integration; relationship of democratic Europe with communist Europe. Prerequisite: POL 101 or 102. Cr 3.

POL 236 Communist Governments

This course offers a survey of existing communist social systems. The following topics will be considered: variation in political parties and state systems, the problem of nationalism, economic management, and cultural policy. Special attention will be given to a comparative survey of current communist ideology and the question of the "socialist commonwealth." Prerequisite: 101 or 102. Cr 3.

POL 237 The Politics of the Soviet Union

An introduction to the USSR: Russian and Soviet political history; Marxism-Leninism; the party and state structures; the socialist economy; the impact of the regime on the individual. Cr 3.

POL 238 Canadian Government and Politics

An introduction to political life in Canada. Primary topics to be covered in the course: Canadian political culture, voting behavior, the parliamentary system, federalism, political parties, and interest groups. The place of Quebec and French-speaking Canadians within the Canadian political system will be given special emphasis. Prerequisite: POL 101 or 102. Cr 3.

POL 239 Soviet Foreign Policy

A survey of Soviet foreign policy as a continuation of Tsarist policies and as a world movement. Major topics include: the Comintern and the Popular Front; impact of World War II; the emergence of the USSR as a superpower; and post-Stalin modifications. Case studies in contemporary foreign problems, including relations with the Communist world. Cr 3.

POL 240 The Politics of Developing Nations

An examination of the thrust towards modernization in the Third World. Economic development, relationships with the world community, the role of the military, and various theories about the nature of the relationship between the Third World and the communist and non-communist industrial worlds are considered. POL 101, 102 or 104 are recommended. Cr 3.

POL 245 British Politics

A survey of the contemporary Constitution of Great Britain. The workings of Parliament, the government, and the parties. Principal stress is on the main issues now current in British politics. Cr 3.

POL 251 Public Administration

An examination of national, state, and local bureaucracies, including their processes of decision making, communications, leadership, internal and external political relationships. A continuing question will be, "How can those institutions be made responsive to the public?" Prerequisite: POL 101. Cr 3.

POL 252 Budgets and Politics

A comparative examination of the budgetary processes of municipalities, states, and nations. The budget is the critical point at which goals intersect with resources. Students who complete the course will have a working understanding of various budgeting techniques (such as PPBS, zero-based budgeting, and incremental budgeting) as well as an appreciation of their effectiveness, their impact on expenditures, and their political consequences. Prerequisite: POL 251 or permission of the instructor. Cr 3.

POL 257 Political Parties

Development and present organization and operation of the American party system. Nature and function of major and minor parties, sectionalism, nominating system, presidential and congressional elections, the electorate, finance, interest groups. Prerequisite: POL 101. Cr 3.

POL 258 Public Opinion and Electoral Behavior

The role of public opinion in the American political system; definition and measurement; sociological and psychological influences; mass media; linkages to government; the role of public opinion in other nations; voting and presidential elections. A major segment of the course will be devoted to the construction, implementation, and analysis of a public opinion poll. Prerequisite: POL 102. Cr 3.

POL 259 Psychology and Politics

This course is an introduction to the psychological roots of political behavior. It will examine various theories of personality and motivation which explain why people act as they do in politics. It will focus on such questions as: Can "national character" explain political differences among nations? What are the psychological causes of political extremism and mass movements? Are there "authoritarian" and "democratic" personalities? What are the needs or drives which lead men into full-time political activity? The bulk of the course will focus on elite, rather than mass, behavior. Prerequisite: POL 102. Cr 3.

POL 274 Contemporary International Affairs

An analysis of contemporary world problems with emphasis on the interdependence of nations versus their viability as individual nation states. Cr 3.

POL 275 United States Foreign Policy

A detailed evaluation of U.S. foreign policy focusing on such topics as: identification of U.S. policy; governmental agencies and personalities in the formulation and implementation of policy; the role of non-governmental influences. The course is designed to evaluate current policy goals and practices within the context of long-range goals. Cr 3.

POL 283 The American Judicial System

The role of the judiciary in American politics, with emphasis on the United States Supreme Court. A series of case studies will cover such topics as economic regulation, civil rights, reapportionment, and war powers. Attention will also be given to the impact of judicial philosophies on decision-making. Prerequisite: POL 101. Cr 3.

POL 284 American Civil Liberties

An analysis of judicial interpretations of Bill of Rights guarantees and their effects on political processes in the United States. Topics include church and state, freedom of speech and press, the rights of the accused and the convicted. Prerequisite: POL 283. Cr 3.

POL 286 Administrative Law

The law made by and for administrative agencies. Topics include delegation, standing, judicial review, and the merits and demerits of "discretionary justice." Prerequisite: POL 101. Cr 3.

POL 289 Political and Social Thought I

An intensive study of ancient political and

social philosophies. A textual criticism of the works of Plato and Aristotle is emphasized. Prerequisite: junior or senior standing. Cr 3.

POL 290 Political and Social Thought II

A study of selected political theories from Machiavelli to modern political philosophers. The basic approach is historical, but an attempt is made to relate theories of politics to the environments in which they developed. Prerequisite: junior or senior standing. Cr 3.

POL 292 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. Prerequisite: consent of the instructor. Cr 3.

POL 307 Statistical Methods for Social Research

Emphasis on uses of statistics in the organization, interpretation, and presentation of research data. Measures of association and correlation; testing of hypotheses, probability and sampling. Includes one hour per week of laboratory exercises. Also listed as SOC 307. Prerequisite: POL 102 or SOC 100. Cr 4.

POL 332 Comparative Political Behavior

This course will introduce students to major approaches and concepts in comparative politics. Emphasis will be placed on using theoretical concepts to understand practical politics in a variety of nations (primarily those modern industrial states of Western Europe and North America). Major topics for study; public opinion, political parties, legislative behavior, bureaucracy. Prerequisite: POL 235 or 236, or permission of the instructor. Cr 3.

POL 351 Federal Executive Internship

Provision may be made to gain professional experience in a department or agency of the federal government located outside of Washington, D.C. The course is open only to selected students. Participation in a seminar is required. Cr 6.

POL 352 Internship in Private and Semi-Public Organizations

Provision may be made to gain professional experience in administration and research. The course is open only to selected students; see department chairman for details. Students will meet for a series of internship seminars, for which readings and reports will be required. Cr 6.

POL 353 Municipal Administration Internship

Provision may be made to gain professional experience in a local government. The course is open only to selected students; see department chairman for details. Students will meet for a series of internship seminars. Readings and research reports are required, focusing on the management, financial control and administration of modern American cities, with emphasis on administration of personnel and finance, the city plan and line functions; public safety, transportation, health, welfare and housing. Cr 6.

POL 354 State Internship

Provision may be made to gain professional experience in a department or agency of state government. The course is open only to selected students; see department chairman for details. Students will meet for a series of internship seminars, for which readings and research reports are required. The state government internship is available under the Maine State Government Internship Program. Cr 6.

POL 355 Congressional Internship

Provision may be made to gain professional experience in the local offices of Maine's U.S. Congressmen and Senators. The course is open only to selected students; see department chairman for details. Students will meet for a series of internship seminars, for which readings and research reports are required. Cr 6.

POL 356 Internship in Washington, D.C.

Provision may be made to gain professional experience in a congressional office, an agency of the national government, or with a private or semi-public organization in Washington, D.C. The course is open only to selected students; see department chairman for details. Readings and research reports are required. Cr 9.

POL 357 The American Presidency

This course examines the development of the modern presidency; the scope and exercise of presidential decision-making in domestic and foreign policy; and standards for assessing

presidential performance. Prerequisite: POL 101. Cr 3.

POL 358 The American Congress

The role of the national legislature in American politics is considered. The course undertakes a study of the men who reach Congress, the internal norms and procedures on national decision-making. Among topics covered are the committee system, leadership patterns in the Senate and the House, the public's influence on Congress, Congress and the Presidency, and Congressional policy-making in selected areas. Prerequisite: POL 101 or 102. Cr 3.

POL 387 International Law

An analysis from the political perspective of the sources, limitations and institutions of international law as they relate to the search for peace and world order. Cr 3.

POL 388 International Organization

An analysis of the approaches to the problems of peace, economic and social justice at the international level. Emphasis on the United Nations' systems and its specialized agencies. Cr 3.

POL 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.

POL 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.

POL 400 Seminar in Political Science I

A seminar focusing on some aspect of political science. Prerequisite: permission of the instructor. Cr 3.

POL 401 Seminar in Political Science II

A seminar focusing on some aspect of political science. Prerequisite: permission of the instructor. Cr 3.

Psychology

Chair of the Department: John S. Bishop, 518 Science Building, Portland
Professors: Bishop, Paradise, Saldanha; *Associate Professors:* Hearns, Sanborn, Gayton, Sytsma

The Department of Psychology offers a four-year program for students majoring in psychology. It also includes courses for students majoring in allied fields, as well as for students wishing an orientation to the field of psychology as part of their general education. Courses are designed to create an awareness of the fundamental principles of psychology, psychological research, and the means by which psychological knowledge is acquired. The emphasis is upon the scientific inquiry into basic phenomena and principles of behavior, not upon the development of professional skills.

Programs and Requirements

Bachelor of Arts in Psychology

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 40.

Required Courses:

PSY 101 and 102	General Psychology (3 credits each semester) to be taken as a two-semester sequence
PSY 201	Statistics in Psychology
PSY 205	Experimental Methodology
PSY 223	Child Development
PSY 330	Social Psychology
PSY 333	Psychopathology
PSY 350	Psychology of Learning
PSY 351	Learning Laboratory
PSY 361	Sensation and Perception
PSY 365	Physiological Psychology
PSY 371	History and Systems

Other courses offered by the Department can be taken as electives to complete the 40-hour minimum. PSY 101 and 102 are prerequisites for all additional psychology courses.

In addition, successful completion of the following three non-psychology courses is required for certification as a psychology major. These courses should be completed by the end of the sophomore year:

MS 100	College Algebra (Prerequisite for PSY 201)
BIO 101	Biological Principles
BIO 111	Human Anatomy and Physiology (Prerequisite for PSY 365)

Psychology 101 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 201 and PSY 205 no later than their junior year. PSY 201 may be taken concurrently with PSY 102. No grade of D in any departmental course will count toward fulfillment of the major requirement.

All students are reminded that, in addition to meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the Core curriculum requirements.

The Department recommends that students who wish to take a more extensive program or who plan to enter graduate school elect, in consultation with their major advisor, further courses in psychology and also include in their programs study in related fields, such as mathematics, biology, philosophy, sociology, anthropology, and computer programming.

PSY 101 General Psychology I

An introduction to the study of behavior as a natural science. Among the topics covered are: method of inquiry, physiological foundations of behavior, sensation and perception, motivation and emotion, learning and thinking. This course is a prerequisite for all courses in the department. Cr 3.

PSY 102 General Psychology II

A continuation of Psychology 101. It deals with complex psychological processes such as ability testing, personality, conflict, behavior disorders and therapy, and social and industrial behavior. Prerequisite: PSY 101. Cr 3.

PSY 201 Statistics in Psychology

A general introduction to the techniques of descriptive, predictive, and inferential statistics. Emphasis is placed on measures of central tendency and variability, correlation, hypothesis testing, and simple analysis of variance. Prerequisites: PSY 101 and MS 100 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 201. Cr 3.

PSY 220 Developmental Psychology

A study of the factors in human psychological growth traced from genetic predisposition through the prenatal and postnatal periods, childhood, adolescence, adulthood and aging to death. The major theorists relevant to each developmental period are considered. Prerequisites: PSY 101 and 102. NOTE: This course does not count toward major credit. Cr 3.

PSY 223 Child Development

A systematic study of the behavior and psychological development of children during infancy, preschool and school-age periods. Analysis of the genetic, prenatal, and postnatal influences on physical, cognitive, and personality development. Prerequisites: PSY 101 and 102. 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. NOTE: This course does not count toward major credit. Prerequisites: PSY 101 and 102. Cr 3.

PSY 311 Industrial Psychology

Critical treatment of research methods in personnel selection and evaluation and current theories of individual behavior in complex organizations such as government and business. Prerequisites: PSY 101 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 101 and 102. Fall semester only. Cr 3.

PSY 330 Social Psychology

The psychological principles which enter into the social behavior of the individual. Areas of consideration include perception, communication, attitude formation, interpersonal attraction, and group behavior. Prerequisites: PSY 101 and 102. Fall semester only. 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 which contribute to maladjustment are examined. Prerequisite: PSY 101 and 102. Spring semester only. 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 101 and 102 or permission of the instructor. Spring semester only. Cr 3.

PSY 338 Theories of Personality

A survey of the major contemporary approaches to the study of personality. Different theories are compared, their impact upon current thinking evaluated, and their research contributions assessed. Prerequisites: PSY 101, 102, and 320, or permission of the instructor. Cr 3.

PSY 340 Behavior Modification

An introduction to the principles of operant conditioning with emphasis on the application of operant techniques in educational, correctional, and therapeutic situations. Prerequisites: PSY 101 and 102. Cr 3.

PSY 343 Psychological Test Theory

The theoretical and statistical concepts

underlying the development of various psychological tests. Individual and group tests of intelligence, personality, aptitude, and interest are examined and evaluated in terms of these concepts. Uses and abuses of psychological tests are considered. Prerequisite: PSY 201 or instructor's permission. Fall semester only. Cr 3.

PSY 350 Psychology of Learning

Experimental findings on the fundamental principles that underlie the acquisition and retention of new behavior. Emphasis is placed on operant and respondent conditioning and the experimental analysis of behavior. Prerequisites: PSY 101 and 102. Cr 3.

PSY 351 Learning Laboratory

An introduction to laboratory experiences designed specifically to demonstrate the basic principles of behavior conveyed in PSY 350. Topics include positive reinforcement, extinction, shaping, discrimination, schedules of reinforcement, generalization, and others. Prerequisites: PSY 101 and 102. PSY 350 must be taken either prior to or concurrently with PSY 351. Cr 1.

PSY 352 Psychology of Motivation

A survey of theory, research methods, and experimental findings related to the search for the determinants of human and animal behavior. The course requires a research paper on a topic of interest to the student, and the planning of an experiment growing out of that interest. Laboratory. Prerequisites: PSY 101 and 102. Cr 3.

PSY 355 Research in Personality

Examination of current research in personality. Intensive experience in designing, executing, reporting and evaluating research in personality. This will include a research project. Prerequisite: PSY 320 or permission of instructor. Spring semester only. Cr 3.

PSY 360 Cognitive Processes

Experimental findings and theoretical analyses of the acquisition, retention, and transfer of verbal behavior and a critical survey of theories and research on such topics as problem solving, creative thinking, reasoning, concept formation, decision making, thought and language, and related topics. Prerequisites: PSY 101 and 102. Cr 3.

PSY 361 Sensation and Perception

An examination of perceptual processes in selected sensory systems. Emphasis on experimental methodology, research findings, and theoretical interpretations. Prerequisites: PSY 201 and 205. Cr 3.

PSY 365 Physiological Psychology

Basic neuroanatomy, neurophysiology, and endocrinology, and the relationships between nervous system functioning and behavior. Physiological analysis of sensory function, motivation, and learning. Prerequisites: BIO 101 and 111; PSY 101, 102. 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 which relate to such topics as jury selection and deliberation, eye witness testimony and credibility, and courtroom strategy. A term paper is required of all students. Prerequisites: PSY 101, 102, 333 and/or permission of the instructor. Spring semester only. Cr 3.

PSY 385 Contemporary Psychotherapies

A survey of contemporary psychotherapies including Gestalt therapy, logotherapy, bioenergetics, reality therapy, transactional analysis and rational-emotive therapy. Seminar format. This course is designed for advanced psychology majors planning to go on to graduate school in clinical or counseling psychology. Prerequisite: permission of the instructor. Fall semester only. Cr 3.

PSY 390 Selected Topics in Psychology

A critical in-depth investigation of one of various topics and issues in different areas of psychology (e.g., experimental, social, clinical, child-developmental, etc.) Each student is expected to complete a research project on the topic for the semester. Consult the Psychology Department for topics offered. Prerequisite: permission of the instructor. Cr 3.

PSY 400 Research in Psychology I

This course is open to qualified majors in psychology who wish to engage in independent readings on selected topics or conduct research projects. With permission of departmental chairman. Cr 3.

Social Welfare

Chair of the Department: Joseph D. Kreisler, 7 Chamberlain Ave., Portland
Professor: Steinman; *Associate Professors:* Deprez, Kreisler, Lazar, Rich;
Assistant Professor: Lieberman; *Field Work Coordinator:* Asen

The program in social welfare prepares the student for the professional practice of social work at the entry level.

The social welfare curriculum of the Department is accredited by the Council on Social Work Education. Students who receive a degree from an accredited undergraduate program in social welfare may apply to selected graduate schools of social work for advanced standing. If accepted the student may complete an M.S.W. degree program in one year instead of two.

Admission to the Social Welfare Department is initially on a provisional basis. Formal admission occurs after the student has completed the Department's admission application and has had an admission conference with his or her faculty advisor. This normally takes place in the second semester of the sophomore year. Transfer students, who select social welfare as their major, should meet with their faculty advisor as soon as possible after they are admitted to the University.

Included in the social welfare course requirements are two semesters of Community Lab. During these two semesters the student puts in 480 hours in his or her field assignment. This field assignment takes place in a community agency. A large number of social and community agencies in the Greater Portland area and in cities and towns of southern Maine have been most generous in their cooperation with the Department and in making available field instruction resources including supervision for students of the Department.

In planning their program, provisional and admitted students must regularly consult with their faculty advisor. Such consultation is designed to help the student explore career objectives, review Departmental requirements, design the best possible combination of required courses and electives, and to facilitate a productive relationship between the student and the Department.

The students of the Department have organized a Social Welfare Majors Association. The organization seeks to facilitate communication between students and faculty, ensure student involvement in departmental deliberations, provide for professional growth, and act on issues and problems in the community. Student representatives attend faculty meetings and serve as full members on the Department's personnel and curriculum committees.

The Social Welfare Department has a policy of awarding credits for work experience to students when a thorough review of their work experience in the human services reveals that they have attained a level of competence equivalent to that expected of students in selected practice-oriented courses. See Department policy statement, "Advanced Credit Procedures for Community Lab." When credits are awarded for work experience they are assigned the following course designation: SWE 251 Community Laboratory in Social Welfare; credit for work experience.

Programs and Requirements

Bachelor of Arts in Social Welfare

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 40.

The major in social welfare consists of 40 credits in required social welfare courses. In addition, 39 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 Welfare Courses

SWE	101	Introduction to Social Welfare
SWE	102	Introduction to Social Work

SWE	351	Human Services and the Consumer
SWE	352	and 353 Methods of Social Work Practice I and II
SWE	354	and 355 Community Laboratory in Social Welfare I and II
SWE	370	Human Development and Social Welfare
SWE	433	Social Welfare Research
SWE	450	Social Problems and Social Welfare Policy
SWE	456	Issues in Social Welfare and Social Work

Required Foundation Courses in Other Departments

Substitutions for, or waivers of any of these courses, require the written approval of a student's advisor.

ENG	100	College Writing
ECON	201	Principles of Economics I
BIO	101	Biological Principles
POL	101	Introduction to Government

OR

POL	102	People and Politics
PLY		(Any introductory philosophy course)
PSY	101	and 102 General Psychology I and II
SOC	100	Introduction to Sociology
SOC	371	Sociology of Minorities

Four other advanced level sociology and/or psychology courses

These four other courses are selected with the advice and approval of the student's advisor.

Students are expected to achieve a grade of C- or better in all Department of Social Welfare and required foundation knowledge courses.

SWE 101 Introduction to Social Welfare

Seeks to define a perspective within which to understand the needs, problems and potential of humans as individuals and in groups. Describes and analyzes social welfare systems and social work practices as they currently respond to social needs, and as they might better facilitate the development of human potential. Cr 3.

SWE 102 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/her entry into the field. Prerequisite: SWE 101. Cr 3.

SWE 265 Women - Social Change

Examines the ways our culture affects and is affected by women in the areas of physical and mental health throughout their lifespan. Emphasis will be placed on an assessment of the problems women face in today's world as well as personal and political approaches to these problems. Cr 3.

SWE 266 Concept of Self and the Handicapped Person

To enhance effective interaction and communication with handicapped persons, issues are examined from the perspectives of society and of the individual (handicapped and non-handicapped). Topics include basic human needs and self-image, independence-dependence, anger-frustration, failure, the power of guilt and shame. All students participate in sensory exercises. Cr 3.

SWE 267 Relating Professionally to Homosexuality

Provides an understanding of varying concepts of homosexuality. Employs recent theoretical, empirical and clinical literature to assess attitudes toward homosexuality. Examines motivation and skills to achieve constructive interaction between the professional and the homosexual. Cr 3.

SWE 274 Aging and Social Policy: A Cross-Cultural View

Examines similarities and differences between simple and complex societies in their treatment of processes of aging. Against this background the position of older Americans is considered in relation to various social institutions, together with the origin and

implementation of social policies affecting them. Cr 3.

SWE 275 Developmental Services to the Aging

Policy, administration, and implementation of human services to older people are studied from a developmental standpoint. Examines implications of age bias (and its modification) for the nature of service. SWE 274 recommended but not required. Cr 3.

SWE 278 Professional Practice with Older People

Enhances skills in human service practice with older people. Analyzes the sources and manifestations of both healthy and problematic aging. Applies concepts drawn from the behavioral and social sciences, and from clinical and community practice. Translates a developmental rather than a custodial view into everyday direct service. Cr 3.

SWE 279 Skills for Serving the Frail Elderly

Enhances values and skills for guiding families to plan with (rather than for) older relatives; for performing periodic, differential functional assessments of clients' remaining strengths as well as their limitations; for utilizing the network of community supports; for discerning appropriate institutionalization and for discharge planning; and for advocacy and assertiveness with and on behalf of the frail elderly. Cr 3.

SWE 288 Substance Use and Abuse: Alcohol and other Drugs

Examines the use and abuse of psychoactive substances - street drugs, prescription drugs, alcohol, caffeine and nicotine. Consideration of the history, pharmacology, and physical and psychological affects of each substance. Exploration of prevention and treatment models, with special reference to those in use locally. Cr 3.

SWE 351 Human Services and the Consumer

Provides a series of concepts for the study and critical evaluation of the bureaucracies, professions, and consumers of social work and other services. Examines a range of approaches to rendering human services more responsive to client needs. This course is offered one semester each academic year. Prerequisite: SWE 101 plus junior standing or permission of instructor. Cr 3.

SWE 352 Methods of Social Work Practice I

An introduction to basic concepts and skills in social work interviewing and in the problem-solving approach within the framework of systems theory. Study of the values and knowledge base of social work skills.

Class discussion and assignments based on community lab experience (SWE 354) which must be taken concurrently. Prerequisite: SWE 101. Cr 3.

SWE 353 Methods of Social Work Practices II

A continuation of SWE 252 covering application of basic social work skills to areas of practice such as community organization, crisis intervention, group work. Class discussions and assignment based on community lab experience (SWE 355) which must be taken concurrently. Cr 3.

SWE 354 Community Laboratory I

For social welfare majors: a required internship in an agency placement, designed to provide an opportunity to relate social work theory to practice. Prerequisites: SWE 101; 352 (concurrent). Cr 6.

SWE 355 Community Laboratory II

A continuation of SWE 354. Prerequisites: SWE 352 and 354; SWE 353 concurrent. Cr 6.

SWE 364 Comparative Social Welfare Systems

A study of social welfare programs in advanced industrial and in developing societies, in market and non-market economies and in democratic and authoritarian political systems. Prerequisite: SWE 450 or permission of instructor. Cr 3.

SWE 365 Social Work with Minority Groups

An exploration of issues in social welfare policy and social work practice as they are related to the status of minority groups and their movement for self-determination. Prerequisites: SOC 371 and six hours of social welfare. Cr 3.

SWE 370 Human Development and Social Welfare

A study of the implications of research and theory related to human development for social welfare policy and social work practice. Prerequisites: at least six hours of social welfare courses. This course is offered one semester each academic year. Cr 3.

SWE 380 Child Welfare

A study of the process of growing under handicapping social conditions and the implications for social services and institutional change. Prerequisite: SWE 101 or permission of the instructor. Cr 3.

SWE 397 Department Projects

Individual or group projects, requiring independent study or field work in some aspect of

social welfare, to be selected by students in consultation with faculty. Prerequisite: department permission. Cr 3.

SWE 433 Social Welfare Research

A study of the implications of social welfare research for social policy and social work practice. Students practice applications of concepts and methodology by means of projects. Prerequisite: SWE 101 plus senior standing or permission of instructor. Cr 4.

SWE 450 Social Problems and Social Welfare Policy

A critical examination of social welfare institutions, the social problems and social needs to which they are addressed, and the policy decisions which determine the organization and direction of social welfare programs. Prerequisite: SWE 101. This course is offered one semester each academic year. Cr 3.

SWE 452 Methods of Social Work Practice III

Provides further exploration of the theoretical knowledge and practice skills involved in

utilization of particular interventive methods (e.g., child advocacy, organizational change and/or the more focused knowledge, methods and skills needed for effective intervention with a particular population at risk -- adolescents, the frail elderly, substance abusers). Prerequisite: permission of instructor. Cr 3.

SWE 453 Methods of Social Work Practice IV

A continuation of SWE 452. Cr 3.

SWE 454 Community Laboratory III

An advanced field experience in human services. Prerequisites: SWE 354 and 355 or permission of the instructor. Cr var.

SWE 455 Community Laboratory IV

A continuation of SWE 454. Cr var.

SWE 456 Issues in Social Welfare and Social Work

Senior seminar for social welfare majors that seeks to integrate class and field experience. Open to others by permission only. Must be taken in students' final semester. Cr 3.

Sociology

Chair of the Department: Peter M. Lehman, 120 Bedford St., Portland

Professors: Giguere, Lacognata, Monsen; *Associate Professors:* Anspach, Beirne, Fullam, Grzelkowski, Lehman

Sociology is the study of social life and the social causes and consequences of human behavior. Sociology's subject matter ranges from the intimate family to the hostile mob, from crime to religion, from the divisions of race and social class to the shared beliefs of a common culture, from the sociology of work to the sociology of sport. Although teaching remains the dominant activity among the more than 15,000 sociologists today, other forms of employment are growing. An undergraduate major in sociology offers valuable preparation for careers in social work, social research, politics, public administration, law, business and education.

Students majoring in sociology may choose between two areas of concentration offered by the department: general sociology and social policy. Requirements for each concentration are listed below.

In addition to the major, the Department also offers a minor in sociology. The minor is intended for those students with a major other than sociology but who wish to broaden their educational experience in a formally designated program of study. The minor program may be of particular interest to students in the schools of Nursing and Business, the College of Education, and non-social science disciplines in the College of Arts and Sciences.

Criminology Degree

The Department of Sociology also offers a bachelor of arts degree in criminology. This program, beginning in Fall 1983, provides an integrated and coherent academic program focusing on the structures, institutions, and activities that define certain social behavior as criminal in modern society. For more information please see the catalog entry for Criminology or contact the Department.

Alpha Kappa Delta

Juniors and seniors who have demonstrated an interest and involvement in sociology, who have completed at least four sociology courses and who have accumulated at least a 3.0 grade point average in sociology courses at the University are eligible for nomination to Alpha Kappa Delta, the national sociology scholarship and honor society.

Student Involvement

Student involvement is a high priority for the Sociology Department. Students are involved in the research projects of the Department as well as the everyday administrative and advising life of the Department. Members of the Sociology Student's Association are involved in all departmental activities and decisions as full voting members of the Department. These student members are elected by students each April, although vacancies sometimes occur during the year. Students who are interested in this kind of involvement are encouraged to talk to departmental faculty.

Internships and Work Experience

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

Colloquia

The Department of Sociology sponsors a colloquium series which seeks to bring together faculty and students in active discussion around a variety of topics. Several colloquia are scheduled each semester with faculty, students, and occasional visiting scholars, making presentations which serve as the focus of discussion. A schedule of current colloquia is available from the departmental office.

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 College of Arts and Sciences, as well as the University's Core curriculum.

Programs and Requirements

Bachelor of Arts in Sociology

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 47.

All students must complete 41 hours of coursework in sociology, and must also satisfy a cognate requirement consisting of 6 hours above the introductory level in a related discipline. All concentrations share a common core of 20 hours of required coursework.

Majors are encouraged to complete their courses in Methods of Social Research (SOC 205), Sociological Theory (SOC 300) and Statistical Methods (SOC 307) relatively early in their academic careers. Students should note that Sociological Theory is a prerequisite for Senior seminar.*

General Sociology Concentration

Common Requirements

SOC	100	Introduction to Sociology
SOC	205	Methods of Social Research
SOC	300	Sociological Theory I
SOC	301	Sociological Theory II*
SOC	307	Statistical Methods for Social Research

One seminar from those numbered SOC 400-SOC 405

Concentration Requirements (three hours from each of the following areas)

SOC	310-319	Social Processes
SOC	330-339	Social Institutions
SOC	350-369	Units of Social Life
SOC	370-379 or SOC 215	Social Problems

Electives in Sociology (9 hours)

**Note:* The Department has revised its curriculum to expand Sociological Theory to a two-semester sequence. This new requirement applies to students entering the major beginning in the Fall 1983. During the academic year 1983-1984, the previously required one-semester, four-credit hour theory course will be offered to serve continuing majors. The two-semester sequence will be first offered in 1984-85. Students entering the sociology major with advanced junior or senior standing may have the new requirement waived during 1983-84 by application to the Department chair.

Students in general sociology may satisfy their cognate requirement with any six hours above the introductory level in any of the following areas: anthropology; biology; criminology; economics; geography; history; mathematics; philosophy; political science; psychology; social welfare; computer science.

Social Policy Concentration

Common Requirements

SOC	100	Introduction to Sociology
SOC	205	Methods of Social Research
SOC	300	Sociological Theory I
SOC	301	Sociological Theory II*
SOC	307	Statistical Methods for Social Research

Concentration Requirements

SOC	312	Class and Inequality
SOC	352	Population Dynamics
SOC	376	Society and Social Policy
One of: SOC 310, SOC 350, SOC 355, SOC 356		
One of: SOC 374, SOC 375		

Sociology Electives (6 hours)

Students in social policy satisfy their cognate requirement by taking ONE of the following clusters:

- Six hours above the introductory level in social welfare to include one of the following: SWE 350 or SWE 351.
- Six hours above the introductory level in political science, to include one of the following: POL 210 or POL 233.

Minor in Sociology

The minimum number of credits (exclusive of the University's Core curriculum) required for the minor: 19.

Ten credit hours are required courses; the remainder are electives. Required Courses: SOC 100; SOC 205; SOC 300 or SOC 356; sociology electives**

**Each student minoring in sociology elects a minimum of three upper-division courses from those offered by the Department. These courses, chosen in consultation with the minor advisor, reflect the preprofessional or other interests of the student.

Note: Advisor to sociology minors: Professor David Fullam.

Major Credit and Grade Policy

There are prerequisites for most major credit courses. See the departmental course listings for particulars. Courses to be taken for major credit at other institutions must be approved in advance. Grades of C- or better must be achieved in all courses for major or minor credit. Courses taken pass/fail are not acceptable.

Introducing the Discipline

SOC 100 Introduction to Sociology

The fundamental concepts, principles, and methods of sociology; analyzes the influence of social and cultural factors upon human behavior; evaluates effect of group processes, social classes, stratification, and basic institutions on contemporary society. Cr 3.

SOC 200 Social Issues

Application of a sociological frame of reference to selected contemporary issues. Guides the student toward an understanding of why

and how issues develop, how particular social groups are affected by them, and what is involved in dealing with them. Specific topics considered vary from term to term, and from section to section. Descriptions of current topics are available in the sociology department office. Students should consult these descriptions before registering for the course. Course may be taken only once for credit. Does not count for credit towards the sociology major or minor. Prerequisite: SOC 100 or permission of instructor. Cr 3.

Tools of the Discipline

SOC 205 Methods of Social Research

Conceptualization and research design, data collection and analysis, logic of inquiry and research techniques. Includes one hour per week of laboratory exercises. Prerequisites: SOC 100 or permission of instructor. Cr 4.

SOC 206 Computers and Social Science

An introduction to the problems, processes, and techniques of computer use in the analysis of social science data. The course will acquaint students with general computer use and processing; with some of the basic concerns and problems of social science data management and analysis; and with the actual use of some of the most common programs and statistical packages in social science. Emphasis will be on use of the Statistical Package for Social Sciences (SPSS). This course assumes little or no prior computer knowledge. Prerequisite: SOC 100 or permission of instructor. Not open to freshmen. Cr 1.

SOC 300 Sociological Theory I

Critical evaluation of selected classical and contemporary models of the social world. Includes consideration of the foundations of sociological thought, the content of major

classical theories and theory groups, and the socio-cultural settings within which they developed. Prerequisite: SOC 100 and two other SOC courses, or permission of instructor. Cr 3.

SOC 301 Sociological Theory II

An investigation of contemporary sociological theory. Traces descent of the classical statements through to the present, and identifies both linkages and discontinuities in sociological analysis. Attention is also given to the socio-cultural settings within which various schools of sociological theorizing presently flourish. Prerequisites: SOC 300 and two additional SOC courses, or permission of the instructor. First offered in Spring 1985. Cr 3.

SOC 307 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. Includes one hour per week of laboratory exercises. Prerequisites: SOC 205 or permission of instructor. Cr 4.

SOC 310 Social Change

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

SOC 312 Class and Inequality

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

SOC 315 Personality and Social Systems

A sociological examination of theory and research in major areas relating personality and social systems; attitudes and behavior; socialization; social perception; bureaucratic structure and personality; etc. Emphasis on issues involved in relating two theoretical levels of analysis. Prerequisite: SOC 100 or SOC 170. Cr 3.

SOC 316 Sex Roles

An examination of sex roles in a socio-political and cultural context focusing on the sexual division of labor in American society. Prerequisite: SOC 100 or permission of instructor. Cr 3.

Social Institutions

SOC 330 Sociology of the Family

A sociological approach to the study of the family, including the structure of social relationships, the modern American family as a social institution, the cultural background of the family, and the impact of social change. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 331 Sociology of Education

Analysis of four major aspects of the social institution of education: analyses of the bureaucratic nature of educational institutions-- especially traditional and changing functions; college student profile shifts with particular emphasis upon adult learners; the new technologies in higher education--especially the micro-electronic revolution; and emerging social values and educational systems by the 21st century. Prerequisites: SOC 100 or permission of instructor. Cr 3.

SOC 332 Industrial Sociology

Social factors involved in the development of industry; social consequences of technological change; social organization within industry; problems encountered within the social structure(s) of industry. Prerequisite: SOC 100 or permission of instructor. Not offered 1983-84. Cr 3.

SOC 333 Sociology of Medicine

A consideration of the socio-cultural dimensions of disease, responses to disease, and social mechanisms which are developed to prevent, treat, and otherwise deal with disease. Particular attention is paid to the his-

torical development of understandings of health, disease, and care. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 334 Sociology of Religion

Review and critique of classical and contemporary sociological interpretations of religion, with emphasis on the changing character of religious expression in the twentieth century. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 335 Penology and Corrections

The course will focus on the social and political problems of dealing with offenders using an examination and analysis of the interrelations between theories of punishment and their application in corrections. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 336 Law and Society

An examination of the interrelationships between law and society, focusing on law, custom, and morality as well as law in relation to social goals. Specific examples of how law functions in the context of the social structure will be used to highlight the major theoretical models used traditionally in this area. Prerequisite: SOC 100, or permission of instructor. Cr 3.

SOC 337 Juvenile Justice

Examination and analysis of the philosophies, processing, and treatment of juvenile offenders with an emphasis on historical and comparative materials. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 350 Sociology of Urban Life

A descriptive and analytical approach to the study of city life. Emphasis is placed on environment, social organization, the ecological processes, population areas, housing, and maladjustment. Prerequisite: SOC 100 or permission of instructor. Not offered 1983-1984. Cr 3.

SOC 352 Population Dynamics

Fertility, mortality, and migration as they impact on every aspect of life whether political, economic, or social and the reciprocal impact of these on the population variables. Specific applications include: the relationship of population growth and aging; population growth and the status of women; population growth and urbanization; food and population policy; population growth and economic development; population characteristics and life changes; population characteristics in marketing; crime and the age structure; fertility changes and the labor market and the impact of immigration. Students are encouraged to explore their participation as population actors, making decisions which affect fertility, mortality and migration and being in turn affected by these population variables. No prerequisite. Cr 3.

SOC 353 Social Movements

The rise and developments of social movements emphasizing structuring and institutionalization. Social movements and sociopolitical change. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 355 Social Structure and Politics

The sociological analysis of politics with a cross-national emphasis, including the social basis of mass political behavior. Conceptual focus will be around consensus and conflict, bureaucratization and the institutionalization of interest groups, social movements, and political parties. Prerequisite: SOC 100

or permission of instructor. (Offered 1984-1985). Cr 3.

SOC 356 Order and Control

An examination of basic processes involved in creation, maintenance and development of social order, with specific emphasis on the role of social control mechanisms and institutions in the larger issue of order. The course will include both structural/institutional and micro-sociological analysis. A comparative element will be introduced through examination of selected non-Western cultures and non-capitalist socio-political systems. The issue of the future forms of social order and control will conclude the course. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 357 Bureaucracy in Modern Society

Examination of the nature and types of formal organizations, the relationships between them and the larger social context of which they are a part, and their internal structure. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 361 Sociology of Franco-Americans

Description and analysis of the development and present state of the culture, institutions and social structure of Americans of French-Canadian descent in the United States. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 365 Sociology of Quebec and Acadia

This course explores the questions: What is going on up there? Why is it going on? When did it begin? How is it being carried out? Who are the chief actors? It is an examination of the stratification, economy, family, education and religion of Quebec and Acadia. Special attention is given to social change. Prerequisite: SOC 100 or permission of instructor. Cr 3.

Social Problems

SOC 215 Criminology

An analytic survey of theoretical orientations which contribute to a sociological understanding of the interrelationships between crime, law and punishment; emphasis given to analysis of fundamental conflicts between law and social order as manifested in the organization and operation of the American criminal justice system. This course may be

credited toward the social problems area requirement. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 371 Sociology of Minority Groups

Considers the factors which produce and maintain structural social inequality based on minority status, and the social conse-

quences of such inequality. Includes analysis of selected minorities both in the U.S. and cross-culturally. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 374 Sociology of Mental Health and Mental Illness

An examination of theories of the 'causes' of 'madness' and the treatment of the mentally ill. Particular attention on the influence of culture on the definition of illnesses, the relationship between social factors and illness, and the social context of treatment. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 375 Sociological Perspectives in Deviance

The origin and nature of socially disapproved behavior. Analysis of societal interpretations of and responses to the deviant. Prerequisite: SOC 100 or permission of instructor. Cr 3.

SOC 376 Society and Social Policy

This course has three objectives: to familiarize students with the policy implications of various sociological theories; to introduce the political and ideological underpinnings of differing approaches to social policy; and to apply these ideas in the analysis of specific social policies. Prerequisite: SOC 100 or permission of instructor. Cr 3.

Advanced Seminars

SOC 400 Seminar in Sociology of Sociology

Focusing on synthesis, the seminar is meant to provide the sociology major with an overall view of the discipline and its perspective as well as an opportunity to consider current issues and the future of sociology. Prerequisite: senior standing in sociology. Cr 3.

SOC 401 Seminar in Sociological Classics

An in-depth study of selected seminal works in sociology. Aimed at the identification of major concepts and propositions. Prerequisites: SOC 300 or permission of instructor. Cr 3.

SOC 402 Seminar in Contemporary Marxism

A survey of issues and debates within Marxist political, social and economic theory. Specific topics examined include: law and the modern state; power and political process; the crisis of hegemony in late capitalism. Prerequisites: SOC 300 or permission of instructor. Not offered 1983-1984. Cr 3.

SOC 403 Seminar in Social Thought

Analyses of contemporary social issues, ideas, and attitudes characterizing American society. Independent library research projects to be emphasized in concert with seminar dialogues. Prerequisites: juniors and seniors only and permission of instructor. Not offered 1983-1984. Cr 3.

SOC 404 Seminar in Theory Construction

The vocabulary and logic of theory construction; from assumptions and isolated propositions to systematized theory. The course aims at enabling the student to understand the utility of theory and its relevance for empirical research. Prerequisite: senior standing in sociology. Not offered 1983-1984. Cr 3.

SOC 405 Research Seminar

Focus on the actual conduct of sociological research. Students will formulate a research problem, develop a research design, collect and analyze data and report their findings. Prerequisites: SOC 205, SOC 307 and senior standing. Cr 3.

SOC 390 Individualized Instruction I

Independent reading and/or research for juniors and seniors. Apply to department chair. Prerequisite: 15 hours in sociology. Cr var.

SOC 391 Individualized Instruction II

Continuation of independent reading and/or research for juniors and seniors. Apply to department chair. Prerequisite: SOC 390. Cr var.

SOC 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 emphasis of the internship is the application of the social science perspective, substantive knowledge, and methodology to understand and illuminate a particular organizational situation. 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/course work in the area of internship placement. In addition to field placement, students are expected to meet for a series of internship seminars, for which readings and reports will be required. Offered each semester. Contact departmental internship coordinator for details. Cr 3 or 6.

Theatre

Chair of the Department: Walter R. Stump, Russell Hall, Gorham
Professors: Stump, Rootes; *Associate Professors:* Duclos, Power, Steele, Kading

The Theatre Department offers a four-year program leading to a B.A. degree in theatre. Students may choose to emphasize a particular area such as acting or directing or a more general curriculum. 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.

Programs and Requirements

Bachelor of Arts in Theatre

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 30.

Incoming freshmen may declare their intent to major. For those declaring their intent to become a theatre major, the following courses are required:

ENG	100	College Writing (for other ways of satisfying this requirement, refer to the Core curriculum, page 28)
THE	101	Introduction to Drama
THE	120	Fundamentals of Acting: Movement and Improvisation
THE	121	Fundamentals of Acting: Scene Work
THE	135/ 137	Stage Craft
THE	290	Oral Interpretation

Students who have declared an intent to become majors are then identified as candidates for matriculation in the Department of Theatre. They may request status as a major when the above requirements have been completed. When the request for major status is submitted, the Department will review the student's past record in terms of academic and practical potential for success. Notification of admittance or rejection will be issued. The student may appeal any rejection if desired.

A total of 30 credits in theatre, not to include those hours selected for major preparation, is required for graduation.

The following courses are required:

THE	136/ 137	Stage Craft II
THE	210	Play Analysis
THE	220	Acting III: Voice for the Actor
THE	221	Advanced Scene Work or
THE	320	Acting V: Contemporary Acting Methods
THE	330	Stage Lighting (or THE 331 Scene Design)
THE	340	History of the Theatre I (or THE 341 History of the Theatre II)

Any one course:

THE	361	Late 19th Century Drama of the Western World
THE	362	20th Century Drama of the Western World
THE	363	Contemporary Avant-Garde Drama
THE	460	American Drama

In addition to the above, a total of nine credits must be selected from the following allied areas, unless otherwise approved by the Department:

ARTH	273	Film as Image and Idea
ARTS	141	Fundamental Design I
ARTS	151	Fundamental Drawing I

English		
ENG	242	Shakespeare I
ENG	243	Shakespeare II
ENG	246	British Drama to 1642
ENG	366	Restoration and 18th Century Drama
ENG	352	Medieval Drama
Foreign Languages and Classics		
CLS	252	The Tragic Hero in Ancient Literature
FRE	264	Avant-Garde Theatre in France
FRE	303	French Theatre in the 20th Century
Music		
MUS	401	Gorham Chorale
MUS	403	A Cappella Choir
MUS	405	The Chamber Singers
Education		
EDU	499	Photography for Classroom Use
Industrial Arts		
IA	210	Electronics Technology
IA	241	Graphic Arts Technology
IA	444	Photographic Reproduction

Theatre Department Production Requirements

A. All theatre majors must participate in a minimum of five Theatre Department productions according to the following guidelines: (1) work performed on a minimum of two of these productions must be in the areas of tech/design;* (2) work performed on a minimum of two of these productions must be in the areas of acting/performing;* (3) these productions must be "in-house" Theatre Department productions; (4) these productions may be part of the requirements of a formal Theatre Department course; (5) students may receive work-study or unrestricted funds for this production work if Theatre Workshop credit is not received (THE 130, 131, 132, 133); (6) students may enroll in Theatre Workshop (THE 130, 131, 132, 133) for these productions if they are not receiving work-study or unrestricted funds as compensation for their production work.

*In the event that a student repeatedly auditions or requests tech 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 tech/design minimum production requirements.

B. All theatre majors must enroll in four units of Theatre Workshop (THE 130, 131, 132, 133).

The Department will meet at least once a semester to review each major's progress and to call to the attention of the student any departmental concern.

Minor in Theatre

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

The courses required are THE 120, THE 121, THE 101, THE 290, THE 135, and two courses from the following: THE 220, THE 221, THE 320, THE 330, THE 340, THE 210, THE 361, THE 362, THE 363, THE 460.

THE 101 Introduction to Drama

A lecture-discussion course designed to provide students with a conception of the development of the theatre and its literature. The course consists of a survey of Greek medieval, Elizabethan, French neo-classic, and 18th, 19th and 20th century theatre and drama.

Cr 3.

THE 120 Acting I -- Fundamentals of Acting: Movement and Improvisation

This is a practical course designed to introduce the student to basic procedures necessary to experience the creative process in acting. The course is designed to cultivate the student's sense of both physical and mental self by increasing his imagination, creative,

and technical abilities. Course utilizes movement, sensitivity, mime, and improvisational exercises. (Taught spring and fall semesters.) Cr 3.

THE 121 Acting II -- Fundamentals of Acting: Scene Work

This is a practical course designed to introduce the student to basic skills of acting through stage movement, projection, characterization and scene work. Emphasis made on internal preparation by developing a role and on external techniques for projecting that role. (Taught spring and fall semesters.) Cr 3.

THE 122 Contemporary Dance I

Contemporary Dance I is designed for beginning dancers with no formal dance training or no dance training in recent years. This class introduces basic contemporary dance skills and vocabulary. The class is divided equally into two areas of study. Physical and technical development are learned through strengthening and stretching exercises and body isolations. Proper body alignment is stressed for the most energy efficient and injury-free movement both in and out of class. Dance phrases are designed to teach rhythmic and locomotor skills. Equal time will be devoted to studying choreographic techniques wherein students will learn how dances are created by creating their own. *The Art of Making Dances* by Doris Humphrey, plus selected writings by more contemporary choreographers will be used in the class. The class will be expected to attend several local dance performances during the semester. Prerequisite: THE 120 or THE 121 or permission of the instructor. Cr 3.

THE 123 Contemporary Dance II

A continuation of THE 122. Cr 3.

THE 124 Intercollegiate Forensics

A course designed to acquaint students with intercollegiate competition. Students will compete at various forensic tournaments throughout the east. Permission of instructor is required. Cr 1.

THE 125 Intercollegiate Forensics

A continuation of THE 124. Cr 1.

THE 126 Intercollegiate Forensics

A continuation of THE 125. Cr 1.

THE 127 Intercollegiate Forensics

A continuation of THE 126. Cr 1.

THE 130 Theatre Workshop I

A course designed to give students practical application of theatre practices in the fields

of acting, design, scene construction, costuming, properties, lighting, management, and directing. A laboratory course. Cr 1.

THE 131 Theatre Workshop II

A continuation of THE 130. Prerequisite: THE 130. Cr 1.

THE 132 Theatre Workshop III

A continuation of THE 131. Prerequisite: THE 131. Cr 1.

THE 133 Theatre Workshop IV

A continuation of THE 132. Prerequisite: THE 132. Cr 1.

THE 135 Stagecraft I

A lecture/discussion/lab course in technical theatre and related topics relevant to technical direction. Specific areas of emphasis will include: theatre/stage terminology and organization; scene shop practices and use of shop tools; basic methods of construction, rigging and moving scenery for the stage. The lecture portion of the course will be supplemented by actual construction, painting and mounting of a major University theatre production. (Concurrent enrollment in THE 137 Stagecraft Lab required.) Cr 3.

THE 136 Stagecraft II

A lecture/discussion/lab course in basic theatrical drafting/graphic practices relating to theatrical construction and design techniques. The primary emphasis of the course will be the execution of various types of theatrical design and construction, painting and mounting of a major University theatre production. (Concurrent enrollment in THE 137 Stagecraft Lab required.) Prerequisite: THE 135 or instructor consent. Cr 3.

THE 137 Stagecraft Lab

A lab course allowing practical application of theory discussed in THE 135, 136. (Concurrent enrollment in THE 135 or 136 required.) Cr 1.

THE 138 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; the relationship of colored light and make-up; the basic approach to theatrical make-up design. Primary emphasis of the course will be 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 170 Public Speaking

An introductory course in the fundamentals of public discourse. Primarily a lecture-performance course, students will learn the basics of informative, persuasive, and entertaining speaking, as well as the processes of problem-solving and informative discussion. Emphasis is upon conception, analysis, structure, and modes of proof. Cr 3.

THE 210 Play Analysis

Representative dramas for the stage are read, discussed and criticized using the Aristotelian elements of plot, character, thought, diction, music and spectacle as analytical tools. Cr 3.

THE 220 Acting III -- Voice for the Actor

This is a practical course designed to develop the actor's speaking voice through emphasis on breath control, articulation, and enunciation. Prerequisites: THE 120, 121. (Fall semester only.) Cr 3.

THE 221 Acting IV -- Advanced Scene Work

This is a practical course designed to develop advanced characterization techniques through the use of scene work. Emphasis will be placed on both serious/comic acting and on methods for preparing auditions. Prerequisite: THE 120, 121, or 220 or permission of instructor. (Spring semester only.) Cr 3.

THE 222 Contemporary Dance II

Contemporary Dance II is for a more experienced dance student. Expertise in executing basic dance skills (proper alignment, parallel and turned out positions, slides, triplets) and knowledge of dance vocabulary are assumed. Through practicing more complicated movement exercises and dance patterns students will increase their technical dance skills and understanding of kinesiology. Entire dances or portions of contemporary choreography will be taught in this class. Choreographic work will consist of movement character development using the effort-shape system of movement analysis. This study of movement qualities will be taken from Cecily Dell's work in *A Primer for Movement Description*. Students will be expected to attend several dance performances during the semester. Prerequisite: THE 122 or permission of instructor. Cr 3.

THE 223 Mime

Class instruction emphasizes Mime Technique, Basic Illusions, Body Graphics, and Silent Character Studies. Solo and group work integrates elements of these four (4) major areas of study. In addition, students gain an understanding of the historical perspective of classical Mime and its influence

on contemporary approaches to the art form. Prerequisites: Fundamentals of Acting (THE 120 or THE 121) or permission of the instructor. Fall semester only. Cr 3.

THE 230 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 234 Directing I

A basic course providing background and experience in play production including such topics as play analysis and selection as influenced by cast and faculty options, rehearsal schedules, blocking action and related stage business. This course is particularly valuable for the classroom teacher. Practicum required. Prerequisites: 101, 120, 121. Cr 3.

THE 240 Costuming I

The course will consist of an introduction to costuming; including basic design, basic construction and an introduction to the materials used in millinery, wig-making and special costume problems (armor, footwear, etc.). The major emphasis will focus on design and construction. Additional hours of production work will be required providing a practical application of classroom theory. (Concurrent enrollment in THE 137 is required.) Cr 3.

THE 274 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 234 or by permission. Cr 3.

THE 290 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 320 Acting V -- Contemporary Acting Methods

This is a practical course designed to broaden the basic skills of the actor through the use of

new contemporary acting techniques and approaches. The course will include a continuation of audition preparation. Prerequisites: THE 120, 121, 220, 221, or permission of instructor. (Fall semester only.) Cr 3.

THE 321 Acting VI -- Acting Styles

This course deals with specific problems in interpretation of Shakespeare and classical and neo-classical tragic and comic styles. Emphasis will be placed on language and characterization, and on audition work. Prerequisites: THE 120, 121, 220, 221 or permission of the instructor. (Spring semester only.) Cr 3.

THE 330 Stage Lighting

Introduction to stage lighting design, elements of electricity, color, light sources, instrumentation, and control systems. Student will participate in lighting projects in practicum. Prerequisites: THE 135, THE 136. Cr 3.

THE 331 Scene Design

Lecture and practicum in stage scenic design. Emphasis on the visual art and drafting of designs. Prerequisites: THE 135 and THE 136, or permission of instructor. Cr 3.

THE 334 Directing II

Designed to train directors in theatrical organization and rehearsal techniques. Encompasses composition, picturization, movement and rhythm. Course involves both contemporary theory and practical application. Prerequisites: THE 101, 120, 121, 234, 135, 221 and 320. Senior or junior with permission. Cr 3.

THE 335 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. Prerequisites: THE 101 and THE 361 or 362 or 363. Cr 3.

THE 340 History of the Theatre I

A study of the development of the drama, the physical theatre, and the modes of production from the ancient Greek period through to 1640. Prerequisite: THE 101. Cr 3.

THE 341 History of the Theatre II

A study of the development of the drama, the physical theatre, and the modes of production from the Restoration to the present. Prerequisite: THE 101. Cr 3.

THE 350 Theatre Management

Investigation of educational and professional theatre management roles, including: man-

aging director; business manager; box office manager; publicity director; house manager. Practicum required. Prerequisites: THE 101, 234. Cr 3.

THE 361 Late 19th Century Drama of the Western World

This course is designed to acquaint the theatre major and non-major with a broad range of dramatic literature of the early 19th century. Representative plays of Ibsen, Strindberg, Chekhov, Shaw, and others which exemplify the literary, social, political, and philosophical aspects of the age will be studied. Prerequisite: THE 101. Cr 3.

THE 362 20th Century Drama of the Western World

This course is designed to acquaint the theatre major and non-major with a broad range of dramatic literature of the 20th century. Representative plays of O'Neill, Odets, Anouilh, Brecht, Sartre, Wilder, Miller, Beckett, Osborne, Chayefsky, and others which exemplify the literary, social, political, and philosophical aspects of the age will be studied. Prerequisite: THE 101. Cr 3.

THE 363 Contemporary Avant-Garde Drama

This course is designed to acquaint the student of theatre with the new voices in contemporary dramatic literature. Focus is upon such playwrights as Beckett, Genet, Pinter, Albee, LeRoi Jones, and representative plays from Off-Broadway Theatre. Prerequisite: THE 101. Cr 3.

THE 390 Advanced Oral Interpretation

A continuation of THE 290. Cr 3.

THE 391 Reader's Theatre

A study of principles and techniques utilized in the performance of a literary work in the Reader's Theatre style. Emphasis is on providing new insights into the material through oral performance. Cr 3.

THE 398 Theatre Internship

Students will assume a full one-semester internship with a professional theatre or Reader's Theatre Company. Students will be involved in management, acting, directing or technical theatre as a member of the company. Each student will be assigned a faculty advisor who will make a biweekly evaluation of ongoing work. Participants will be required to keep a diary and/or portfolio to be reviewed by the faculty of the Theatre Department at the conclusion of the internship. All creative work done by the student will be evaluated by the advisor and at least one other or if possible all members of the

department. Prerequisite: permission of the Theatre Department. Cr 3-15.

THE 399 Independent Study

The student will submit a written proposal defining the scope and the limitations of his study. He must submit his project for independent study to the faculty one month prior to the completion of the semester preceding his study. This deadline should be published at least one month prior to the student's deadline. The faculty must approve and determine the credits given to the independent study. If the faculty does not meet before the semester is concluded, the student will not be eligible to do the study until the coming semester. The student will choose a supervisor. It will be the duty of this instructor to closely supervise, advise, and recommend to the student and assure all faculty that each will receive a copy of the proposal before the meeting at which the student's proposal will be presented to the entire faculty. At the completion of the independent study the student will take an oral examination conducted by the entire faculty and chaired by his advisor (Review Board). At the completion of the oral examination the faculty will advise the student's advisor as to their determination of a grade. The advisor will then determine the grade and submit the

grade to the Registrar's Office. A student, generally, should not embark on a study until he has taken and completed all of the available course work that is necessary to do his study in depth. Each theatre student is entitled to take six units in either Independent Study or Theatre Projects, or a combination of both not to exceed six units unless the specific proposal is unanimously approved by the theatre faculty. Cr 3.

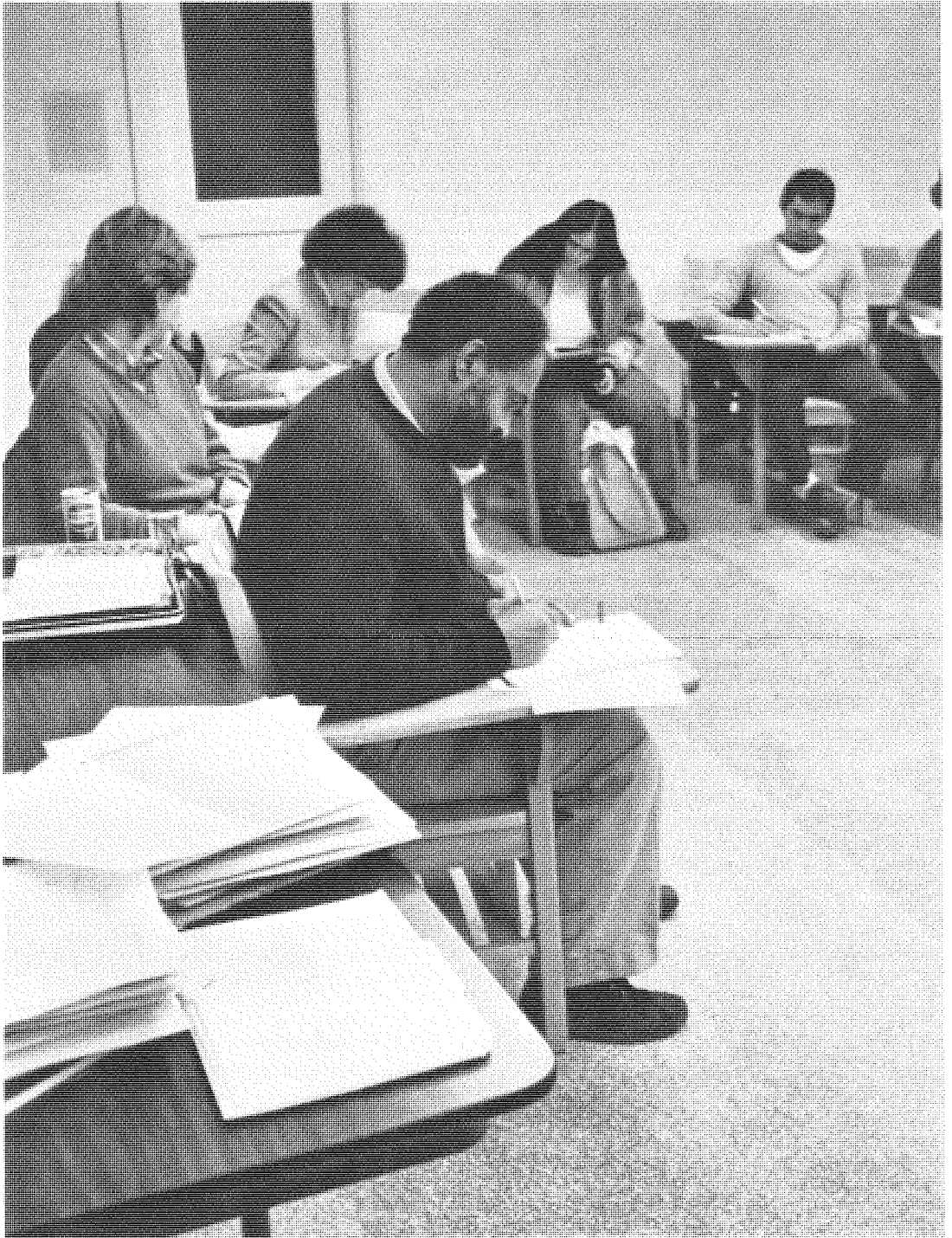
THE 433 Project I

Investigation of special topics, or execution of special projects which fall within the purview of theatre. Students may select an inter- or intra-departmental committee of three professors to approve, assist, and oversee the project. Prerequisites: juniors and seniors only; precise definition of project and unanimous permission of committee. Students must obtain rules for this course from the department chairman.

Credit hours arranged.

THE 460 American Drama

A study of drama in the United States. A brief history of early American playwrights followed by a close study of major figures, with O'Neill as the center. Others: Maxwell Anderson, Robert Sherwood, Tennessee Williams, Arthur Miller, and Edward Albee. Cr 3.



College of Education

Acting Dean: Dorothy D. Moore, 119 Bailey Hall; *Acting Assistant Dean:* Bruce A. Allen

Chair, Department of Industrial Education and Technology: Arthur Berry; *Chair, Department of Professional Education:* John Deady; *Chair, Department of Human Resource Development:* John Sutton, Jr.; *Director of Graduate Education:* Miriam Clasby; *Director, Center for Professional Development:* A. Nye Bemis; *Director, Office of Clinical Experiences:* Melissa Costello

Department of Professional Education

Professors: R. Costello, Downey, Hodgdon, Neuberger, O'Donnell, Philippi; *Associate Professors:* Allen, Amoroso, Bouchard, Chronister, Clasby, Cohen, Colucci, M. Costello, Deady, Gorman, Lyons, Milbury, Morrill, Silvernail, Smith; *Assistant Professors:* Davis, Major, Wood; *Instructors:* Drew, Field, Turlo

Department of Human Resource Development

Professors: Callender, Southworth; *Associate Professors:* D. Moore, Sutton; *Assistant Professors:* Campbell, Davis, Lapointe, Williams; *Instructors:* Henry, Sandberg

Department of Industrial Education and Technology

Professor Berry, Associate Professors: Anderson, Carter, Faulkner, Kirk, W. Moore, Nannay, Zaner

The College of Education is organized into three departments. The Department of Professional Education offers an undergraduate degree in early childhood/elementary education, as well as graduate degrees in reading, professional teacher, and educational administration. The Department of Human Resource Development offers an early childhood intern option, and graduate degrees in counselor education and adult education. The Department of Industrial Education and Technology offers undergraduate degrees in industrial arts education, vocational/occupational education, industrial technology, and vocational technology. Additionally, undergraduate degree programs are offered with the College of Arts and Sciences in art education, music education, and secondary mathematics education.

The three departments are supported by the Office for Clinical Experiences, which coordinates field experiences such as practica, internships, and student teaching. The Educational Placement Office provides professional assistance in preparing students for employment opportunities.

The Professional Development Center serves undergraduate students, graduate students, and community educators. Services include maintenance of a resource laboratory housing commercial education materials for examination and loan, specialized teaching resources, and a workshop area for teacher production of classroom materials; sponsorship of conferences and workshops responsive to the needs of educators; support of curriculum reviews by local schools through consultation and material provision; assistance in planning and implementation of field-based noncredit, recertification credit, and in-service graduate credit experiences; and assistance in securing other University, regional, and statewide staff development resources.

The Office of Graduate Education administers graduate programs in the College of Education. Information about these programs is available in the office (408 Bailey Hall) and the University's graduate catalog.

General Information

Admission to an undergraduate program in the College of Education is initiated through the Admissions Office. Candidates for admission must be graduates of approved secondary schools or hold the high school equivalency diploma. A detailed description of the admissions procedure appears on pp. 8 of this catalog.

Education majors are assigned an advisor during the first semester they are enrolled in the College. Responsibility for successfully completing the requirements of a program resides with the student. It is, therefore, necessary that students carefully read the catalog section which describes program requirements, and confer at least once each semester with their advisor for approval of their programs.

All baccalaureate programs in the College of Education lead to a bachelor of science degree and require a minimum of 127 semester hours, with the exception of the Industrial Education and Technology programs, which require a minimum of 125 semester hours.

Grade Point Average Students must earn an accumulative grade point average (GPA) of 2.0 for their complete baccalaureate program. Students must achieve a GPA of 2.5 in their liberal arts sequence. No more than one D grade will count toward fulfillment of the liberal arts sequence.

Students majoring in the early childhood/elementary education, industrial arts, and vocational education programs must achieve a grade point average of at least 2.5 in their professional educational requirements (EDU courses) prior to student teaching. No grades of D will count toward the fulfillment of the professional requirements.

Pass/Fail Option An undergraduate in the College of Education may register for a total of 18 hours of pass/fail credits in addition to electing pass/fail credits for student teaching and the related seminar. Required courses in the Core curriculum and the student's major may not be taken pass/fail.

Independent Study Junior and senior students may elect independent study in their major for one to six credits. Normally, no more than three credits may be earned in a semester.

The student submits to a faculty sponsor an independent study application which includes a detailed description of the proposed program of study. Approval by the appropriate department chair is required. No University credit may be earned for courses described in the catalog taken through independent study.

The approved independent study form is filed with the Registrar during the registration period.

Graduate Course Enrollment for Undergraduate Students An undergraduate student may be permitted to enroll in graduate courses if the following conditions are met:

1. The student is a junior or senior in an approved undergraduate program.
2. The student has an earned GPA of 3.0.
3. The student has met all course prerequisites.
4. The student has received prior approval to enroll in the course from his/her advisor, course instructor, and the Director of Graduate Education.
5. The student is not displacing a graduate student in the course; that is, an undergraduate student may enroll in a course only after all qualified graduate students have had an opportunity to enroll in the course.
6. The student may not enroll in courses that are restricted to matriculated graduate students only.

Intern Programs A teaching internship is a cooperative teacher education program for early childhood/elementary majors that the College of Education shares with participating school districts. In addition to being assigned to classroom teachers who help interns integrate theory and practice, the interns receive instruction on-site by University and public school personnel. Internship programs generally are designed as two-semester programs where the interns may earn up to 36 academic credits.

Exchange programs with King Alfred's College, Winchester, England and Whitelands College, London, England are also available. Students may elect to complete a semester of study, including student teaching, through this option.

Undergraduate Program Description

Early Childhood/Elementary Education

The early childhood/elementary education curriculum prepares graduates to teach in grades K-8. Details are provided in the following pages of this catalog.

Early Childhood/Intern Option (competency-based)

The early childhood intern curriculum is specifically designed for the student (intern) who is employed in a preschool classroom and at the same time is studying for a baccalaureate degree. Since each intern is working full-time, it is estimated that it will take six years to complete the program. The curriculum qualifies the graduate to teach preschool through grade eight. Interns study how children learn and how adults in the home, school, and community can foster this learning. Special emphasis is placed on the child from infancy to eight years of age. Details appear in the following pages under the heading for the Department of Human Resource Development.

Inquiries about this program may be directed to the Maine Children's Resource Center located on the Gorham campus.

Secondary Education Mathematics Program

The secondary education program offers a major in mathematics. Graduates of this program are certified to teach mathematics in grades 7 through 12. Students enrolled in this secondary education program are also required to complete an 18-semester hour minor of a subject commonly taught in the secondary schools. Details are provided in the following section.

Art Education Program

Graduates of the program are qualified to teach or supervise art in all grades of the public schools. Details about the art education curriculum are provided on page 49.

Music Education Program

The aim of the music education program is to develop individual potential in the areas of musicianship and scholarship, as well as to present the most recent trends in the fields of music education. Upon satisfactory completion of the four-year program, graduates receive a bachelor of science degree with a major in music education and are certified by the state of Maine to teach music in grades one through twelve. The program qualifies graduates to teach or supervise all phases of vocal and instrumental music. Details are provided on page 121.

Industrial Arts Education

The industrial arts curriculum prepares students for the teaching of industrial arts in elementary and secondary schools. It is the only college program in the state of Maine in this specialized field. Details are provided on page 176.

Vocational Technical Education Program

This is a part-time evening and summer program leading to a B.S. degree with a major in vocational/occupational education, vocational technology, or in industrial technology. Details are provided on p. 178.

The College of Education also offers a master of science degree in education, with a variety of major concentrations. Please refer to the graduate programs page in this catalog, and to the Graduate Catalog.

Department of Professional Education

The early childhood/elementary education curriculum qualifies graduates to teach grades K through 8. To meet proposed new teacher certification requirements for the state of Maine, the program has been revised to expand studies in the liberal arts for prospective teachers.

Programs and Requirements

Early Childhood/Elementary Education

The minimum number of credits (exclusive of the University's Core curriculum) required for the major: 93.

In meeting the Core curriculum requirements, students in this program must take the following courses: MS 131 Number Systems for Elementary Teachers, MS 232 Geometry for Elementary Teachers, and HRD 333 Human Growth and Development. The first two courses satisfy the Basic Competence Quantitative Decision Making requirement; the third course fulfills part of the Methods of Inquiry/Ways of Knowing social science requirement.

Professional Education Sequence

1. Introduction to Education (EDU 100)
2. Theoretical foundations
3. Theory applied to classroom practice
4. Internship in a classroom setting
5. Senior seminar

Liberal Arts Sequence. Several options are available; for example:

1. Multi-disciplinary sequence: a program of study in fine arts, humanities, social science, or science, particularly appropriate for teaching at the early childhood level.
2. Double Major: a program of study in a selected department of the College of Arts and Sciences, particularly appropriate for teaching at the upper elementary level.

More detailed information on both the Professional Education Sequence and the Liberal Arts Sequence will be available through advisors.

Certificate Program in Athletic Coaching for Men and Women

This program is designed to prepare students for certain coaching responsibilities in schools and recreational programs. The curriculum includes an introduction to the organization and administration of athletics as well as practical work in assisting coaches in selected sports. Attention is also given to the prevention and care of the most common injuries occurring in athletic programs.

A certificate will be presented to students completing the minimum 15-hour program. In addition, the proper notation will be made on the student's official transcript indicating proficiency in the area of athletic coaching as determined by the certificate program.

Course of Study in Athletic Coaching (15-credit program)

Required

PE	203	Athletic Training
PE	302	Coaching Philosophy and Fundamentals
PE	314	Organization and Administration of Athletics
PE	391	Field Experience in Coaching

Electives

PE	209	Officiating Basketball
PE	210	Officiating Field Hockey
PE	211	Officiating Soccer
PE	212	Officiating Baseball/Softball
PE	303	Coaching Basketball, Philosophy and Methods
PE	305	Coaching Track and Field, Philosophy and Methods

PE	311	Coaching Soccer, Philosophy and Methods
PE	312	Coaching Football, Philosophy and Methods
PE	315	Coaching Field Hockey, Philosophy and Methods
PE	316	Coaching Volleyball, Philosophy and Methods
PE	318	Coaching Gymnastics, Philosophy and Methods
PE	331	Coaching Golf, Philosophy and Methods
PE	332	Coaching Tennis, Philosophy and Methods
PE	334	Coaching Cross Country, Philosophy and Methods
PE	335	Coaching Baseball and Softball, Philosophy and Methods

Secondary Education Program in Mathematics

- A. Core Curriculum Requirements: 31-34 credits
- B. Teaching Specialty: Mathematics 39-51 credits
- C. Professional Education Requirements: 30 credits (see page 114)
- D. Electives

Note: Teacher certification requirements require that a candidate successfully complete a concentration of 50 hours or a major of 30 semester hours and a minor of 18 hours of subjects commonly taught in the secondary schools.

Computer Science and Mathematics for Education Majors

The Department of Mathematics and Computer Science in cooperation with the College of Education offers an area major of 51 hours of mathematics and computer science courses for students majoring in secondary education. The program is described on p. 113.

Physical Education

PE 198 Foundations of Exercise Science

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. Satisfies PE requirement. Cr 2.

PE 201 Conditioning and Therapeutic Exercise

Discussions in practical application of various theories of athletic conditioning and therapeutic exercise, i.e., progressive resistance, circuit training, isometrics, interval training, aerobics, calisthenics, etc. Also, analysis of body alignment and how functional problems can be corrected with reconditioning exercises. Cr 2.

PE 202 Current Health Issues

The aim of this course is to help students grow in scientific health knowledge, develop desirable health attitudes, improve health practices, and solve individual and group health problems. Cr 3.

PE 203 Athletic Training

Care and prevention of athletic injuries; the use of proper field equipment, support methods, therapeutic modalities, pharmacology in athletics, and training techniques. Cr 3.

PE 207 Gymnastics

A basic course in tumbling and gymnastics including use of apparatus for men and women. Cr 1.

PE 208 Folk and Square Dance

Fundamental and traditional dance steps, folk and square dances, and cultural background of the folk dances of other nations will be covered. Open to beginners and beyond. Cr 1.

PE 209 Officiating Basketball

Study and discussion of the rules with limited practical experience in the techniques of officiating basketball. Course is designed to prepare student for the National Federation Examination. Cr 2.

PE 210 Officiating Field Hockey

Study and discussion of the rules of field hockey as well as practical experience in the techniques of officiating. Practical and written tests will be given. Opportunity to become a rated official. Cr 2.

PE 211 Officiating Soccer

Study and discussion of the rules of soccer as well as practical experience in the techniques of officiating. Practical and written tests will be given. Opportunity to become a rated official. Cr 2.

PE 212 Officiating Baseball/Softball

Study and discussion of the rules of baseball and softball as well as practical experience in the techniques of officiating. Practical and written tests will be given. Opportunity to become a rated official. Cr 2.

PE 215 Posture and Figure Control

The course includes individual postural appraisal, corrective exercises, and recognition of postural deviations. Recommended for prospective teachers. Cr 1.

PE 302 Coaching Philosophy and Fundamentals

This course covers various approaches to planning, organizing, and implementing practice sessions in preparation for athletic competition. The psychological and emotional aspects of coaching are also investigated. One segment of the course will be concerned with society's view of coaching as illustrated by today's literature. Cr 3.

PE 303 Coaching Basketball, Philosophy and Methods

Emphasis on the methods of teaching and coaching basketball. Offense and defense, coach-player relationship, team selection, planning of practice sessions, and game situations will be areas of concentration. Cr 2.

PE 305 Coaching Track and Field, Philosophy and Methods

Coaching experience on the field with analysis of the form and technique of the various events. Selection of candidates, training, conditioning, diet, organization and promotion of track will be covered. Cr 2.

PE 311 Coaching Soccer, Philosophy and Methods

Emphasis on the methods of teaching and coaching soccer. Offense and defense, player-coach relationship, team selections, planning of practice sessions, and game situations will be areas of concentration. Cr 2 or 3.

PE 312 Coaching Football, Philosophy and Methods

Emphasis on the methods of teaching and coaching football. Offense and defense, player-coach relationship, team selections, planning of practice sessions, and game situations will be areas of concentration. Cr 2.

PE 314 Organization and Administration of Athletics

This course covers the principles and practices of athletic administration as related to middle schools, junior and senior high schools. Cr 3.

PE 315 Coaching Field Hockey, Philosophy and Methods

Analysis of the techniques and methods of coaching field hockey with emphasis on stick work, team strategy, and practice organization. Cr 2.

PE 316 Coaching Volleyball, Philosophy and Methods

Fundamentals of individual skills, team strategy, practice organization, and team play are emphasized. Cr 1.

PE 318 Coaching Gymnastics, Philosophy and Methods

Analysis of skills fundamental to competitive gymnastics with emphasis on techniques of coaching floor exercise, uneven parallel bars, vaulting, and balance beam. Judging skills are also developed. Cr 2.

PE 331 Coaching Golf, Philosophy and Methods

Course content includes methods of team selection, fundamentals of golf, types of competition, and practical experience. Cr 1.

PE 332 Coaching Tennis, Philosophy and Methods

Course content includes skill development strategies, drills, conditioning principles, and team management. Cr 1.

PE 334 Coaching Cross Country, Philosophy and Methods

Course content includes the techniques of training and conditioning, the operation of meets, course layouts and running techniques. Cr 1.

PE 335 Coaching Baseball and Softball, Philosophy and Methods

Emphasis on the methods of teaching and coaching baseball and softball. Offense and defense, player-coach relationship, team selection, planning of practice sessions, and game situations will be areas of concentration. Cr 2.

PE 391 Field Experience in Coaching

Practical field work in a coaching area. The student will be assigned as an assistant coach in a sport for a season. Supervision, evaluation, and guidance of the student will be provided by a staff member who is responsible for that coaching area. Prerequisite: PE 203, PE 302. Cr 1-3.

EDPE 216 Analysis of Human Movement

A study of major skeletal bones and muscle groups; posture appraisal, development, and correction; and application of the principles of mechanics to body movement. Cr 3.

EDPE 218 Games and Activities

An introductory course in non-competitive games for school age children. The course follows the growth of the New Games Foundation and has a practical teaching experience with school age children. Cr 1.

EDPE 298 First Aid and Safety

A multi-media approach to the utilization of techniques of first aid as prescribed by the American Red Cross. Various aspects of safety will be discussed. Successful completion of the course requirements will lead to Red Cross certification. Cr 2.

EDPE 300 Camp Leadership

A leadership course for the elementary school teacher to direct an outdoor education program. The course includes the skills, attitudes, and appreciations necessary for the intelligent use of the outdoors and outdoor pursuits. Many of these are often considered a part of physical education and recreation programs but they have significance in other subjects which cut across all areas of the school curriculum. Cr 3.

EDPE 304 Methods and Materials for Teaching Physical Education

A basic course for prospective teachers to acquaint them with the various areas of physical education. Topics include: philosophy and objectives of physical education; characteristics of children; the PE curriculum; class organization and lesson planning; teaching strategies and techniques; extra class programs and correlation with other subjects. Observation of and practical experience with children will be included. Cr 3.

EDPE 306 Movement Education in the Elementary School

A course is designed to help the prospective teacher plan instructional programs which will give children an opportunity to be creative and to participate in the planning. Activities based on movement skills - movement exploration are stressed. Children from grades one to six are part of the experience. Cr 3.

EDPE 308 Physical Education for the Atypical Child

This course is planned to help students understand adaptive physical education for the physically and mentally handicapped child. Emphasis will be placed on educable mentally retarded and learning disabled children. An investigation into the causes of mental retardation and learning disabilities is also included. Cr 3.

EDPE 309 Rhythms and Motor Activities

Preparation of classroom teachers with necessary knowledge to provide an understanding of sound mechanical principles that insure the proper application of force and the attainment of accuracy and balance through the learning of basic motor skills. Also to provide comprehensive dance experiences for students through the introduction to the meaning and areas of dance, teachers of techniques, skills, aids to teaching and the use of rhythm in accompaniment. Cr 3.

EDPE 310 Experiential Learning in Outdoor Education**Ropes/Initiative Course Construction and Use**

Participants can expect to gain first-hand knowledge and experience through actual participation in all phases of initiative course construction and operation. Of primary importance will be the understanding one receives from the experience for constructing a similar course in his/her own educational program.

Mountaineering

Designed to gain knowledge in technical mountaineering and to improve capabilities in technical rock climbing.

Orienteering

Designed to gain knowledge in expedition planning and route finding. Cr 3.

EDPE 389 Advanced First Aid and Emergency Care

This course will cover the topics prescribed by the American Red Cross and the advanced first aid and emergency care course, including respiratory emergencies, artificial respiration, wounds, poisoning, water accidents, drugs, burns, emergency child birth, emergency rescue and transfer, and CPR. Successful completion of the course requirements will lead to: Advanced Red Cross First Aid and Emergency Care and CPR certification. Cr 3.

EDPE 398 Independent Study in Physical Education

Provides students who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest, bearing upon it previous course experience and emerging with an intellectually sound, coherent synthesis reflecting a high caliber of performance. Restricted to students in the PE Leadership Minor. Prerequisite: permission of instructor. Cr 1-3.

EDPE 401 Practicum in Physical Education Leadership

Provides opportunity for a seminar approach to group thinking and discussion of problems of the beginning teacher. Areas of emphasis include organization, administration and conduct of programs of physical education, intramurals, and recreation in the elemen-

tary and secondary school. Opportunity for each student to gain leadership experience in local area schools or recreational agencies under the supervision of qualified teachers/leaders and a University instructor. Prerequisite: previous experience with children or permission of instructor. Cr 3.

Early Childhood/Elementary Education

EDU 100 Exploring Teaching as a Profession

This course provides an introduction to the College of Education program for all early childhood and elementary majors during the first year. The course is designed around lectures and seminars coordinated with field-based experiences in a school setting. The purpose is to enable students to make a valid career decision through an examination of the diversity of facets of education including teacher roles, educational settings, and curricular methods. Cr 3.

ment: (1) goals and objectives; (2) sources of content; (3) teaching strategies; and (4) evaluation. Prerequisite: HRD 333. Cr 3.

EDU 302 Primary Reading

This course introduces and analyzes the basic components of the primary reading program. The topics include: individual differences in reading readiness; word perception, reading interests; the directed reading-thinking activity, diversifying comprehension requirements; and diagnosis of reading. Cr 3.

EDU 151 Preprofessional Field Experience (For International Exchange Students)

This section is designed primarily for international exchange students. It allows an expanded preprofessional experience (requiring a minimum of four full days per week in schools). Students are expected to participate in teaching activities as well as classroom management during this placement. Cr 6.

EDU 303 Developmental Reading I

A basic course encompassing the developmental reading program. Content includes the major stages of reading progress, specific instructional methods and materials and informal diagnostic techniques. Students are exposed to the characteristics of reading at different levels. Case studies are used to highlight instructional practices. Cr 3.

EDU 200 Studies in Educational Foundations

This course provides an introduction to the study of American education. Problems and issues in contemporary education are examined from several perspectives, including the social, historical and philosophical. Cr 3.

EDU 304 Practicum in Elementary School Mathematics

A field-based course conducted primarily in the setting of actual elementary school classes. After several mathematics workshop sessions, the students will prepare and then teach several lessons in elementary school math classes. All planning and teaching will occur with guidance of the professor and the public school cooperating teacher. Recommended to be taken concurrently with EDU 307. Prerequisites: MS 131, HRD 333, and EDU 301. Cr 3.

EDU 300 Introduction to Teaching in the Early Elementary Grades

This basic course is designed to provide an overview of curriculum, methods and materials utilized in early elementary education. Emphasis will be placed on teaching learning theory, learning styles, approaches to school and classroom organization, parent involvement, the teacher as a human being and the hidden curriculum. Students will work independently in a modular approach for one segment of this course. (Formerly Primary Curriculum) Cr 3.

EDU 305 Methods of Teaching Elementary School Mathematics

The content of this course will focus on developing techniques for teaching mathematics to elementary grade pupils. The course will be conducted mainly in the setting of a mathematics resource center, featuring manipulative devices appropriate to teaching mathematics concepts. Prerequisites: MS 131, HRD 333, and EDU 301. Cr 3.

EDU 301 Elementary School Curriculum

This course is designed to provide an overview of the influences, methods, and materials that affect curriculum designs in the intermediate grades. Emphasis is given to four factors affecting curriculum develop-

EDU 306 Reading in the Content Areas

The course presents methods and techniques that middle and upper grade teachers can use in helping pupils transfer reading proficien-

cies in content areas. Areas covered include readability of instructional materials, concept acquisition strategies, comprehensive, vocabulary development and study skills. Cr 3.

EDU 307 Practicum in Elementary Science

A field-based methodology course conducted primarily in an elementary school. After several science workshop sessions students prepare and teach sequential lessons in the actual K-6 classroom setting under the supervision of University staff and cooperating public school teachers. Recommended to be taken concurrently with EDU 304. Cr 3.

EDU 308 Science for Children

An alternative to EDU 307. This course is conducted in a University science resource center and provides opportunities for students to apply learning theory by exploring current science curricula. Emphasis is on content analysis and comparison and on implementation in public classrooms. A field experience is included whenever possible. Recommended prerequisite: HRD 333 or 335. Cr 3.

EDU 310 Preparation of Classroom Instructional Materials

This lecture-laboratory course involves students in the creation of instructional materials using techniques such as dry mounting of flat pictorial materials, professional quality lettering, rudimentary photography and processing (including use of the darkroom), and the production of transparent projects. Lab fee \$10.00. Cr 3.

EDU 312 Teaching Language Arts in Elementary School

Recent methods and materials basic to the teaching of communication skills. Topics include spelling, handwriting, listening, creative expression, oral and written reporting. Use of tapes, records, filmstrips, and contemporary language arts books for the elementary school. Opportunities to work with children in local schools are stressed. Cr 3.

EDU 316 Introduction to Learning Disabilities

This course is designed to serve as an introduction to the reasons why some children have difficulty in school. In pursuit of this goal, it will survey the field of exceptionality in general, and will focus specifically on origins, detection, and strategies of intervention for disabilities in the information processing model. Cr 3.

EDU 319 Measurement and Evaluation

Construction, selection, and use of educational achievement tests, including diagnos-

tic and survey instruments. Skill in writing essay and objective types is developed. An inquiry into the validity and reliability of typical standardized tests. Elements and uses of statistics; tabulation of data; measures of central tendency, variability, and correlation. Cr 3.

EDU 320 Kindergarten Development

Students are involved with curricula, materials, methods, and philosophies of contemporary and conventional kindergarten and early childhood programs. An emphasis is upon the practical, as well as the theoretical. Cr 3.

EDU 322 Remedial Reading

The course presents typical reading disabilities, including methods for diagnosing and planning corrective strategies. Consideration is given to methods and techniques appropriate for general classroom use. Prerequisite a basic course in reading. Cr 3.

EDU 323 Independent Study in Education

To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest within their major field, bearing upon it previous course experiences and emerging with an intellectually sound, coherent synthesis, or an artistic or technical creation reflecting a high caliber of performance. May not be used as a substitute for currently described courses. Cr Var.

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. Opportunities for student teaching include: Preschool, Early Elementary, Elementary, Secondary Mathematics, Art, Music, Industrial Arts, and Vocational Education. Prerequisites vary according to major field of study. See curriculum listing in catalog. Applications due in the office of the Director of Clinical Experiences by February 1 each year. Cr 12.

EDU 325 Internship

Year long internship during the junior or senior year is provided under direct supervision in off-campus teaching/learning centers for all who meet requirements. Professional courses are offered concurrently with internship. Opportunities for internship are available for Preschool, Early Elementary, and Elementary majors only. Cr 18.

EDU 326 Seminar in Elementary Education

A study of issues in elementary education: school law; professional and ethical prece-

dures; organization of student teaching; and teacher relationships with schools, community, and state. Visiting lecturers participate. Concurrent: enrollment in EDU 324 or EDU 325. Cr 3.

EDU 336 Children's Literature

This course emphasizes a creative, interdisciplinary approach to children's books, an understanding of the interests and developmental tasks of the child, and, by percept and example, methods of individualizing reading. The student will be expected to read children's books widely and in depth. Cr 3.

EDU 340 Language Acquisition

This course focuses on the development of language acquisition, 0-5 years; factors which affect language acquisition process; brief introduction to deviations in early language and speech function; and materials, methods and skill development for facilitating language and speech development. Cr 3.

EDU 342 Theories and Practices in Early Childhood Education

In addition to familiarizing the student with the historical perspective of early childhood education, this course is designed to acquaint the student with the underlying philosophical bases of a wide variety of early education models and with the approaches for implementing these models. Content will be presented by means of films, filmstrips, recordings, guest speakers, group discussions, student presentations and lectures. Cr 3.

EDU 344 Teaching the Child Under Six
Philosophy, curricula, methods, and materials of the preschool child and his teachers. Extensive observation and field experience are integral parts of the course. Prerequisite or corequisite EDU 342. Cr 3.

EDU 346 Exceptionality and the Preschool Child

This course is designed primarily for students interested in exceptionality and the preschool child. It is intended to be a practical introduction to the field of exceptionality. Topics covered will include: definitions, labels, brief history of special education, the law, integration, attitudes, diagnosis and prescription, materials, and community resources. Cr 3.

EDU 348 Cooperative Experiences in Early Childhood Education

This course is designed exclusively for Early Childhood Education Majors who are currently contributing to a preschool or K-3 program in a public or private school. Seminars and on-site visits by the instructor will

be an integral part of the experience. Prerequisites: EDU 100 and instructor approval of the cooperative experience site. Cr 3.

EDU 350 Modern Philosophies of Education

This course is designed to examine the current patterns of thought that ground and guide contemporary theory, policy, and practice in the enterprise of education. An emphasis will be placed on philosophy as an activity through which one critically examines the merits of alternative patterns of educational thought and seeks to form a personal philosophy of education. Open to juniors and seniors; other by permission of instructor. Cr 3.

EDU 363 Emotional Problems of Exceptional Children

This course is designed to offer a cross-categorical view of exceptionality with emphasis on disabilities in the affective domain. Origins, detection, prevention, and strategies of intervention will be treated. Cr 3.

EDU 366 Practicum in Learning Disabilities

This course is designed to provide students with an advanced pre-professional experience with learning-disabled children. This experience is served co-terminously by a seminar which provides leadership in discussion activities to assist students in reflecting on experiences and viewing them from various perspectives. Prerequisite: EDU 316. Cr 3.

EDU 367 Psycholinguistics

This course is designed to study the mental processes which underlie the acquisition and use of language as it is related to human development and other behavior, including learning and thought. This course will deal with the normal acquisition of language from birth through the primary years. Included in the course will be how to recognize and deal with students in the classroom whose language is delayed. Selected tests will be studied in terms of their relationship to educational tasks. Examples of language problems will be provided as well as materials and suggestions for classroom language activities. Cr 3.

EDU 368 Introduction to Communication Disorders

The common speech and language disorders found in school children will be discussed. For each disorder the probable causes, symptoms, and methods diagnosis and remediation will be covered. The course will also include the basic principles of articulatory phonetics. Cr 3.

EDU 442 Organizing and Directing the Preschool

Comprised of a series of discrete modules, this course will focus on the implementation, organization, and continued functioning of the preschool. Equipment, daily routines, health and safety, licensing regulations, parent involvement, and funding will be among the topics explored. Students will spend considerable time while participating in this course. Cr 3.

EDU 465 Instructional Media for the Early Childhood Teacher

This course is designed to equip the early childhood teacher with skills and resources to design, prepare and utilize appropriate instructional media. The course will be lecture-demonstration with laboratory experiences designed to afford each student a high degree of facility with media material and equipment. Lab fee: \$7.50. Cr 3.

EDUX 299 Developmental Reading II

This course builds upon the concepts intro-

duced in Developmental Reading I. Students are guided in designing specific instructional activities that correspond to the major stages of reading progress. Empirical demonstrations, methods and materials for teaching reading are stressed. Cr 3.

EDUX 399 Methods and Materials for Teaching Learning Disabled

This course reviews approaches and materials concurrently used for teaching children with learning problems. Remediation methods for perceptual, motor, cognitive, communication and academic skills will be covered as well as ways to modify existing curriculum to meet existing needs. Prerequisite: EDU 316. Cr 3.

EDU 499 British Exchange

A cooperative program between the College of Education of USM and King Alfred's and Whitelands Colleges in England. Students may elect to take up to 15 credits per semester with prior USM departmental approval. Cr Var.

Department of Human Resource Development

The Department is responsible for courses in human development and family studies, and for an undergraduate early childhood intern program. In addition, it provides graduate programs in adult education and counselor education. For information regarding graduate programs, please see the Graduate Catalog.

Maine Children's Resource Center

The Maine Children's Resource Center has served early childhood programs throughout Maine since 1968. University courses, an intern program, workshops, technical assistance, and consultation are provided to Head Start and Day Care staff serving children from infancy to eight years of age. The Center is also funded to deliver similar services to staff who work with young children with special needs, including those at privately run facilities and the early public school grades, and to parents of children with special needs.

A resource library of books, pamphlets, and audiovisual materials and equipment is maintained at the Center. Materials are distributed through a "mailbag library" approach; however, staff are encouraged to visit the Resource Center whenever possible.

Programs and Requirements

Early Childhood Intern

The early childhood intern curriculum is specifically designed for the student (intern) who is employed in an early childhood classroom while at the

same time studying for a baccalaureate degree. Since each intern is working full-time, it is estimated that completion of the program will take six years. The curriculum is designed to prepare the graduate to teach preschool through the early grades. Home, school, and community can foster this learning. Special emphasis is placed on teaching the child from infancy to eight years of age.

Students enrolled in the intern program participate in the following nine courses, some of which are held on site. The instructor/child development specialist observes the intern's teaching competence and recommends individual learning experiences for improved teaching skills. The balance of the courses are held in the more traditional classroom format.

In the series of field teaching experience courses (HRD 301-309) listed below, the intern focuses on teacher competencies outlined by the Child Development Associate Consortium (CDA).

HRD	301	Directed Classroom Observation
HRD	302	Directed Classroom Participation (optional)
HRD	303	Safe, Healthy Learning Environments
HRD	304	Advancing the Child's Physical and Intellectual Competence
HRD	305	Building the Child's Self-Concept and Individual Strength
HRD	306	Positive Functioning of Children and Adults in the Classroom
HRD	307	Coordination of Home and School
HRD	308	Preschool Administration
HRD	309	The Competent Teacher

Field teaching experiences (HRD 301-309) may be substituted for EDU 324 Student Teaching.

Professional Education Courses

In addition to the field teaching experience courses interns are required to complete the following early childhood courses:

EDU	200	Studies in Foundations of Education
HRD	333	Human Growth and Development
EDU	336	Children's Literature
EDUX	370	Enabling Experiences
HRD	226	Topics in Early Childhood Education

HRD 226 Topics in Early Childhood Education

This is a one-credit modular course designed to allow students to explore a specific subject area. Topics for study will be proposed by faculty in response to student interest, and will vary from semester to semester. (The course may be taken as many as three times per semester and may be taken for credit up to six times.) Cr 1.

HRD 301 Directed Classroom Observation

This course explores the role of a preschool teacher. After investigation of competency-based assessment, this introductory course will address methods of how a teacher can foster the child's physical, social, emotional, and intellectual development. Through observing teachers in action, outside readings, and discussing alternative styles, necessary teaching skills will be explored. Students will be helped to determine their own

levels of competence and explore alternatives for continued growth and learning. Cr 3.

HRD 302 Directed Classroom Participation -- The Role of the Teacher

This course is designed for the intern with little academic background in the field of early childhood education. Assumptions, methods, and implications of the early childhood teacher's role in a classroom will be examined. Cr 2.

HRD 303 Safe, Healthy Learning Environments

The intern focuses on the physical environment of the classroom, such as learning center organization and safety, light, heat, and ventilation requirements. Time schedule requirements and emergency health measures are studied. It is expected that the intern will obtain a First Aid Certificate as a course requirement. Cr 2.

HRD 304 Advancing the Child's Physical and Intellectual Competence

The intern studies and implements methods of fostering the child's creativity, as well as physical, cognitive, and language growth. Cr 2.

HRD 305 Building the Child's Self-Concept and Individual Strength

The intern studies how children build a sense of self and how adults influence whether or not this concept is positive or negative. Techniques for building individual strengths are stressed in the classroom. Cr 2.

HRD 306 Positive Functioning of Children and Adults in the Classroom

The intern studies how children develop social skills necessary to work and play cooperatively in a group. The intern helps children respect the feelings, rights, and property of others and creates an atmosphere in the classroom where feelings may be expressed. Techniques of group management are studied and implemented. Cr 2.

HRD 307 Coordination of Home and School

The intern studies ways to support, encourage, and provide opportunities for parents to get involved in center activities. The intern studies the ethnic cultures represented in the classroom and reflects this knowledge in classroom planning. Methods of communicating with parents are explored in order to exchange information about the child's individual needs and progress. Cr 2.

HRD 308 Preschool Administration

Systems of record keeping and program planning are explored. The intern works with other center staff members to maintain records of each child's growth and development and to plan and record center activities. Cr 2.

HRD 309 The Competent Teacher

The University advisor guides the intern through the Child Development Associate credentialing process and serves as the "trainer" on the local assessment team. Cr 3.

HRD 331 Group Dynamics

An experimental study of the nature of group process and one's own functioning in a group. The developing awareness of self in relation to others in a group will be of primary importance. Specific techniques will include reading and participation in a seminar planned to aid in the exploration of self

and others. Prerequisite: upperclass or graduate status and permission of the instructor. Cr 3.

HRD 332 Psychology of the Self

An exploration into the development of the self, primarily as an issue of personal growth. Topics might include alienation, loneliness, and verbal/ non-verbal communication. Learning techniques center around readings, common class experience, and intensive small-group interaction. Prerequisite: permission of instructor. Cr 3.

HRD 333 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. Cr 3.

HRD 335 Educational Psychology

Basic principles, techniques, and research in educational psychology. A special consideration given to the learning process, perception, motivation, individual differences, and measurement, with reference to the facilitation of effective teaching and learning. Prerequisite: upperclass status. Cr 3.

HRD 501 Strategies and Techniques in Classroom Management

This course will consist of a variety of strategies, techniques, and philosophical issues related to adult-child relationships. The focus of the course will be to provide both a theoretical base and practical experience for dealing with classroom and school-related issues. Cr 3.

HRD 502 The Family: Implications for Educators

This course is designed to review selected topics in the areas of family relations and child development that are relevant to educators. Consideration will be given to such topics as dating, sexuality, marital relationships, divorce, adult-child relationships, and home-school relationships. The course will provide an overview of the issues and current research in the field. Cr 3.

Industrial Education and Technology

Technology is the study of the creation and utilization of adaptive systems including tools, machines, materials, techniques and technical means, and the relation of the behavior of these elements and systems to human beings, society, and the civilization process. Technological concepts are presented through a variety of approaches including the lecture, technical laboratories, field experiences, industrial visitations, and cooperative programs.

The curricula of the Department of Industrial Education and Technology provide a blend of cultural, technical, and professional courses designed to prepare individuals for teaching or industrial positions. Recognition is given to prior learning, where appropriate. Four degree programs are offered.

The undergraduate program in industrial arts education is designed to prepare students to organize, manage, and teach programs of industrial arts in elementary and secondary schools. Laboratory courses in energy and transportation, graphic communication, and manufacturing and construction provide a technical/conceptual background.

Vocational/occupational education recognizes prior learning and skill obtained through occupational experience. It is designed to prepare students for teaching in vocational/technical education or other occupational training programs and requires a minimum of three years of occupational experience as a prerequisite for the degree program. Emphasis is placed on the development of cultural and professional education.

Industrial technology is a management-oriented curriculum designed to prepare an individual for supervisory/technical/managerial roles in industry. Two options are available. For the individual without technical skills, shop/laboratory experiences provide for development of technical proficiency. For those with prior learning through occupational training/experience, trade and technical competencies are evaluated and credit granted. Both options, in cooperation with the School of Business, Economics and Management, provide a basic preparation in business administration. Students may concentrate in one of seven areas to prepare themselves for future employment.

The vocational technology program is an occupationally oriented curriculum designed for individuals who desire to prepare for managerial/supervisory roles. The program recognizes nontechnical occupational experience, assesses prior learning, and offers four areas of concentration in business management. A minimum of three years of occupational experience is required as a prerequisite for the degree program.

Admissions Requirements

Applicants for industrial arts education, or those without occupational experience desiring to pursue the industrial technology program, must visit the Industrial Education Center for a tour of the facility, interviews with the faculty, and testing of spatial relationships. Applicants will be notified of the appropriate procedure to follow and the dates available for on-campus visits.

Applicants with a minimum of three years of occupational experience who desire to pursue the industrial technology, vocational/occupational education, or vocational technology programs must submit evidence of a minimum of three years of occupational experience and appear for a personal interview. Candidates should contact the Department office for an appointment to discuss the evaluation of prior work experience in the vocational/technical field.

Programs and Requirements

Bachelor of Science in Industrial Arts Education

The number of credits (including the University's Core curriculum) required for the degree: 125.

Core Curriculum (40-49 credits)

Basic Competence 0-9

Methods of Inquiry/Ways of Knowing

- a. Fine Arts 6
 - 1. Performance-centered
 - 2. History-centered
- b. Humanities 6
 - 1. Literature
 - 2. Other Times/Other Cultures
- c. Social Sciences 6
- d. Natural Sciences 10

(Students must take HRD 333 Human Growth and Development in addition to another Social Science course.)

Interdisciplinary course 3

In addition, students must take 9 credits of electives.

Technical (54 credits)

Required courses

- ITP 300 Modern Industry
- ITT 102 Introduction to Technology
- ITT 211 Electronics Technology
- ITT 221 Power Technology
- ITT 231 Technical Graphics
- ITT 241 Graphic Arts Technology
- ITT 251 Metal Technology
- ITT 261 Wood Technology
- ITT 271 Plastics Technology
- ITT 311 Communication Electronics
- ITT 323 Energy and the Consumer
- ITT 331 Engineering Design Graphics
- ITT 342 Photo Offset Lithography
- ITT 351 Machining and Fabrication
- ITT 361 Production Manufacturing in Wood

Technical Electives (select any three)

Energy and Transportation

- ITT 312 Computer Technology
- ITT 313 Electrical Construction
- ITT 321 Automotive Systems
- ITT 322 Automotive Diagnosis and Tuneup
- ITT 413 Instrumentation
- ITT 414 Digital Electronics
- ITT 423 Fluid Power
- ITT 424 Fluid Power Systems

Graphic Communication

- ITT 332 Architectural Drawing and Design
- ITT 334 Energy Efficient Residential Design
- ITT 343 Communication Design
- ITT 434 Industrial Production Illustration
- ITT 435 Systems Analysis and Design
- ITT 444 Photographic Reproduction
- ITT 445 Color Reproduction Theory

Manufacturing and Construction

- ITT 300 Crafts Technology
- ITT 352 Fabrication and Forming
- ITT 362 Residential Construction
- ITT 363 Wood Science
- ITT 452 Metallurgy and Metrology
- ITT 482 Materials Testing (Metals/Wood)

ITT 490 Special Problems in Industrial Arts		
Professional Education (25 credits)		
IEA	190	Preprofessional Field Experiences
IEA	290	Contemporary Teaching in IA
*IEA	380	Curriculum Materials in IA
*IEA	381	Methods of Teaching IA
*EDU	324	Student Teaching/Seminar
EDU Elective		

*Minimum 2.5 cumulative index required and must be maintained in order to register for IEA 380, IEA 382, and EDU 324 and for graduation from the program.

Bachelor of Science in Industrial Technology

The number of credits (including the University's Core curriculum) required for the degree: 125.

Option #1: Skill Development

Core Curriculum (37-46 credits)

Basic Competence 0-9

Methods of Inquiry/Ways of Knowing

- a. Fine Arts 6
 - 1. Performance-centered
 - 2. History-centered
- b. Humanities 6
 - 1. Literature
 - 2. Other Times/Other Cultures
- c. Social Sciences 6

(Students must take ECON 20I Economics I in addition to another social science course.)

- d. Natural Sciences 16
- Interdisciplinary course 3

Technical (51 credits)

Required courses

ITP	310	Plant Layout and Material Handling
ITP	320	Occupational Safety
ITP	330	Production Control
ITP	340	Quality Control Fundamentals
ITP	360	Motion and Time Study
ITT	102	Introduction to Technology
ITT	211	Electronics Technology
ITT	221	Power Technology
ITT	231	Technical Graphics
ITT	241	Graphic Arts Technology
ITT	251	Metals Technology
ITT	261	Wood Technology

Technical Electives (select a minimum of 9 credits from one of the groups below) — 15 credit hours

Energy and Transportation

ITT	311	Communication Electronics
ITT	312	Computer Technology
ITT	313	Electrical Construction
ITT	321	Automotive Systems
ITT	322	Automotive Diagnosis and Tuneup
ITT	323	Energy and the Consumer
ITT	413	Instrumentation
ITT	423	Fluid Power
ITT	424	Fluid Power Systems

Graphic Communication

ITT	331	Engineering Design Graphics
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ITT	332	Architectural Drawing and Design
ITT	334	Energy Efficient Residential Design
ITT	342	Photo Offset Lithography
ITT	343	Communication Design
ITT	434	Industrial Production Illustration
ITT	435	Systems Analysis and Design
ITT	444	Photographic Reproduction
ITT	445	Color Reproduction Theory

Manufacturing and Construction

ITT	271	Plastic Technology
ITT	300	Crafts Technology
ITT	351	Machining and Fabrication
ITT	352	Fabrication and Forming
ITT	361	Production Manufacturing in Wood
ITT	362	Residential Construction
ITT	363	Wood Science
ITT	452	Metallurgy and Metrology
ITT	472	Materials Testing (Wood/Metal)

Optional Electives

ITP	491	Industrial Internship I
ITP	492	Industrial Internship II
ITT	490	Special Problems in Industrial Arts

Education and Business (30 credits)

Required courses (18 credit hours)

ITP	300	Modern Industry
ITP	350	Conference Leading
ITP	370	Occupational and Trade Analysis
ACC	201	Principles of Financial Accounting
BUS	340	Principles of Management
ECON	202	Principles of Economics II

Professional Concentration (select one area) — 12 credit hours

Area 1 — General

ACC	202	Principles of Management Accounting
BUS	290	Introduction to Computers in Business
BUS	320	Business Finance
BUS	360	Marketing

Area 2 — Personnel Management

ACC	202	Principles of Management Accounting
BUS	346	Personnel Management
BUS	348	Industrial Relations
ECON	320	Labor Economics

Area 3 — Accounting

ACC	301	Intermediate Accounting I
ACC	302	Intermediate Accounting II
ACC	305	Cost Accounting
BUS	320	Business Finance

Area 4 — Marketing and Distribution

BUS	346	Personnel Management
BUS	360	Marketing
BUS	363	Advertising
BUS	367	Managerial Marketing

Area 5 — Electronics

EET	051	Analog Systems
EET	061	Digital Systems
EET	071	Micro-Computer Architecture and Design

Area 6 — Computer Science

CS	160	Structured Problem Solving: PASCAL
CS	161	Algorithms in Programming
CS	250	Introduction to Computer Systems
CS	350	Systems Programming

Option #2: Occupational Experience

Core Curriculum (37-46 credits)

Basic Competence 0-9

Methods of Inquiry/Ways of Knowing

- a. Fine Arts 6
 - 1. Performance-centered
 - 2. History-centered
 - b. Humanities 6
 - 1. Literature
 - 2. Other Times/Other Cultures
 - c. Social Sciences 6
(Students must take ECON 201 Economics I in addition to another social science course.)
 - d. Natural Sciences 16
- Interdisciplinary course 3

Technical (51 credits)

Required courses (15 credit hours)

- ITP 310 Plant Layout
- ITP 320 Occupational Safety
- ITP 330 Production Control
- ITP 340 Quality Control Fundamentals
- ITP 360 Motion and Time Study

Technical Assessment (36 credit hours)

- ITT 400 Occupational Experience, verified (credits will be determined by rating plan)
- ITT 440 Related Occupational Experiences (two options, total credits to be no more than the difference between those granted for ITT 400 and 36 credits)

Option #1: This course option is designed to permit attendance at an approved industry-sponsored school or seminar for the purpose of providing the student with advanced related occupational or technical training. Courses provided by organizations such as General Motors Training Centers or International Typographical Union qualify under this option.

Option #2: Approved employment with a company may qualify a student under this option. Arrangements must be approved by the advisor in advance. The experiences should provide opportunities for updating occupational technical skills and knowledges. Credit will be determined on the basis of one credit for each three full weeks of employment with a maximum of three credits for each period of approved continuous full-time employment. A daily log, summary, report, and evaluation by a supervisor will constitute part of this option.

For additional information concerning either option of ITT 440, consult your advisor.

Education and Business (30 credits)

Required courses (18 credit hours)

- ITP 300 Modern Industry
- ITP 350 Conference Leading
- ITP 370 Occupational and Trade Analysis
- ACC 201 Principles of Financial Accounting
- BUS 340 Principles of Management
- ECON 202 Principles of Economics II

Professional Concentration (select one area) 12 credit hours

- Area 1 — General
- ACC 202 Principles of Management Accounting

BUS	290	Introduction to Computers in Business
BUS	320	Business Finance
BUS	360	Marketing
Area 2 — Personnel Management		
ACC	202	Principles of Management Accounting
BUS	346	Personnel Management
BUS	348	Industrial Relations
ECON	320	Labor Economics
Area 3 — Accounting		
ACC	301	Intermediate Accounting I
ACC	302	Intermediate Accounting II
ACC	305	Cost Accounting
BUS	320	Business Finance
Area 4 — Marketing and Distribution		
BUS	346	Personnel Management
BUS	360	Marketing
BUS	363	Advertising
BUS	367	Managerial Marketing
Area 5 — Electronics		
EET	051	Analog Systems
EET	061	Digital Systems
EET	071	Micro-Computer Architecture and Design
Area 6 — Computer Science		
CS	160	Structured Problem Solving: PASCAL
CS	161	Algorithms in Programming
CS	250	Introduction to Computer Systems
CS	350	Systems Programming
OR		
CS	358	Data Structures

Bachelor of Science in Vocational/Occupational Education

The number of credits (including the University's Core curriculum) required for the degree: 125.

Core Curriculum (40-49 credits)

Basic Competence	0-9
Methods of Inquiry/Ways of Knowing	
a. Fine Arts	6
1. Performance-centered	
2. History-centered	
b. Humanities	6
1. Literature	
2. Other Times/Other Cultures	
c. Social Sciences	9
(Students must take HRD 333 Human Growth and Development in addition to two other social science courses.)	
d. Natural Sciences	13
Interdisciplinary course	3
Electives	3

Technical Assessment (45 credits)

ITT 400 — Occupational Experience, verified (see below; credits will be determined by rating plan)

ITT 440 — Related Occupational Experiences (two options, total credits to be no more than the difference between those granted for ITT 400 and 45 credits)

Option #1: This course is designed to permit attendance at an approved industry-sponsored school or seminar for the purpose of providing the student with advanced related occupational or technical training. Courses

provided by organizations such as General Motors Training Centers or International Typographical Union qualify under this option.

Option #2: Approved employment with a company may qualify a student under this option. Arrangements must be approved by the advisor in advance. The experiences should provide opportunities for updating occupational technical skills and knowledges. Credit will be determined on the basis of one credit for each three full weeks of employment with a maximum of three credits for each period of approved continuous full-time employment. A daily log, summary report, and evaluation by a supervisor will constitute part of this option.

For additional information concerning either option of ITT 440, consult your advisor.

Professional Education (27 credit hours)

Required Courses: All courses 3 credits except as noted

IEV	305	Curriculum Development in Vocational Education
IEV	310	Methods and Materials of Instruction in Vocational Education
IEV	340	Shop Organization and Management
IEV	350	Philosophy of Vocational Education
IEV	411	Measurement and Evaluation (vocational)
ITP	300	Modern Industry
ITP	370	Occupational and Trade Analysis
EDU	324	Student Teaching/Clinical Experiences (required for all candidates with less than three years of successful teaching experience) — 6 credits

Recommended Electives (all 3 credit courses) — May be elected to meet 125 credit requirement for degree, if needed

IEV	315	Learning and Programmed Instruction
IEV	320	Coordination of Cooperative Education
IEV	330	Principles and Practices of Vocational Guidance
IEV	382	Preparation of Instructional Materials
IEV	420	Trends in Vocational Education
IEV	450	Local Administration and Supervision of Vocational Education
IEV	455	Development of Technical Education
IEV	460	Independent Study in Vocational Education
ITP	350	Conference Leading

Bachelor of Science in Vocational Technology

The number of credits (including the University's Core curriculum) required for the degree: 125.

Core Curriculum (37-46 credits)

Basic Competence 0-9

Methods of Inquiry/Ways of Knowing

- a. Fine Arts 6
 1. Performance-centered
 2. History-centered
 - b. Humanities 6
 1. Literature
 2. Other Times/Other Cultures
 - c. Social Sciences 6
(Students must take ECON 201 Economics I in addition to another social science course.)
 - d. Natural Sciences 13
- Interdisciplinary course 3
Electives 3

Technical Assessment (45 credits)

ITT 400 — Occupational Experience, verified (credits will be determined by rating plan; see below)

ITT 440 — Related Occupational Experiences (two options, total credits to be no more than the difference between those granted for ITT 400 and 45 credits)

Option #1: This course option is designed to permit attendance at an approved industry-sponsored school or seminar for the purpose of providing the student with advanced related occupational or technical training. Courses provided by organizations such as General Motors Training Centers or International Typographical Union qualify under this option.

Option #2: Approved employment with a company may qualify a student under this option. Arrangements must be approved by the advisor in advance. The experiences should provide opportunities for updating occupational technical skills and knowledges. Credit will be determined on the basis of one credit for each three full weeks of employment with a maximum of three credits for each period of approved continuous full-time employment. A daily log, summary report, and evaluation by a supervisor will constitute part of this option.

For additional information concerning either option of ITT 400, consult your advisor.

Education and Business (30 credits)

Required Courses (18 credit hours)

ITP	300	Modern Industry
ITP	350	Conference Leading
ITP	370	Occupational and Trade Analysis
ACC	201	Principles of Financial Accounting
BUS	340	Principles of Management
ECON	202	Principles of Economics II

Professional Concentration (select one area) (12 credits)

Area 1 — General

ACC	202	Principles of Management Accounting
BUS	290	Introduction to Computers in Business
BUS	320	Business Finance
BUS	360	Marketing

Area 2 — Personnel Management

ACC	202	Principles of Management Accounting
BUS	346	Personnel Management
BUS	348	Industrial Relations
ECON	320	Labor Economics

Area 3 — Accounting

ACC	301	Intermediate Accounting I
ACC	302	Intermediate Accounting II
ACC	305	Cost Accounting
BUS	320	Business Finance

Area 4 — Marketing and Distribution

BUS	346	Personnel Management
BUS	360	Marketing
BUS	363	Advertising
BUS	367	Managerial Marketing

ITT 102 Introduction to Technology
An introductory study of industry and technology and their impact on our culture.

Emphasis on the role of industrial education in developing an understanding of basic concepts and functions of industry and technology.

ogy is stressed. The conceptual areas of energy and transportation, manufacturing and construction, and graphic communication are defined and developed. Required for all entering program majors. Lecture and lab. Cr 3.

ITT 211 Electronics Technology

A study of the fundamental concepts of electronics. Laboratory experiences with typical circuits found in power supplies, amplifiers, and receivers. Use of test equipment including meters, the oscilloscope, signal generators and component checkers. Opportunity to practice soldering and printed circuit development is also provided. Cr 3.

ITT 221 Power Technology

Power Technology is designed as an introduction to the broad field of power. Power is examined from the standpoints of generation, transmission, and application. Emphasis will be placed on understanding through study and manipulative experiences in the power laboratory. Experiences will include assembly and disassembly procedures, design and construction, testing, diagnosis, service, power measurements and safety considerations as applied to heat engines. Cr 3.

ITT 231 Technical Graphics

Concepts of spatial relationships and visualizations with related techniques. Basic skill development and understanding taught through freehand illustrations as well as conventional instruments and devices. Multi-view projections, pictorial techniques, primary and secondary auxiliaries, detail and assembly working drawings, and reproduction techniques. Contemporary industrial practices and processes. Cr 3.

ITT 241 Graphic Arts Technology

A study of the common reproduction systems with significance in the graphic arts industries and technology. Designing, composing, reproduction, assembling, and finishing of printed materials utilizing conventional reproduction techniques. Emphasis on letter press, offset lithography, and screen printing, with related experiences in rubber stamp making, block printing, embossing, and photo enlarging. Cr 3.

ITT 251 Metal Technology

A study of metal manufacturing industries. Introduction to concepts of designing, planning, fabrication, finishing, and distribution as they pertain to these industries. Selection, use, and care of equipment. Safety practices. Cr 3.

ITT 261 Wood Technology

A basic course in wood technology, including wood properties, basic hand and machine tool processes, assembly and finishing. Cr 3.

ITP 300 Modern Industry

Evolution and contemporary structure of American industry and its impact upon the social, economic, and cultural environment. Major areas and functions of industry explored include: personnel administration, research and development, production, finance, marketing, and service. Industrial visitations and reports. Cr 3.

ITT 311 Communication Electronics

A detailed study of communication circuits and applications; including receivers, transmitters, antennas, and satellites. Opportunity provided to obtain an Amateur Radio license. Prerequisite: ITT 211 or permission of instructor. Cr 3.

ITT 312 Computer Technology

Study of the function and applications of programmable calculators, micro-processors, and digital computers. Laboratory experiences relating to digital electronics and using the computing facilities of the University. Prerequisite: ITT 211 or permission of instructor. Cr 3.

ITT 313 Electrical Construction

A study of electrical wiring, control circuits and motors, as they relate to industrial and residential applications. Laboratory experiences and field study are used to enhance the student's learning. Prerequisite: ITT 211 or permission of instructor. Cr 3.

ITT 321 Automotive Systems

Automotive Systems is an extension of the basic concepts of power technology as they are applied to the automobile. Automotive technology is examined through analysis of, the operation, and service of electrical and fuel systems. Experiences include testing and measurement as well as overhaul procedures. Includes theory of design, construction, and operation of basic systems in automotive products. Prerequisite: ITT 221 or permission of instructor. Cr 3.

ITT 322 Automotive Diagnosis and Tuneup

Automotive Diagnosis and Tuneup is designed as an in-depth study of automotive ignition and carburetion systems. Theory, operation and testing of ignition, carburetion and pollution control systems is included. Opportunities for independent research and problem solving are provided. Prerequisite: ITT 321 or permission of instructor. Cr 3.

ITT 323 Energy and the Consumer
Designed as an introduction to the efficient use of energy from the consumer standpoint. Areas explored include the use of energy to condition homes, commercial structures and other buildings, as well as the use of power in motive devices. Activities include analysis, testing and owner maintenance of these energy using devices. Prerequisite: ITT 221 or permission of instructor. Cr 3.

ITT 331 Engineering Design Graphics
Engineering Design Graphics will expose the student to contemporary industrial practices and techniques of advanced spatial and dimensional theory utilizing orthographic and pictorial techniques. Emphasis will be on design criteria selection and implementation employing standard scientific procedures. Both individual and team assignments will be used. Prerequisite: ITT 231 or permission of instructor. Cr 3.

ITT 332 Architectural Drawing and Design
Basic architectural design and drawing as related to residential and light construction. A detailed set of plans for a single home will be executed. Construction techniques, environmental considerations, building materials, specifications, costs and financing, codes and zoning, schedules, and architectural models. Prerequisite: ITT 331 or equivalent or permission of instructor. Cr 3.

ITT 342 Photo Offset Lithography
Theory and practice in lithographic and photo-offset printing with emphasis upon camera work, stripping, platemaking, presswork, and finishing. Photographic conversion of line and halftone copy and copy preparation are also included. Prerequisite: ITT 241 or permission of instructor. Cr 3.

ITT 343 Communications Design
An introduction to the principles of layout and design in preparing camera copy for graphic reproduction. Emphasis on design elements and fundamentals, manuscript, and illustration preparation, graphic and photographic techniques, and production specifications. Prerequisite: ITT 241 or permission of instructor. Cr 3.

ITT 351 Machining and Fabrication
A study of metal industries concerned with electric and gas welding and machining techniques. Emphasis on process engineering. Individual and group problems. Laboratory and maintenance practices. Prerequisite: ITT 251 or permission of instructor. Cr 3.

ITT 352 Fabrication and Forming
Concepts, principles and activities in TIG welding, sheet metal fabrication, and casting techniques as they relate to the manufacturing and construction industries. Group and individual problems and activities. Prerequisite: ITT 351 or permission of instructor. Cr 3.

ITT 361 Production Manufacturing in Wood
Production and wood manufacturing problems including production planning, mass production, jigs, fixtures, special machine operations, and advanced finishing techniques. General maintenance procedures on production equipment. Group and individual research assignments and related technical problems. Prerequisite: ITT 260 or permission of instructor. Cr 3.

ITT 362 Residential Construction
A study of the residential construction industries including construction principles; layout, foundation, framing, exterior covering, and finish. Related areas of services, plot planning, earth-moving principles considered in research activities. Group and individual problems. Prerequisite: ITT 261 or permission of instructor. Cr 3.

ITT 363 Wood Science
Wood anatomy and identification experiences leading into a study of the properties of wood, wood-liquid relations, bonding and finishing of wood, and machining as they relate to the manufacturing processes. Prerequisite: ITT 261 or permission of instructor. Cr 3.

ITT 300 Crafts Technology
Design and manufacture of products utilizing ceramics, leather, plastics, art metals, and other craft materials. Examination of artistic crafts for leisure-time activities and for adult programs. Individual and group research and problem solving. Prerequisite: ITT 251 and 261, and permission of instructor. Cr 3.

ITT 271 Plastics Technology
A study of plastics as a material and the basic industrial process used to produce plastic products. Included are basic polymer chemistry, injection molding, extrusion, blow molding, compression and transfer molding, thermoforming, roll forming, lamination, casting, expansion, thermofusion, fabrication and bonding, product applications, mold design and construction. Cr 3.

ITT 413 Instrumentation and Process Control

A study of instruments and sensing devices used to observe and/or control processes in our industrial society. Laboratory and field experiences to research and/or construct an instrument of interest to the student. Prerequisite: ITT 211 or permission of instructor. Cr 3.

ITT 414 Digital Electronics

A study of the fundamentals of digital logic and logic systems. Laboratory experiences with typical circuits using semiconductor devices, including diodes, transistors and integrated circuits. Prerequisite: ITT 211 or permission of instructor. Cr 3.

ITT 423 Fluid Power

A study of fluids at work. Investigation of the theory and application of hydraulics and pneumatics in mechanics and industry. Design, construction, and maintenance of fluid power devices and systems. Cr 3.

ITT 424 Fluid Power Systems

Application of fluid power and fluidic systems to manufacturing and construction industries. Prerequisite: ITT 423 or permission of instructor. Cr 3.

ITT 434 Industrial Production Illustration

Principles and techniques employed by contemporary industry to graphically describe industrial products, technical concepts, and service information. The media range will include chalk, ink, pencil, charcoal, water color, tempera, pressure sensitive transfer symbols, and various methods of graphic reproduction. Engineering and architectural problems. Prerequisite: ITT 331 or permission of instructor. Cr 3.

ITT 435 Systems Analysis and Design

Research applied to solving basic engineering problems. Contemporary systems of analysis and design. Economic factors, resource utilization, planning, design, model construction, follow-up studies and evaluation techniques applied to specific practical problems. Prerequisite: ITT 331 or permission of instructor. Cr 3.

ITT 444 Photographic Reproduction

Photographic concepts, processes, and techniques utilized in graphic reproduction. Experience in contact printing, continuous tone enlarging, duotones, posterization, and color separation. Prerequisite: ITT 241 or permission of instructor. Cr 3.

ITT 452 Metallurgy and Metrology

The technology of metallurgy and metrology. Heat treatment, powdered metals,

machining and inspection of metal parts. Individual and group activity. Prerequisite: ITT 250 or permission of instructor. Cr 3.

ITT 482 Materials Testing

Industrial techniques involved in the analysis of the physical properties of materials and their utilization in the manufacturing and construction industries. Emphasis on research and experimentation. Individual and team activities. Prerequisite: ITT 361 or 351 or permission of instructor. Cr 3.

ITT 490 Special Problems in Industrial Arts

Provides upper-level students an opportunity to pursue independently a topic, project, or experiment of interest. Students will prepare a contract or proposal for study to be conducted and, upon completion, submit findings in a scholarly report or other evidence of merit. Cr 3.

IEA 190 Preprofessional Field Experiences

Provides an exploratory opportunity in public/private school or educative agencies to assist students in becoming acquainted with the teaching profession and to examine various options in the field of industrial arts. Cr 2.

IEA 290 Contemporary Teaching in Industrial Education

This course is designed to develop verbal communication skills in the field of Industrial Arts. Basic understanding of related terminology in Industrial Education will be emphasized. Students will become knowledgeable of contemporary Industrial Arts programs at the elementary, junior high, and senior high school levels. Prerequisites: IEA 190. Cr 2.

IEA 380 Curriculum Materials in Industrial Arts

Development of curriculum materials for contemporary programs in Industrial Arts. Emphasis on unit preparation, performance-based objectives, and task analysis essential for identifying content and an effective instructional delivery system. Individualized and class instruction. First of a two-course sequence prior to student teaching. Prerequisites: 100/200 level technical core, ITP 300, 2.5 GPA and recommendation of faculty. Cr 3.

IEA 381 Methods of Teaching Industrial Arts

Utilization of prepared plans for micro- and participation-teaching. Instructional media preparation and utilization. Audio and video tape presentations and critiques. Introduction to criterion-referenced evaluation techniques. Safety principles and class-

room control stressed. Basic organization and administration procedures for implementing a modern program of Industrial Arts. Orientation to student teaching. Prerequisites: 100/200 Level Technical core, ITP 300, 2.5 GPA and recommendation of faculty. Cr 3.

ITP 360 Motion and Time Study

A study of techniques to utilize available resources (men, material, machines and facilities) in the most effective and economical manner giving full recognition to the human factors involved in engineering work methods and time measurements. Cr 3.

ITP 310 Plant Layout and Material Handling

A study of materials flow, layout production, assembly and service departments, manufacturing, buildings, service departments, handling equipment, and packaging techniques. Cr 3.

ITP 320 Occupational Safety

Theory of industrial safety with emphasis on fundamental concepts in the industrial environment. Emphasis will be placed on the psychological, sociological and physiological aspects of industrial safety. Consideration will be given to OSHA and its impact on the work environment. Cr 3.

ITP 330 Production Control

Production control as a system, types of process organization, planning and scheduling, inventory control, forecasting production control and production planning. Some of the techniques developed in Operational Research will be used to solve problems in Production Control. Cr 3.

ITP 340 Quality Control Fundamentals

An overview of fundamental concepts and principles of quality control. The course will cover techniques utilized from the simplest products test to process control engineering and will include incoming material control, inspection sampling and quality control management. The course will cover practical application for installing quality control systems using actual case studies developed by participants. Cr 3.

ITP 370 Occupational and Trade Analysis

Identification of occupational or trade fields, units, operations, and items of related information. Cr 3.

IEV 305 Curriculum Development in Vocational Education

This course is concerned with developing specific course content from an occupational analysis. The identification of educational needs and objectives precedes the selection

and organization of relevant matter. Prerequisite: ITP 370. Cr 3.

IEV 310 Methods and Materials of Instruction in Vocational Education

This course treats the general and specific materials and methods of teaching vocational courses. Deals with both the theoretical and practical aspects. Prerequisites: ITP 370 and IEV 305. Cr 3.

IEV 312 Teaching Students With Special Needs

A course designed for vocational educators who need to learn how to serve handicapped, disadvantaged and gifted youth. It is structured to aid vocational teachers in working with special education personnel and to provide skills needed in planning instruction for students with special needs. Cr 3.

IEV 315 Learning and Programmed Instruction

The first application of the laboratory and scientific study of the learning process, including the principles of learning which are derived from experimental study and which have provided a foundation for advances in the techniques of learning. Cr 3.

IEV 320 Coordination of Cooperative Education

The role of the coordinator in organizing and conducting a program of work-study experience in high school. Introduction to cooperative half-time training, community survey, advisory committees, laws and regulations; and examination of the responsibilities and activities of the coordinator. Cr 3.

ITP 350 Conference Leading

A course in philosophy and techniques of organizing and conducting successful conferences. Each participant will assume the responsibility of planning and leading a simulated conference. Cr 3.

IEV 330 Principles and Practices of Vocational Guidance

Discussion and study with the intent to develop a better understanding of principles and objectives of vocational guidance. Cr 3.

IEV 331 Practicum - Vocational Guidance

Field experiences in identification of content and relevant information for vocational counseling. Individual and group activity, visitations, tours, and career counseling techniques. Cr 3.

IEV 340 Shop Organization and Management

Basic principles of planning, organizing and managing an industrial or technical shop or

laboratory. Selection and arrangement of equipment including specification writing. Control of personnel for efficient shop management. Prerequisite: IEV 310 Cr 3.

IEV 350 Philosophy of Vocational Education
A survey of the history and philosophy of vocational education in the United States with emphasis upon recent developments. Cr 3.

IEV 382 Preparation of Instructional Materials

A lecture-laboratory series which involves students in the creation of instructional materials. Techniques include the dry mounting of flat pictorial materials, cloth backing of pictorial materials, professional-quality lettering, rudimentary photography and processing (including use of the dark-room), and the production by several techniques of transparent projectuals. Cr 3.

ITT 400 Trade Experience, Verified
(see ITT 440, Option No. 2 below.)
(Credits will be determined by rating plan.)

IEV 411 Measurement and Evaluation in Vocational Education

The construction, selection, and use of achievement and performance tests in industrial-technical education. Skill in writing test items is developed. Elementary statistics for the industrial-technical instructor, including grading, are stressed. Prerequisites: ITP 370 and IEV 310. Cr 3.

IEV 420 Trends in Vocational Education
Identification, analysis, and discussion of major problems and trends in vocational education. Cr 3.

ITT 440 Related Occupational Experiences
(Two options, total credits to be no more than the difference between those granted for ITT 400, and 45 credits.)

OPTION NO. 1

This course option is designed to permit attendance at an approved industry-sponsored school or seminar for the purpose of

providing the student with advanced related occupational or technical training. Courses provided by organizations such as General Motors Training Centers, or International Typographical Union, qualify under this course option.

OPTION NO. 2

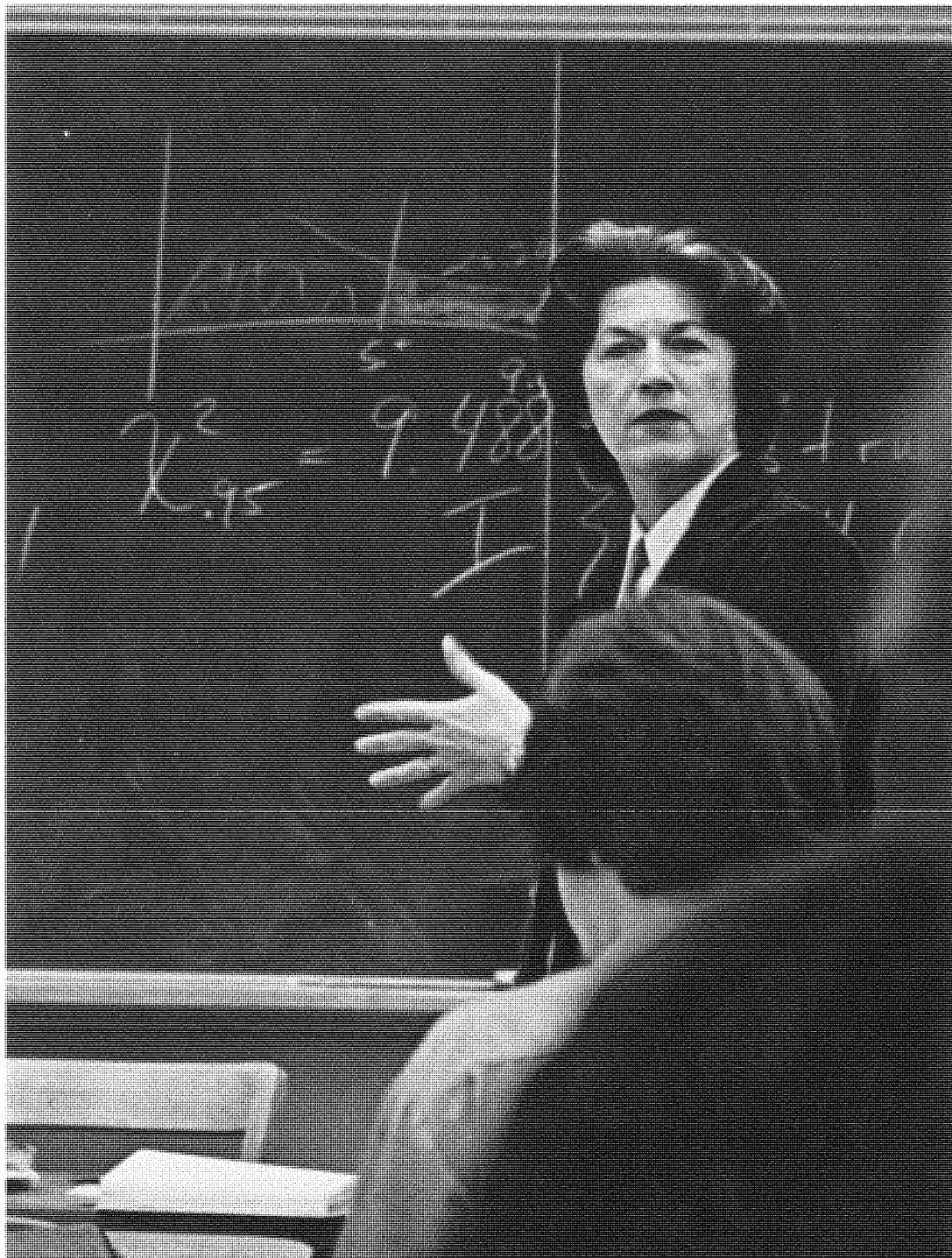
Approved employment with a company may qualify a student under this option. Arrangements must be approved by the adviser in advance. The experiences should provide opportunities for updating technical skills and knowledge. Credit will be determined on the basis of one credit for each two full weeks of employment with a maximum of five credits for each period of approved continuous full-time employment. A daily log, summary report and evaluation by an industrial supervisor will constitute part of this option.

For additional information concerning either option of ITT 440, consult your advisor.

IEV 450 Local Administration and Supervision of Vocational Education
Procedure and practices utilized in establishing, promoting, coordinating, supervising, controlling vocational programs on the local level. Cr 3.

IEV 455 Development of Technical Education Programs
Planning and development of technical education programs including the determination of needs and organization of programs for secondary and post-secondary schools. Cr 3.

IEV 460 Independent Study in Vocational Education
An opportunity to pursue independently, a topic, project, or experiment of interest. Students will prepare a contract or proposal for study to be conducted and, upon completion, submit findings in a scholarly report or other evidence of completeness. Permission of advisor. Cr 3.



School of Business, Economics and Management

Dean: Duane R. Wood

Department of Business Administration

Chair: Richard J. Clarey, 417 Research Center, Portland
Professors: Findlay, Neveu, Sturner, Wood; *Associate Professors:* B. Andrews, Chandler, Clarey, Hodson, Houlihan, Jagolinzer, Potts; *Assistant Professors:* Boyle, H. Parsons, Sanders

Department of Associate Business Administration

Chair: Jean E. Gutmann, 118 Bedford Street, Portland
Professor McKeil; *Associate Professors:* Aiello, S. Andrews, Gold, Gutmann, Purdy; *Assistant Professors:* Coit, Kim, Lohmeyer

Department of Economics

Chair: Robert C. McMahon, 227 Bonney Hall, Portland
Professor Durgin; *Associate Professors:* Bay, McMahon, Medley; *Assistant Professor* Phillips

The School of Business, Economics and Management offers a number of different programs to meet student needs. The School offers a two-year program in business administration leading to an associate of science in business administration degree. Four-year undergraduate programs are available in three areas of study: accounting, business administration, and economics. Upon successful completion of one of these fields the degree of bachelor of science in business administration or economics is awarded. The School also provides a graduate program leading to the degree of master of business administration (See Graduate Catalog for information).

Programs and Requirements

Associate of Science in Business Administration

The associate program in business administration is designed to prepare students who wish to complete their education in two years for employment in junior management positions in several different careers; and to provide a sound foundation for those students who perform well and who wish to transfer to a baccalaureate program in business administration at this University or other institutions.

Associate degree graduates are equipped for employment at the junior management level in many fields of business. Some fields of business that graduates have entered are accounting, bookkeeping, business computers/data processing, sales, retailing, banking, finance, real estate, hospitality services, and management trainee programs.

While the program emphasizes business, it contains courses in liberal arts including English, fine arts, social science, humanities, and mathematics. Options within the associate program include accounting; business computer programming; management; marketing; hotel, motel and restaurant; and real estate.

The hotel, motel, and restaurant option is a cooperative, two-year program developed jointly by Southern Maine Vocational Technical Institute and the A.B.A. program. The third semester is offered only on the SMVTI campus in their Culinary School. Students are enrolled at the University but attend at SMVTI and must provide their own transportation. Students must return to the University campus to complete the fourth semester.

Admission Requirements

Any high school student may seek admission to the two-year associate degree program. A college preparatory background, while desirable, is not necessary. Applicants should complete the University of Maine application and specify the associate in business administration program. Candidates also must complete the Scholastic Aptitude Test.

Students admitted to the University will be admitted to the School of Business, Economics and Management as pre-associate degree students provided the student has completed at least 23 semester hours with a minimum accumulative grade point average of 2.00, and has completed the following set of courses with a minimum accumulative grade point average of 2.00: ABUS 101; ABUS 102; ABUS 111; ABUS 112; MS 010 or MS 011 or MS 109; ENG 100.

An application for admission to the associate degree program should be completed and returned to the Dean's Office, School of Business, Economics and Management. An official transcript of credits earned at the University of Southern Maine and/or a copy of the transfer credit evaluation from other colleges or universities must be submitted with the application.

Although actual admission will not be approved until completion of at least 23 semester hours, required prerequisites, and required grade point averages, students may apply and be admitted pending completion of the current semester's work. These students will be allowed to register early for the following term. If admission requirements are not completed, their admission will be revoked and any enrollments in 200-level or above courses in the School of Business, Economics and Management will be cancelled.

Students who have not been admitted to an associate degree program within the School will be allowed to enroll in associate business courses on a space-available basis according to the following criteria: they have declared a major which requires the course in its curriculum; they are admitted to a baccalaureate program within the School of Business, Economics and Management (baccalaureate students will not receive credit for these courses toward their degree requirements except by prior approval of the Dean); they are admitted to the University as degree candidates (baccalaureate students will not receive credit for these courses toward their degree except by approval of their Dean); they are non-degree students.

Associate of Science in Business Administration

The minimum number of credits required for the degree: 60.

Basic Requirements (18 credits)

ENG	100	College Writing
ENG	019	Written Business Communication
MS	010	Elementary Algebra and MS 011 Intermediate Algebra

OR

MS	011	Intermediate Algebra and MS 109 Linear Systems
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OR

MS	109	Linear Systems and MS 110 Elementary Mathematical Analysis
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Humanities Elective or Fine Arts Elective
Social Science Elective

Required Courses (27 credits)

ABUS	101	Principles of Economics I
ABUS	102	Principles of Economics II

ABUS	111	Principles of Accounting I
ABUS	112	Principles of Accounting II
ABUS	190	Introduction to Computers in Business
ABUS	220	Business Finance I
ABUS	240	Principles of Management
ABUS	260	Marketing
ABUS	280	Business Law
Associate Business Administration Options (15 credits)		
Accounting Option		
ABUS	211	Financial and Managerial Accounting I
ABUS	212	Financial and Managerial Accounting II
ABUS Program Electives		
General Elective		
Business Computer Programming Option*		
ABUS	291	Cobol I: Application and Documentation
ABUS	292	Cobol II: Advanced Programming Application
ABUS	294	RPG Programming
ABUS	295	Data Design and Handling
ABUS	296	Business Information Systems
Business Management Option		
ABUS	243	Problems in Small Business
ABUS	253	Human Relations in Business
ABUS Program Elective		
General Elective		
Business Marketing Option		
ABUS	243	Problems in Small Business
ABUS	264	Retailing
ABUS	267	Sales Management
ABUS Program Elective		
General Elective		
Hotel, Motel and Restaurant Option SMVTI Semester		
Front Office Management		
Hotel Law		
Food Fundamentals		
Food and Beverage Control		
Quality Food		
Real Estate Option		
ABUS	221	Principles of Real Estate
ABUS	222	Real Estate Law
ABUS	224	An Introduction to Appraising Real Property
ABUS	226	Principles of Real Estate Finance
General Elective		

*To be admitted to this option, a student must be admitted to the associate business administration program, plus earn a 3.10 grade point average in ABUS 190 and ABUS 291.

Courses to fulfill the ABUS program electives required in some options above are to be selected from the following:

ABUS	100	Introduction to Business
ABUS	211	Financial and Managerial Accounting I
ABUS	212	Financial and Managerial Accounting II
ABUS	221	Principles of Real Estate
ABUS	222	Real Estate Law
ABUS	224	Introduction to Appraising Real Property
ABUS	226	Principles of Real Estate Finance
ABUS	227	Investment Management
ABUS	243	Problems in Small Business
ABUS	253	Human Relations in Business
ABUS	264	Retailing
ABUS	267	Sales Management
ABUS	291	Cobol I: Application and Documentation

ABUS	292	Cobol II: Advanced Programming Application
ABUS	294	RPG Programming
ABUS	295	Data Design and Handling
ABUS	296	Business Information Systems
ACC	202	Principles of Management Accounting
ACC	301	Intermediate Accounting I
BUS	190	Personal Finance
BUS	290	Introduction to Computers in Business
MS	109	Linear Systems
MS	110	Elementary Mathematical Analysis
MS	211	Probability
MS	212	Statistics

Baccalaureate Programs in Business Administration and Economics

The primary objective of the undergraduate baccalaureate program in business administration is to develop the student's abilities to assume the responsibilities of management. The program aims at developing skills and an attitude of mind that will enable the student to cope successfully with the changing problems of management in the years ahead.

The program is implemented in three phases. First, the student acquires broad training in the arts and sciences for the necessary foundation upon which his or her future education will build. Second, the student pursues a program of study designed to provide an understanding of the major functional areas common to most business operations and knowledge of certain fields which are particularly relevant to the study of management. This is referred to as the "core" program and includes basic courses in accounting, introduction to computers, economics, finance, business law, marketing, management, operations research, and production/operations 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 21 credit hours beyond the core program.

The undergraduate program in economics provides a broad preparation for a variety of careers as well as for graduate study in economics, business administration, or law. Economics is a social science and as such must be studied in the perspective of a broad training in the liberal arts and sciences. Within the economics program, courses are available in such fields as: economics analysis, quantitative methods, international economics, and the economics of monetary and fiscal policy.

Applied Studies

Within the four-year programs in accounting, business administration, and economics, the following opportunities are available.

Cooperative Education Program The School of Business, Economics and Management offers a Cooperative Education Program in which students, while working in business or industry, may earn a maximum of 15 academic credits. This program combines the efforts of employers and educators in forming an educational experience in a wide range of areas including management, accounting, production, and marketing. Firms engaged in the Cooperative Education Program represent such fields as banking, public utilities, manufacturing, retailing, and public accounting. Its primary value is educational, although it does provide the opportunity for students to earn money for college expenses. Students who desire further information should contact the office of the Dean.

Small Business Institute The School of Business, Economics and Management, through the Small Business Development Center, sponsors a program called the Small Business Institute. Juniors and seniors are selected to provide management counseling to the area's small businesses. Under the program, students counsel and advise, in cooperation with a faculty advisor and representatives of the Small Business Administration, various businesses within southern Maine. The program provides an opportunity for relevant practical

application of academic principles. Students may be involved in consulting in such areas as accounting, finance, management, and marketing. The course carries three hours of academic credit.

Double Majors Students may elect to complete the requirements for a double major in accounting and economics or in business administration and economics. Students may not seek a double major in accounting and business administration.

Admissions Requirements

To be admitted to a baccalaureate degree program within the School of Business, Economics and Management, a student must be admitted to the University and have completed at least 53 semester hours with a minimum accumulative grade point average of 2.00, and have completed one of the following set of courses, depending upon the designated major, with a minimum accumulative grade point average of 2.00.

Accounting Major: ACC 201, ACC 301, BUS 280, BUS 290, ECON 201, ECON 202, MS 109, MS 110

Business Administration Major: ACC 201, ACC 202, BUS 280, BUS 290, ECON 201, ECON 202, MS 109, MS 110

Economics Major: ACC 201, ECON 201, ECON 202, MS 109 and MS 110 or MS 152 and MS 153

An application for admission to the baccalaureate degree program in the School of Business, Economics and Management should be completed and returned to the Dean's Office. An official transcript of credits earned at the University and/or a copy of the transfer credit evaluation from other colleges or universities must be submitted with the application.

Although actual admission will not be approved until completion of at least 53 semester hours, required prerequisites, and achievement of required grade point averages, students may apply and be admitted pending completion of the current semester's work. These students will be allowed to register early for the following term. If admissions requirements are not met, their admission will be revoked and any enrollments in 300-level or above courses in the School of Business, Economics and Management will be cancelled.

Students who have not been admitted to a baccalaureate degree program within the School will be allowed to enroll in 300-level or above courses on a space-available basis (except for required 300-level courses for students admitted to the associate business degree program) according to the following priorities: they have declared a major which requires the course in its curriculum; they have declared a minor in the Department of Economics (applies to Economics courses only); they are juniors or seniors admitted to the University as degree candidates; they are non-degree students.

Transfer from an Associate to a Baccalaureate Program

To be admitted to a baccalaureate degree program within the School of Business, Economics and Management from an associate degree program, a student must have: completed at least 53 semester credit hours with a minimum accumulative grade point average of at least a 2.40 in all associate business (ABUS) courses and in all associate-level courses, and at least a 2.00 in all baccalaureate-level courses.

The student must also have completed one of the following sets of courses or their equivalents depending upon the desired major:

Accounting Major: ACC 201, ACC 301, BUS 280, BUS 290, ECON 201, ECON 202, MS 109, MS 110.

Business Administration Major: ACC 201, ACC 202, BUS 280, BUS 290, ECON 201, ECON 202, MS 109, MS 110.

Economics Major: ACC 201, ECON 201, ECON 202, MS 109 and MS 110 or MS 152 and MS 153.

All baccalaureate courses (not associate business, ABUS, or associate level) must be completed with at least a 2.00 accumulative grade point average. Associate business (ABUS) courses must be completed with a minimum grade

of C- to be considered equivalent to ACC 201, ACC 202, BUS 280, ECON 201, and ECON 202.

To be admitted from an associate degree program to baccalaureate status as a pre-business, economics and management student, an individual must have completed at least 15 semester credit hours and no more than 53 semester credit hours with an accumulative grade point average of at least a 2.40 in all associate business (ABUS) courses and in all associate level courses and at least a 2.00 in all baccalaureate level courses.

For those baccalaureate courses (not associate business, ABUS, or associate level) listed below which have been completed, at least an accumulative grade point average of 2.00 must be earned. Associate business (ABUS) courses must be completed with a minimum grade of C- to be considered equivalent to ACC 201, ACC 202, BUS 280, ECON 201, and ECON 202.

ACC 201, ACC 202, ACC 301, BUS 280, BUS 290, ECON 201, ECON 202, MS 109, MS 110, MS 152, MS 153

From the time of admission to baccalaureate status as a pre-business, economics, and management student, an individual must fulfill the remaining criteria for admission to a major in the same manner as any other baccalaureate student.

Degree Requirements

All students must complete at least 120 credit hours of coursework. To be eligible for the B.S. degree, a student must have attained an accumulative grade point average of 2.00 or higher in all courses taken in baccalaureate programs at the University and in all baccalaureate programs in accounting (ACC), business (BUS), and economics (ECON).

Bachelor of Science in Business Administration

The number of credits (including the University's Core curriculum) required for the major: 120.

Core Curriculum Requirements (28-31 credits)

Basic Competence

1. English Composition*
2. Skills of Analysis/Philosophy
3. Quantitative Decision Making (this requirement will be fulfilled by taking the mathematics courses noted below under Supplementary Requirements.)

Methods of Inquiry/Ways of Knowing

1. Fine Arts
 - a. Performance-centered arts
 - b. History-centered arts
2. Humanities
 - a. Literature
 - b. Other Times/Other Cultures
3. Social Science (not to include ECON courses)
4. Natural Science

Interdisciplinary CORE course

Supplementary Requirements (18 credits)

Mathematics 12 credits

(Students must take MS 109, MS 110, MS 211, & MS 212)

Social Science 6 credits

Requirements in Business and Economics (33 credits)

Economics

ECON 201 Principles of Economics I

ECON 202 Principles of Economics II

300-level or above ECON courses

Business

ACC 201 Principles of Financial Accounting

BUS 280 Business Law

BUS 290 Introduction to Computers in Business

BUS	320	Business Finance
BUS	340	Principles of Management
BUS	360	Marketing
BUS	371	Operations Research/Management Science
BUS	375	Production/Operations Management

Major Field Requirements (21 credits)

Accounting Major

ACC	301	Intermediate Accounting I
ACC	302	Intermediate Accounting II
ACC	303	Intermediate Accounting III
ACC	305	Cost Accounting
ACC	313	Federal Tax Reporting
ACC	401	Advanced Accounting I
ACC	410	Auditing

Business Administration Major

ACC	202	Principles of Management Accounting
BUS	327	Investment Management
BUS	450	Business Management and Policy
BUS	367	Managerial Marketing
BUS	452	Organizational Behavior

300-level or above ACC, BUS, or ECON electives

Electives (17-20 credits)

*Students who fulfill the English Composition Competence of the Core curriculum without earning credits must complete 3 credits of humanities electives (CLS, ENG, FRE, GMN, GRK, LAT, PLY, SPN).

Bachelor of Science in Economics

The number of credits (including the University's Core curriculum) required for the major: 120.

Core Curriculum Requirements

Basic Competence (28-31 credits)

1. English Composition*
2. Skills of Analysis/Philosophy
3. Quantitative Decision Making (This requirement will be fulfilled by taking the mathematics courses noted below under the supplementary requirements.)

Methods of Inquiry/Ways of Knowing

1. Fine Arts
 - a. Performance-centered arts
 - b. History-centered arts
2. Humanities
 - a. Literature
 - b. Other Times/Other Cultures
3. Social Science (not to include ECON courses)
4. Natural Science

Interdisciplinary CORE course

Supplementary Requirements (12 credits)

Mathematics: Students must take MS 109, MS 110, MS 211, and MS 212. An optional, more rigorous mathematics sequence is available to those students who desire it. Students who wish to take MS 152 Calculus A and MS 153 Calculus B can substitute those two courses for MS 109 and MS 110. They must still take MS 211 and MS 212.

Requirements in Economics and Business (36 credits)

Business

ACC	201	Principles of Financial Accounting
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Economics

ECON	201	Principles of Economics I
ECON	202	Principles of Economics II
ECON	301	Macroeconomic Analysis
ECON	302	Microeconomic Analysis

ECON electives which may include GEOG 303 and HIST 338
Electives (41-44 credits)

*Students who fulfill the English Composition Competence of the Core curriculum without earning credits must complete 3 credits of humanities electives (CLS, ENG, FRE, GMN, GRK, LAT, PLY, SPN).

Minor in Economics

A minor in economics is available to students in any major within the University. A description of requirements follows.

To gain admission, students must be in good standing at the University and submit a signed Economics Minor Authorization Form to the Dean of the School of Business, Economics and Management. The 21 credit hours below must be completed with at least a 2.00 accumulative grade point average: ECON 201; ECON 202; ECON 301; ECON 302; MS 120; MS 362; and six additional credits of 300-level or above ECON electives.

Minor in Mathematics

In cooperation with the Department of Mathematics and Computer Science, a minor in mathematics is available to all economics majors. The optional mathematics minor is: 21 credit hours (not to include statistics courses), with 12 of the credit hours in MS 152, 153, and 252. The remaining 9 credit hours are to be selected from the following: MS 290, MS 352, MS 354, MS 366, MS 380, MS 460; CS 260.

Master of Business Administration

The School offers a master of business administration degree. For those interested in this program a separate brochure is available at the School of Business, Economics, and Management office. Please refer to the Graduate Catalog for further information.

Associate Degree Program

ABUS 100 Introduction to Business

An examination of the significant relationships between business and the social, political, and economic environment of our society for the purpose of evaluation of goals, values, ethics, and practices in the business world. Historical development of business and capitalism is covered. The industrial and commercial structures and functions in our society are described. Social relationships internal to the firms are explored. Special problems concerning mass production, automation, and employment are discussed along with other current and future issues and problems related to business and our society.

Cr 3.

ABUS 101 Principles of Economics I

A theoretical analysis of the basic characteristics, institution, and operational activities of a modern capitalistic economy which is involved in the transformation of scarce economic resources into the goods and services demanded by consumers. Topics discussed include inflation, unemployment, government monetary and fiscal policy to achieve full employment, and economic growth.

(Cannot be applied toward Core Curriculum Requirement in Social Science) Cr 3.

ABUS 102 Principles of Economics II

A theoretical analysis of the firm, and its role in the transformation of scarce economic resources into the goods and services demanded by consumers. Special attention is focused on the development of a market mechanism for the exchange of goods, services, and resources within a capitalistic economy. Topics discussed include consumer preferences and consumer behavior, production theory and production costs, the monopoly firm, and resource pricing. (Cannot be applied toward Core Curriculum Requirement in Social Science).

Cr 3.

ABUS 111 Principles of Accounting I

An introduction to the accounting cycle, working papers, and financial statements. A practical emphasis on accounting methodology with coverage of inventory control, cash control, depreciation of plant assets and payroll.

Cr 3.

ABUS 112 Principles of Accounting II

A study of the procedures of accounting for

owner's equity, long-term investments and the cost of manufacturing goods. the proprietorship, partnership, and corporation accounting techniques are developed in a practical approach. Prerequisite: ABUS 111. (not for SBEM baccalaureate) Cr 3.

ABUS 190 Introduction to Computers in Business

This course focuses on the role of the computer as an aid in managerial decision making. Computer operation and programming fundamentals including flowcharting and program writing in one of the common computer programming languages emphasizes business applications. Provides a basic knowledge of computer concepts; "hands on" problem solving with the computer; and the impact of computers on the business world. Required for ABA program. Transfers to baccalaureate program, but does not replace BUS 290. Cr 3.

ABUS 211 Financial and Managerial Accounting I

A detailed study of such accounting topics as special journals, subsidiary ledgers, voucher register, financial statements, inventory, depreciation, payroll and computer applications with an emphasis upon the practical aspect of accounting procedures. Prerequisites: ABUS 111, ABUS 112. Cr 3.

ABUS 212 Financial and Managerial Accounting II

The course deals with the uses of accounting data for financial and management control. Topics include the analysis of costs, the preparation of comprehensive budgets, and the study of decision-making processes. Prerequisites: ABUS 211. Cr 3.

ABUS 220 Business Finance I

A study of the promotion, organization, and financing of the single proprietorship, partnership, and corporation. Such topics as fund flows, ratio analysis, breakeven analysis and leverage, time value of money concepts, cost of capital and capital budgeting are examined. Prerequisites: ABUS 101, ABUS 102 ABUS 111 and ABUS 112. Cr 3.

ABUS 221 Principles of Real Estate

An overview of real estate fundamentals, including rights and interests in land; forms of ownership; contracts; records, and forms; taxes and assessments; appraisals; insurance; brokerage; property management; and land-use control. Cr 3.

ABUS 222 Real Estate Law

A study of real property law in general and Maine law in particular, land titles, acquisi-

tion and transfer, methods of ownership, rights of husband and wife, rights of landlord and tenant, easements, fixtures, land descriptions, mortgages, deeds, taxes, contracts, legal elements of brokerage relationship, selected environmental and land use regulations, coastal island registry, physical regulations of subdivisions, zoning and selected federal laws. (Completion of this course with a grade of 75, or better, provides one-third of an approved course of study for those who wish to prepare for the State of Maine real estate brokers license examination.) Offered only in the evening. Cr 3.

ABUS 224 An Introduction to Appraising Real Property

This is an intensive course covering all real property appraising concepts and the technical skills employed in their applications to residential property. The course is designed for the beginning appraiser, real estate broker, lender, builder, and assessor. Included is a summary introduction to real estate economics and urban land studies. This is the first of three courses accepted by the Society of Real Estate Appraisers for credit toward a professional designation. Offered only in the evening. Cr 3.

ABUS 226 Principles of Real Estate Finance

Methods of financing various types of real estate including sources of funds, analysis of lenders, risks, types of loans, government influences and participation, financing instruments, loan processing, defaults and foreclosures. Offered only in the evening. Cr 3.

ABUS 227 Investment Management

Provides the planning and management of investment programs for all types of investors. Evaluates the various media of investments in terms of their risks and profits. The functions of the stock market and its behavior are examined. Prerequisites: ABUS 101, ABUS 102, ABUS 111, and ABUS 112. Cr 3.

ABUS 240 Principles of Management

A comprehensive survey of all phases of the management of industrial and business enterprises. The influence of industrial relations is interspersed with the treatment of management's technical problems. Prerequisites: ABUS 101, and ABUS 102. Cr 3.

ABUS 243 Problems In Small Business

A study of the aspects of management that relate most specifically to the management of small business. The course covers areas of business planning, development, and operation which the prospective owner/manager

must consider seriously early in his/her thinking. During the course each student will develop a comprehensive small business plan. Prerequisites: ABUS 102, ABUS 111, ABUS 112, ABUS 260. Cr 3.

ABUS 253 Human Relations in Business

Introduction to the behavioral sciences, emphasizing typical behavioral problems faced in business by employees and management. Lectures, case analysis, and outside readings are supplemented by involving the student in role playing and analyzing collected data. Prerequisite: ABUS 240. Cr 3.

ABUS 260 Marketing

A study of the marketing organization with a focus on product policies, distribution policies, promotional and pricing policies. Market research is implemented by getting students involved in casework, controversial issues, and local business community projects. Prerequisites: ABUS 102. Cr 3.

ABUS 264 Retailing

Study of the retail distribution structure and of the problems involved in successful store operation under current conditions. Prerequisites: ABUS 260. Cr 3.

ABUS 267 Sales Management

Analysis of the problems facing marketing management in formulating sales policy and in managing the sales organization. Prerequisite: ABUS 260. Cr 3.

ABUS 280 Business Law

This course, an introduction to the study of business law, includes origins of the law, the conduct of a civil lawsuit, contract, agency, and property law, the law of negotiable instruments and secured transactions, and an overview of partnership and corporation law. Cr 3.

ABUS 291 COBOL I: Applications and Documentation

An introduction to programming in the COBOL language, it includes practice in the

structure, rules, and vocabulary of COBOL using exercises in structured problem analysis, program specification techniques, and coding. Programs will focus on simple business problems and generally accepted business procedures. Prerequisites: ABUS 111, ABUS 190 or permission of the Dean. Cr 3.

ABUS 292 COBOL II: Advanced Program Applications

It emphasizes applying the techniques for developing and documenting a complete business program. Major focus will be on data design, structured programming, output formats, and program optimization. Prerequisites: A 3.1 accumulative grade point average in ABUS 190 and ABUS 291 or permission of the Dean. Cr 3.

ABUS 294 RPG Programming

An introduction to programming in the RPG language, its focus is on the use of RPG to manipulate files in the process of producing necessary business reports. Programming assignments will focus on report specifications, file handling, and editing. Prerequisites: ABUS 111, ABUS 190 or permission of the Dean. Cr 3.

ABUS 295 Data Design and Handling

This course covers the techniques for the effective management of data in a business information system. Content includes I/O hardware, file formats, access methods, fixed and variable fields, searching, sorting sequencing, labelling, directories, and data base concepts. Prerequisite: ABUS 292. Cr 3.

ABUS 296 Business Information Systems

The purpose of this course is to develop an understanding of the interrelationships and requirements for an integrated business data processing system in order to provide accurate and timely management information. It examines the most common business applications. Prerequisites: ABUS 240, ABUS 292 or permission of the Dean. Cr 3.

Baccalaureate Program

ACC 201 Principles of Financial Accounting

An introduction to accounting principles and concepts. Emphasis is placed on understanding financial statements and the accounting for assets, liabilities, equities, revenue and expenses. Cr 3.

ACC 202 Financial and Management Accounting

(This course is designed for non-accounting

majors.) It deals with the selection and preparation of information which will serve to support and assist management in planning and controlling a firm's operations: the emphasis is on information needs for management decision-making. Included are analysis of financial statements, changes in financial position, cost-volume-profit analysis, budgeting, income tax considerations, and quantitative techniques integrated with more tradi-

tional approaches. Prerequisite: ACC 201. Cr 3.

ACC 301 Intermediate Accounting I

A study of accounting theory including the conceptual framework, financial statements, the accounting for cash, temporary investments, receivables, and inventories. (Sophomores may enroll.) Prerequisite: ACC 201. Cr 3.

ACC 302 Intermediate Accounting II

The study of accounting theory including property, plant and equipment, intangible assets, current liabilities, long-term corporate capital, income tax allocation, and earnings per share. Prerequisite: ACC 301. Cr 3.

ACC 303 Intermediate Accounting III

The study of accounting theory and practice relating to pension liabilities, leases, interim reporting, segment reporting, accounting changes, price level and current value accounting, statement of changes in financial position, and income tax allocation, other topics. Prerequisite: ACC 302. Cr 3.

ACC 305 Cost Accounting

Concepts and analytical procedures necessary to the generation of accounting data for management planning and control and product costing. Emphasis is on job costing, process costing, standard costs, and variance analysis and direct costing. Prerequisite: ACC 202 or ACC 301. Cr 3.

ACC 313 Federal Tax Reporting

An overview of federal tax laws as they affect individuals, partnerships, corporations, and related topics. Prerequisite: ACC 201. Cr 3.

ACC 401 Advanced Accounting I

The study of accounting principles and theory relating to mergers and consolidations, not-for-profit organizations, and foreign currency. Prerequisite: ACC 303. Cr 3.

ACC 402 Advanced Accounting II

The study of accounting principles and theory related to partnerships, estates and trusts, installment sales, consignments, franchises, receiverships, retail land sales, and other miscellaneous advanced topics. Prerequisite: ACC 303. Cr 3.

ACC 410 Auditing

A study of auditing philosophy and theory relative to the examination of financial statements and other data. Coverage includes internal control, auditing standards and procedures, and the legal and ethical responsibilities of the independent auditor. Prerequisite: ACC 303. Cr 3.

ACC 420 Senior Seminar in Accounting

A review of APB opinions, FASB statements, SEC role in accounting, and other current issues. Prerequisite: ACC 303 and senior standing, or permission of instructor. Cr 3.

BUS 190 Personal Finance

In dealing with the problems of managing personal finances, primary emphasis is placed on methods of measuring and evaluating expenditures to assure optimal benefit from the income. It includes an evaluation of typical occupations and incomes; of life insurance with the various types, investments and mutual funds; of the borrowing of money and use of credit; of taxes and estate planning. The course work will be a series of readings with brief case problems in each of the major areas. (When taken by business or accounting majors, this course will give general elective credit.) Cr 3.

BUS 280 Business Law

This course, an introduction to the study of business law, includes a thorough survey of the preparation for and conduct of a civil lawsuit, a brief discussion of criminal law, and a broad overview of contracts, agency, negotiable instruments, partnerships, corporations, secured transactions, labor law, and bankruptcy. This course is intended to provide a broad overview of business law and the Uniform Commercial Code. Cr 3

BUS 281 Business Law II

An opportunity to continue the study of business law and to thoroughly evaluate selected topics such as corporate reorganizations and combinations, antitrust law, business organization, and tax planning and estate planning. This course is designed for students who want to do in-depth analysis of selected areas in business law. Prerequisite: BUS 280 or ABUS 280 with permission of instructor. Cr 3.

BUS 290 Introduction to Computers in Business

The role of the computer as an aid in managerial decision-making. Computer operation and programming fundamentals including flow charting and program writing in one of the common computer program languages emphasizing business applications. 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: ECON 201, ECON 202, ACC 201, ACC 202 or ACC 301, MS 109, MS 110, MS 211, MS 212. Cr 3.

BUS 327 Investment Management

Provides the planning and management of investment programs for all types of investors. Evaluates the various media of investments in terms of their risks and profits. The functions of the stock market and its behavior are examined. Prerequisite: BUS 320. Cr 3.

BUS 340 Principles of Management

A comprehensive survey of all phases of management in public and private sectors. The influences of human, social and political factors are interspersed with the treatment of management's structural and technical processes. Analyses focus on such themes as planning, decision-making, organizational design, supervisory skills, communications, and information systems. Prerequisites: ECON 201 and ECON 202. Cr 3.

BUS 346 Personnel Management

The selection, training, and management of personnel in private and public sectors, including elements of wage and salary administration, testing, training and labor relations. Designed for the student interested in administration, office management, or personnel work in education, business, engineering, public service, and other fields. Prerequisite: BUS 340 or permission of instructor. Cr 3.

BUS 348 Industrial Relations

A study of industrial relations patterns in the U.S. Major focus is on the relationship between management and labor (organized and unorganized), and the bargaining, administration, and interpretation of contracts, the problem of dispute settlement, and a comparison of methods used in the U.S. and abroad. Attention is also given to industrial relations in unorganized firms and in the Civil Service. Prerequisite: BUS 340 or permission of instructor. Cr 3.

BUS 349 Women and Management

For both men and women in business, education, and the social services, etc. 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 or permission of the instructor. Cr 3.

BUS 360 Marketing

An introduction to the field of marketing normally through the use of a computer simulation game. The concepts of market segmentation, marketing mix strategy, and market

systems development are presented along with an analysis of consumer behavior and the need for marketing research. Prerequisites: ACC 201, ECON 201, ECON 202, BUS 290, MS 109, MS 110, MS 211. 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. Prerequisite: BUS 360. Cr 3.

BUS 367 Managerial Marketing

Students gain experience making marketing decisions as managers of a computer-simulated firm. The emphasis is on applying a "systems" approach to marketing decision-making and on integrating knowledge gained in the other functional business areas into a strategic market planning framework. Prerequisites: BUS 360, BUS 371. Cr 3.

BUS 369 Marketing Research

Consideration of market research as a management planning and evaluative tool. Emphasis on problem formulation, exploratory research, research design, basic observational and sampling requirements, data analysis, interpretation and sampling. Prerequisites: BUS 360 and MS 212. Cr 3.

BUS 371 Operations Research/Management Science

A survey of quantitative methods and tools which are commonly used in sophisticated managerial decision-making. Mathematical models are constructed and applied, with the computer's aid, to a wide range of realworld business situations. Topical coverage includes decision analysis, inventory models, network analysis, simulation, queuing models, applied stochastic processes, dynamic programming and non-linear programming. Prerequisites: MS 109, 110, 211, 212. Cr 3.

BUS 375 Production/Operations Management

An introduction to the problems and topics associated with the management of production operations and the delivery of services. The primary emphasis is upon the design of model-based planning and control systems. Specific applications of such systems are used to illustrate general concepts as well as implementation difficulties. Prerequisite: BUS 371. Cr 3.

BUS 391 Computer-Based Decision Modelling and Simulation

A more in-depth examination of the role of the computer as an aid in managerial deci-

sion-making. Emphasis is placed upon strengthening the student's ability to build and properly utilize computer-based decision models and simulation for problem-solving in the public and private sectors. Prerequisites: BUS 290 or CS 160, MS 211. Cr 3.

BUS 395 Cooperative Education - Business Administration I

The student has the opportunity to relate academic knowledge to practical experience in the business world. The University makes arrangements with certain institutions and/or industries to employ students to fill specific jobs on a semester basis. The student's work is in a related field, and the work experience increases in difficulty and responsibility as the student progresses through the academic curriculum. The work experiences are approved in advance by the faculty. Open to sophomores, juniors, and seniors in the School of Business, Economics and Management with permission. Cr 1-5.

BUS 396 Cooperative Education - Business Administration II

Open to sophomores, juniors, and seniors in the School of Business, Economics and Management with permission. Prerequisite: BUS 395. Cr 1-5.

BUS 397 Cooperative Education - Business Administration III

Open to juniors and seniors in the School of Business, Economics and Management with permission. Prerequisite: BUS 396. Cr 1-5.

BUS 445 Compensation Administration

It provides a basic understanding of the tasks, responsibilities, and objectives of compensation and managing compensation programs. Techniques for determining wages, salaries, and benefits and their application to actual situations in order to design, develop, and administer compensation programs will be covered. The implications of process and policies on parties internal and external to the organization will be investigated. Prerequisites: BUS 346 or permission of the instructor. Cr 3.

BUS 450 Business Management and Policy

Administrative practice at the higher levels of business management through case analysis and discussion. The course attempts to coordinate the background of business majors in the formulation and administration of sound business policy. Prerequisites: BUS 320 BUS 340, BUS 360, BUS 375. Cr 3

BUS 452 Organizational Behavior

An analysis of the interplay between individual and group behavior, leadership styles and

the culture of an organization. The findings of behavior science are applied to such processes as motivation, influence, the structure of work, organizational design, leader-group relations and organizational change. Models, case studies, simulations and applications. Prerequisites: BUS 340 or permission of instructor. Cr 3.

BUS 490 Independent Readings and Research

Selected topics in the various areas of accounting, finance, management, and marketing may be studied and researched on an independent basis. Prerequisites: senior standing and permission of the instructor and chairman of the department. Cr 1-6.

BUS 491 Small Business Institute

This course is designed to allow the student to apply the concepts of business administration, economics and accounting to operational problems in the field. Assignments are arranged by the School of Business, Economics and Management in conjunction with agencies such as the Small Business Administration for an off-campus consulting experience in a business firm or other appropriate institutional setting. Prerequisites: open to qualified juniors and seniors with approval. Cr 3.

BUS 499 Special Topics in Business and Management

ECED 300 Economic Concepts and Research Materials for Educators

A study of the simplification of economic concepts for presentation at elementary and secondary grade levels; also the study and preparation of various resource materials used in presenting economic concepts at these levels. Prerequisite: permission of the instructor. (Offered through independent study.) Cr 3.

ECON 201 Principles of Economics I

A theoretical analysis of the basic characteristics, institutions, and operational activities of a modern capitalistic economy which is involved in the transformation of scarce economic resources into the goods and services demanded by consumers. Topics discussed include inflation, unemployment, government monetary and fiscal policy to achieve full employment and economic growth. Cr 3.

ECON 202 Principles of Economics II

A theoretical analysis of the firm and its role in the transformation of scarce economic resources into the goods and services demanded by consumers. Special attention is focused on the development of a market

mechanism for the exchange of goods, services, and resources within a capitalistic economy. Topics discussed include consumer preferences and consumer behavior, production theory and production costs, the monopoly firm, and resource pricing. Cr 3.

ECON 301 Macroeconomic Analysis

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: ECON 201 and ECON 202. Cr 3.

ECON 302 Microeconomic Analysis

Price, income, and employment theory as tools in the study of economics. Prerequisites: ECON 201 and ECON 202. Cr 3.

ECON 305 Mathematical Economics

This course will cover the development and application of contemporary quantitative methods to the analysis of economic theory. Primary emphasis will be placed upon optimization theory and techniques for solving systems of simultaneous equations. These tools will be developed within the framework of economic models. Prerequisites: ECON 201, ECON 202; MS 109 and 110 or MS 152 and MS 153. Cr 3.

ECON 306 Econometrics

Econometrics is a special field of economics in which models are used to test the validity of hypothesized theoretical relationships against actual data. Topics covered include: the bivariate linear regression model, heteroscedasticity, multicollinearity, serial correlation of errors, and two-stage least squares. Econometric forecasting and simultaneous equation estimation will be discussed. Prerequisites: ECON 201, ECON 202, and MS 212. Cr 3.

ECON 310 Money and Banking

This course examines the structure and operation of the financial system with major emphasis on commercial banking; reviews the structure of the Federal Reserve System and analyzes the tools of policy; develops alternative monetary theories; and discusses major issues in monetary policy. Prerequisites: ECON 201 and ECON 202. Cr 3.

ECON 320 Labor Economics

This course emphasizes the application of economic analysis and concepts to a variety of labor problems such as the supply and demand for labor, labor markets, wage determination, wage differentials and structures, and wages and inflation. In addition,

there will be a brief review of the evolution of the American labor movement and public policy toward labor. Prerequisites: ECON 201 and ECON 202. Cr 3.

ECON 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: ECON 201, ECON 202. Cr 3.

ECON 350 Comparative Economic Systems

The structures and operating principles of the major contemporary economic systems are examined and compared. Prerequisite: ECON 201. Cr 3.

ECON 351 Economic Systems of the Soviet Union

A study of the development, institution, and structure of the Soviet economy. Emphasis on current theories and problems of central planning. Prerequisites: ECON 201 and ECON 202. Cr 3.

ECON 360 Economic Development

The theories and practices of interregional and international economic development. Special attention is given to developmental problems of emerging nations. Prerequisite: ECON 201. Cr 3.

ECON 370 International Trade

The principles and practices of international trade and finance are thoroughly treated. Special emphasis is given to current trends in the international economy and to United States commercial policy. Prerequisites: ECON 201 and ECON 202. Cr 3.

ECON 380 Public Finance and Fiscal Policy

Public expenditure theory; principles of taxation; the federal budget and alternative budget policies; federal tax policy; fiscal policy for stabilization; federal debt. Prerequisites: ECON 201 and ECON 202. Cr 3.

ECON 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: ECON 201, ECON 202. Cr 3.

ECON 390 Energy Economics

The purpose of this course is to assist the student in analyzing the "energy crisis" from an economic perspective. Topics to be covered include: the concepts of energy and effi-

ciency, the role energy plays in the U.S. economy, stocks of energy resources and the role of the government in creating and/or curing the crisis. Various energy related policies will be reviewed. Some time will be devoted to an analysis of alternate energy sources and technologies. Prerequisites: ECON 201 and ECON 202. Cr 3.

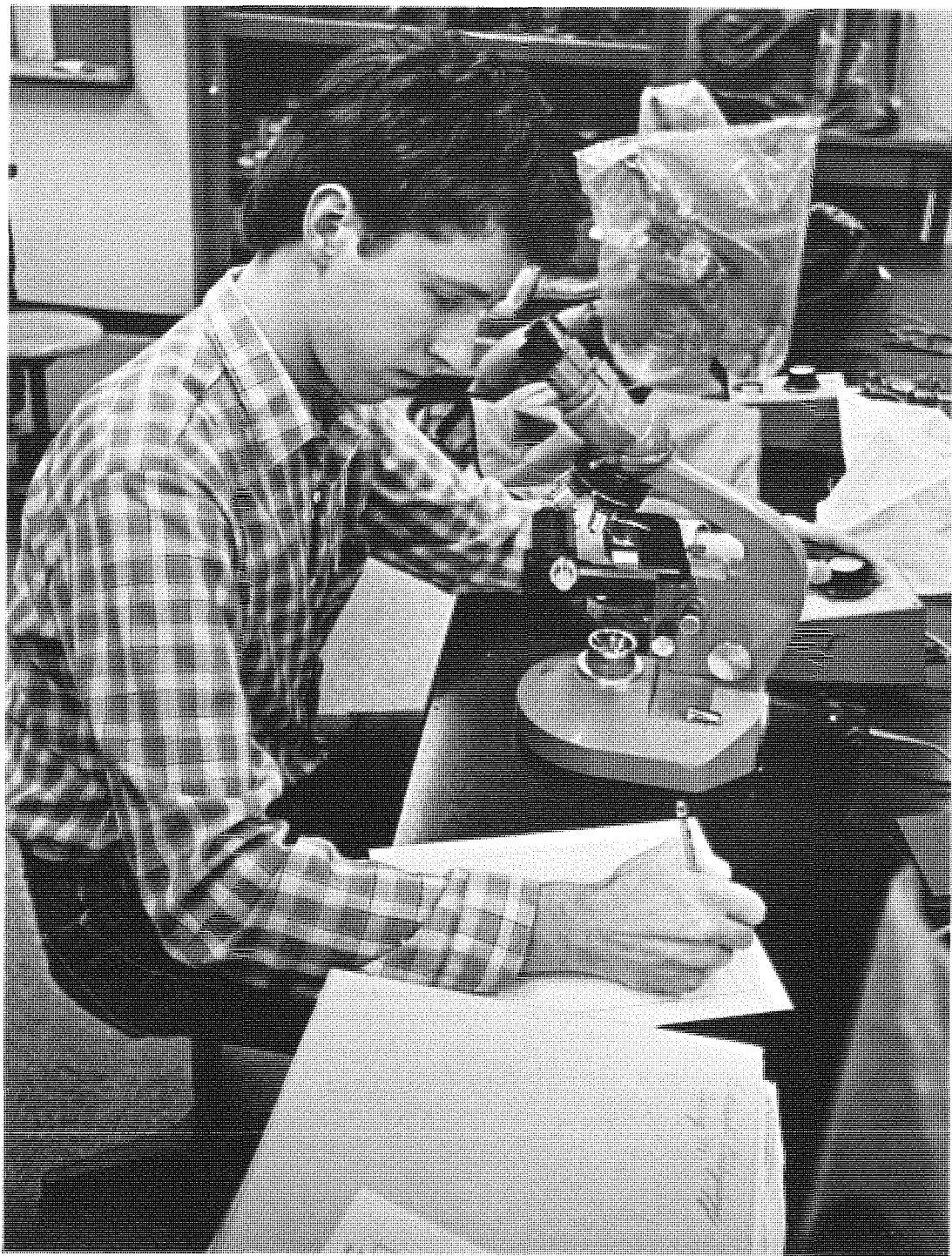
ECON 450 Readings in Economics

A series of readings and discussions of important books of a socio-economic and politico-economic nature -- books with which the

well-informed economics major should be familiar but which, due to time constraints, have not been integrated into the student's formal course work. Prerequisite: nine hours of economics. Cr 3.

ECON 490 Independent Readings and Research in Economics

Independent study and research of various student selected areas of economics. Prerequisites: Senior standing and a completed independent study form (available from Registrar). Cr 1-3.



University of Southern Maine School of Nursing

Dean: Audrey J. Conley; *Associate Dean:* Carla H. Mariano

Faculty in Nursing

Professors: Carper, Conley; *Associate Professors:* Cotton, Dorbacker, Dubowick, Fournier, Jensen, Mariano, MacPherson, Normandeau, Shoobs, Tryon, Tukey; *Assistant Professors:* Bailow, Burson, Czupryna, Drew, Dunn, Greenleaf, Healy, Henderson, Tiffany, Ullman; *Instructors:* Bergstrom, Dyer, Elliott, Heidema, Peake-Godin, Pearson, Roche, Rodgers, Stowell

Faculty in Therapeutic Recreation

Coordinator, Therapeutic Recreation Programs: James V. Sullivan

Professor: Sullivan; *Associate Professor:* Meyer; *Assistant Professors:* Martin, Willard; *Instructor:* McCullough

Assistant Dean, University of Southern Maine School of Nursing, Orono campus: Marjorie Keller

Program Coordinator, University of Southern Maine School of Nursing, Ft. Kent campus: Kathleen Murphy

Director, University of Southern Maine School of Nursing Learning Resource Laboratory: Sarah Whitney

Adjunct Faculty: Mary Ann Rost

The University of Southern Maine School of Nursing offers programs in nursing and therapeutic recreation. These include a baccalaureate program which leads to the bachelor of science degree with a major in nursing, a graduate program which leads to a master of science degree with a major in nursing, an associate degree program leading to an associate of science degree in therapeutic recreation, and a baccalaureate degree program leading to a bachelor of science degree in therapeutic recreation.

Summary of the School of Nursing Philosophy

The philosophy of the School of Nursing incorporates these beliefs:

Professional nursing practice focuses upon assisting individuals, families, and communities to achieve a state of optimal health. The maintenance of optimal health involves a dynamic interaction among the individual, family, community and the environment. Optimal health includes a state of positive biological, psychological, social and cultural growth throughout the life cycle. The existing and emerging roles of the professional nurse are in the areas of health promotion, maintenance, and restoration. Within each of these roles, there need be an application of the nursing process, and skills in leadership, advocacy, research and collaboration.

Learning is a process of interaction between the individual and the environment which results in affective, cognitive and psychomotor changes. The learning relationship between the teacher and student requires a shared commitment to clearly identified program objectives. The learner has an opportunity to develop personal learning objectives within the framework of the program and to select learning experiences in order to meet program objectives. Throughout the entire learning process, evaluation is shared by the teacher and learner.

The graduate of the program will be prepared to practice professional nursing with all age groups in a variety of settings; collaborate with consumers and health professionals to improve health care delivery; and contribute to the improvement of the practice of professional nursing.

Baccalaureate Program in Nursing

The School of Nursing offers a baccalaureate nursing program with an upper-division major for professional study. The aims of the program are to: provide a baccalaureate education in nursing; prepare a beginning professional nurse for practice in a variety of settings; prepare a beginning professional nurse who can respond to community health needs; and provide a foundation for advanced study in nursing.

Each nursing student must complete a minimum of 121-126 credits which include nursing, core competencies, general education, liberal arts, and other supporting courses. Upon successful completion of the program the student is awarded a bachelor of science degree with a major in nursing, and is eligible to take the State Board Examination for R.N. licensure. The School of Nursing is approved by the Maine State Board of Nursing and is accredited by the National League for Nursing.

Admission Policy

Students interested in pursuing a bachelor of science with a major in nursing first must be admitted to the University, and upon admission will be designated as pre-nursing candidates. Admission to the University of Southern Maine is through the Admissions Office of the University, and prospective students should refer to the sections in this catalog on admissions policy required by the University. Admission of pre-nursing candidates to the School of Nursing is determined by the School of Nursing Undergraduate Admissions Committee. In addition to applying to the School of Nursing, pre-nursing candidates must apply to the University of Maine campus at which they intend to take the upper-division nursing major if it is different from the campus at which they are completing prerequisites. Pre-nursing candidates will be evaluated for admission to the School of Nursing based on the completed application, grade point average, letters of reference, a personal interview, and successful completion of all prerequisites (62-67 credits) as outlined on page 208. Recent, standardized test scores may be requested by the School of Nursing Undergraduate Admissions Committee.

Admission Procedure

Applicants for admission to the School of Nursing must: a) have successfully completed a minimum of 30 credits in the prescribed prerequisites; b) file an application with the School of Nursing by December 15 of the year prior to desired admission to the upper-division nursing major; and c) apply to the campus where the applicant intends to take the upper-division major if different from the campus where prerequisites are completed.

To complete the application file, the following documents must be received by the School of Nursing Undergraduate Admissions Committee prior to January 28 of the year in which admission to the School of Nursing is desired: official transcripts of all college courses completed and three letters of reference.

Courses from other colleges or universities are evaluated by the University of Southern Maine Office of Transfer Affairs. **Applications cannot be processed until the above documents have been received.**

After receipt of all the appropriate documents, the School of Nursing Undergraduate Admissions Committee reviews the applicant's credentials. A personal interview is then scheduled. When the committee has acted upon an application and forwarded a recommendation to the Dean of the School of Nursing, the applicant is advised of the decision prior to pre-registration for the fall semester. All admissions to the School of Nursing are contingent upon successful completion of all prerequisites with a minimum grade point average of 2.25.

Challenge Policy

After admission to the School of Nursing, students may wish to challenge

select upper-division courses. The following policy must be followed in each case.

1. The applicant must: meet general admission requirements of the University; complete the prerequisites for the nursing major with a minimum grade point average of 2.25; be admitted to the School of Nursing; and be a registered nurse who has graduated from a National League for Nursing accredited program.

2. A challenge exam may be taken only once for each course.

3. Students must successfully complete NUR 300 Nursing Process I prior to challenging NUR 305 Nursing Process II and NUR 400 Nursing Process III.

4. When challenging courses which include a clinical component, there will be a written exam which must be passed prior to taking the clinical exam. Each component of the challenge exam must be passed satisfactorily, otherwise no credit will be given.

5. The student who fails the challenge exam may take the course in keeping with the University policy on repeating courses; the applicant who subsequently fails the course will be withdrawn from the School of Nursing.

6. Both credit and quality points will appear on the transcript of a student who challenges select upper-division courses.

7. For further information regarding the challenge process, times, and fees, contact the University of Southern Maine School of Nursing.

Prerequisites for the Nursing Major

Prerequisite courses to the upper-division nursing major consist of core competencies (English Composition, Quantitative Decision Making, Skills of Analysis/Philosophy), physical and behavioral sciences, humanities, and fine arts. Pre-nursing candidates must achieve a minimum of 2.25 cumulative grade point average in order to be eligible to apply for admission to the upper-division nursing major. D grades or below are not acceptable in areas cited as specific requirements for the nursing major.

Note: Upon applying to the upper-division nursing major, pre-nursing candidates must have completed their science requirements within the last eight years.

Prerequisite Courses

English Composition Competence	0-3 credits
Skills of Analysis/Philosophy Competence (philosophy or reasoning)	3 credits
General Biology (must include lab component)	4 credits
Human Anatomy and Physiology (must include lab component)	4-5 credits
Chemistry (Organic and Bio-Chemistry; each must include lab component)	8 credits
*Introduction to Statistics (any department)	3 credits
Microbiology (must include lab component)	4-5 credits
Human Nutrition (must include metabolic component)	3 credits
General Psychology	3 credits
General Sociology	3 credits
Social Science Elective (political science, psychology, sociology, anthropology)	3 credits
Human Growth and Development (entire life span preferred)	3 credits
Humanities (one course in Other Times/Other Cultures and one course in literature)	6 credits
Fine Arts (must be from 2 different departments)	6 credits
†General Electives (any area but nursing)	9 credits
	<hr/>
	62-67 credits

*Fulfills the Quantitative Decision Making Competency

†Only 3 credits may be in physical education or therapeutic recreation.

Pre-nursing candidates taking prerequisite courses at the University of Southern Maine campus must meet Core curriculum requirements of that campus. Please refer to Core curriculum requirements section of this catalog.

Upper-Division Nursing Major

The upper-division nursing major (junior and senior years) is offered by the University of Southern Maine School of nursing and consists of clinical nursing courses, courses supportive of nursing content, and elective courses. Clinical nursing courses are organized in a manner that facilitates the integration of nursing and other disciplines. These courses focus on the use of the nursing process to promote, maintain, and restore the health of clients. Students have experiences which involve assessment, planning, implementation, and evaluation of care for individuals of all ages, families, groups of clients, and communities on all spectra of the health continuum. Inpatient and outpatient hospital settings, community health agencies, community experiences, nursing homes, schools, and industries are used for clinical experience.

Nursing majors are required to have the Medical History and Physical Examination Form completed and on file at the University of Southern Maine Student Health Services before enrolling in clinical nursing courses.

Nursing majors must purchase uniforms (approximately \$100.00) before entry into the junior year. In addition, a \$15.00 fee per semester (junior and senior years) is required as a clinical fee. Cost for books is approximately \$150.00 per semester. Clinical learning experiences take place in a variety of settings and geographic locations. It is the student's responsibility to provide his/her own transportation for junior and senior clinical experiences. Professional liability insurance and health insurance are strongly recommended for students in the School of Nursing.

Junior Year

First Semester		Credits	Second Semester		Credits	
NUR	300	Nursing Process I	9	NUR	305 Nursing Process II	8
BIO	345	Pathophysiology	3	NUR	302 Pharmacology	3

Senior Year

First Semester		Credits	Second Semester		Credits	
NUR	400	Nursing Process III	7	NUR	405 Nursing Process IV	6
†NUR	401	Health-Related Research	3	†NUR	406 Community Health	3
NUR	402	Patterns of Emotional Disorders	3	NUR	407 Leadership in Health Care	5

Note: Six credits of general elective credit and three credits of nursing elective credit are required during the upper-division for graduation with a major in nursing.

†Offered both fall and spring semesters.

Academic Policies — Upper-Division Nursing Major

Retention/Progression: It is expected that students remain with their class. To do so, the student must maintain class standing with a cumulative grade point average of 2.00. The courses in the nursing major are sequential and must be passed with a minimum grade of C before progressing to the next level. A student who is unable to maintain class standing with a cumulative grade point average of 2.00 will be withdrawn from the School of Nursing and either suspended from the University in accordance with University policies or required to change his or her major to a different program.

Repeating: A D grade in a major nursing course interferes with or prevents the student from progressing to the next level. A student who receives a D grade in a nursing course but is able to maintain a cumulative grade point average of 2.00 will be allowed to repeat the course one time when that course is offered again. A student who receives a D grade but is unable to maintain a

cumulative grade point average of 2.00 will be withdrawn from the School of Nursing and either suspended from the University in accordance with University policies or required to change his/her major to a different program.

Grading System:

A	= 4.00 quality points =	90-100
B+	= 3.33 quality points =	86-89
B	= 3.00 quality points =	80-85
C+	= 2.33 quality points =	76-79
C	= 2.00 quality points =	70-75
D	= 1.00 quality points =	60-69
	Not acceptable for progression	
F	= 0.00 quality points =	below 60
	automatic School of Nursing withdrawal	

Incomplete Grades: A temporary grade is given by the faculty when a student, because of extraordinary circumstances, has failed to complete course requirements in a nursing course. The courses in the nursing major are sequential; therefore, the incomplete grade in a major nursing course must be replaced by a letter grade before progressing to the next level. Failure to progress sequentially in the program will result in withdrawal from the School of Nursing and either suspension from the University in accordance with University policies or a requirement to change the major to a different program.

Leave of Absence: A leave of absence may be granted to a student who is experiencing a health or other personal problem. The student must request a leave of absence. Such a leave may also be recommended by the faculty. If granted, the leave of absence will be for a period of no longer than one year. To request a leave of absence, the student must submit a letter to the Dean who will decide on the student's request. To return, the student must submit to the Dean a written request for reinstatement. If the request for reinstatement is granted, the Academic Standing Committee determines the reinstatement status within the nursing program. If the student does not initiate a request for reinstatement within one year, the student will be automatically withdrawn from the School of Nursing and either suspended from the University in accordance with University policy or required to change his or her major to a different program.

Withdrawal: Withdrawal from a major nursing course interrupts progression in the nursing program. Reinstatement into the program need be initiated by the student within one academic year and reviewed by the Academic Standing Committee. The Academic Standing Committee determines the reinstatement status within the program. If the student does not initiate a request for reinstatement within one academic year, the student will be automatically withdrawn from the School of Nursing. If the student withdraws or is withdrawn from the School of Nursing, the student will either be suspended from the University in accordance with University policies or required to change his or her major to a different program.

Administrative Withdrawal: A student may be withdrawn from the School of Nursing for other than academic reasons.

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 121-126 credit hours with a cumulative grade point average of at least 2.00.

Student Appeal Policy: A student who feels there is a just cause for an academic grievance regarding final course grades or discrimination may initiate an academic appeal. A copy of the policy and procedure is available in the Dean's office.

Note: Major nursing courses refer to all nursing courses offered in the upper division with the exception of nursing electives and independent studies.

University of Southern Maine School of Nursing Baccalaureate Program at Extended Sites

The University of Southern Maine School of Nursing will offer the upper-

division nursing major at the University of Maine at Orono and the University of Maine at Fort Kent. The University of Southern Maine School of Nursing prerequisites, admission policies and procedures, academic policies and procedures, and degree requirements will apply to all nursing majors at University of Maine at Orono and University of Maine at Fort Kent extension sites. For further information, contact the University of Southern Maine School of Nursing Undergraduate Admission Committee.

Graduate Program in Nursing

The School of Nursing offers a master of science degree (M.S.) program in nursing. The aims of the School of Nursing's graduate program are to:

1. prepare professional nurses for roles of leadership in nursing practice, education and administration.
2. provide a foundation for doctoral study in nursing.

The program offers students both an advanced practice component focusing upon families in crisis and a choice of a functional role component in either education, administration or primary care practice. The following are integral elements of the master's degree program in nursing: advanced health assessment; communication, health promotion and leadership skills; organizational and system analysis skills with application to health care facilities and educational institutions; emphasis on social, political and economic factors influencing health and health care delivery; research and theory development in nursing; and an holistic, multidisciplinary approach to learning and practice. For further information, refer to the University of Southern Maine Graduate Catalog.

NUR 300 Nursing Process I

Introduces the student to basic cognitive, affective, and psychomotor skills fundamental to nursing practice. Utilization of the nursing process is emphasized to assist individuals to promote and maintain optimal health. Concepts and selected theories provide a basis for understanding the factors which facilitate and/or inhibit the growth and development of human beings. Didactic classroom and experiential learning in the Learning Resource Lab provides the opportunity to practice and develop basic skills which will be applied in selected clinical settings. Prerequisites: junior level standing in the School of Nursing. Concurrent: BIO 345. Cr 9.

NUR 302 Pharmacology

Basic concepts in pharmacology including major drug categories, drug interactions, the use of the nursing process in the therapeutic administration of drugs, legal implications, and the physical and psychological effects of drugs on various age groups will be emphasized. Prerequisites: Human Anatomy and Physiology. Recommended: BIO 345. Concurrent: NUR 305. Open to other than nursing students with permission of faculty. Cr 3.

NUR 305 Nursing Process II

Utilizes the nursing process in promotion, restoration and maintenance of health with individuals and families experiencing short-

term alterations in health which do not significantly disrupt potential but which do require nursing and/or other intervention. Prerequisites: NUR 300, BIO 345. Concurrent: NUR 302. Cr 8.

Nursing Elective

Study of selected area in nursing. Open to other than nursing students with permission of faculty. Cr 3.

NUR 395 Nursing Independent Study

Individualized study in an area of nursing with the permission of the instructor. Cr 1-3.

NUR 400 Nursing Process III

Utilization of the nursing process is emphasized in the promotion, restoration and maintenance of health with individuals, families, and groups experiencing long-term alterations in health which significantly disrupt potential and require nursing and/or other intervention. Collaborates and consults with health team members in a variety of settings. Prerequisites: NUR 302, 305. Concurrent: NUR 401, 402, or 406. Cr 7.

NUR 401 Health-Related Research

Various types and methods of research and concepts basic to the research process including sampling, validity, reliability, and ethics will be introduced. The student evaluates and utilizes health-related research and considers implications for nursing practice and the nurse as a researcher. Prerequisites: sta-

tistics. Open to other than nursing students with permission of faculty. Cr 3.

NUR 402 Patterns of Emotional Disorders

Emotional disorders are examined in relation to various bio-psycho-social and cultural factors. Traditional and contemporary treatment models will be discussed. Prerequisites: Growth and Development, General Psychology. Open to other than nursing students with permission of faculty. Cr 3.

NUR 405 Nursing Process IV

Utilizes the nursing process in the promotion, restoration, and maintenance of health with individuals, families, and groups experiencing depleted health, ie. alterations resulting in actual or predictable disintegration requiring complex and/or other intervention. Collaborates and consults with health team members in any setting. Prerequisites: NUR 400, 401, 402. Concurrent: NUR 406, 407. Cr 6.

NUR 406 Community Health

Introduces concepts and principles basic to the development and maintenance of community health. Emphasis is on population aggregates in the community as the unit of service. The epidemiological process is stressed in surveying current major health issues. Concurrent: NUR 405, 407. Open to other than nursing students with permission of faculty. Cr 3.

NUR 407 Leadership in Health Care

Theories of leadership, organizations, and planned change are presented. The student will analyze systems and methods of health care delivery and identify factors and strategies which inhibit or facilitate change. Professional and ethical issues, legislation, and emerging role in nursing will be analyzed. An experiential component is required and varies with the student's learning objectives and interests. Prerequisites: NUR 400, 402, Concurrent: NUR 405, 401, 406. Cr 5.

Nursing Elective

Study of a selected area in nursing. Open to other than nursing students with permission of faculty. Cr 3.

NUR 495 Nursing Independent Study

Individualized study in an area of nursing with the permission of the instructor. Cr 1-3.

NUT 352 Human Nutrition

A course designed to show how the given nutrients serve to meet the metabolic processes required for life. A physiologic and biochemical approach is used. Prerequisites: Anatomy and Physiology; General and Organic Chemistry; Biochemistry. *For challenge information of NUT 352, contact the School of Nursing. Challenge arrangements must be made by October 1.* Cr 3.

Therapeutic Recreation Programs

The School of Nursing offers two degree programs for students interested in pursuing careers in therapeutic recreation. The associate degree program in therapeutic recreation consists of 60 credit hours. Upon completion of the degree requirements, the student may seek employment as a therapeutic recreation assistant and is eligible for certification by the National Council for Therapeutic Recreation Certification.

The baccalaureate degree program in therapeutic recreation consists of 122.5 credit hours. Upon completion of the degree requirements, the student may seek employment as a therapeutic recreation specialist and is eligible for certification by the National Council for Therapeutic Recreation Certification.

In addition to the two degree programs, a wide selection of professional recreation and leisure courses, as well as activity classes, is available. Students are encouraged to pursue recreation and leisure course offerings as appropriate to their academic program.

Associate Degree Program in Therapeutic Recreation

The minimum number of credits required for the degree: 60.

The two-year program in therapeutic recreation consists of the following courses leading to the associate of science degree:

A. General Foundation Courses		Credits
Required		
ENG	100 College Writing	3
BIO	019 Biological Basis for Human Activity	3
THE	170 Public Speaking	3
OR		
COM	171 Interpersonal Communication	3

Electives (one from each area)			
	Humanities		3
	Social Sciences		3
	General Elective		3
B. Major Requirements			
THR	110	Introduction to Recreation and Leisure Services	3
THR	113	Preprofessional Field Experiences	3
THR	120	Introduction to Therapeutic Recreation and Disabilities	3
THR	211	Programming Leadership in Recreation	3
THR	216	Advanced First Aid and Emergency Care	3
THR	230	Methods and Materials in Therapeutic Recreation	3
THR	290	Organization and Administration of Recreation	3
THR	294	Pre-internship	0
THR	295	Internship	9
Two courses from the following:			
THR	221	Development and Utilization of Therapeutic Recreation Resource	3
THR	222	Recreation Activities for Special Populations	3
THR	231	Arts and Crafts in Therapeutic Recreation	3
THR	233	Environmental Recreation for Special Populations	3
Two elective courses in recreation			6

Transfer from the Two-Year Degree Program in Therapeutic Recreation to the Four-Year Degree Program in Therapeutic Recreation

Students in the associate degree program in therapeutic recreation who have a 3.5 cumulative average or a 3.0 average in selected courses may transfer to the four-year therapeutic recreation program providing space is available. Students interested in this option should meet with their advisor.

Baccalaureate Degree Program in Therapeutic Recreation

The minimum number of credits required for the degree: 122.5

In satisfying Core curriculum requirements, students are urged to take MUS 110 Fundamentals of Music, for the fine arts performance-centered arts section. PSY 101 Introduction to Psychology and SWE 101 Introduction to Human Services are recommended for fulfilling the social sciences requirement. BIO 101 and 102 Biological Principles are recommended for the natural sciences requirement.

The four-year program in therapeutic recreation consists of, in addition to the Core requirements, the following courses leading to the bachelor of science degree.

Required courses within the program			Credits
THR	110	Introduction to Recreation and Leisure Services	3
THR	113	Preprofessional Field Experience	3
THR	130	Introduction to Therapeutic Recreation Services	3
THR	216	Advanced First Aid and Emergency Care	3
THR	232	Methods in Therapeutic Recreation Program Design	3
THR	241	Leadership and Supervision in Recreation	3
THR	290	Organization and Administration of Recreation	3
THR	314	Leisure Counseling Methods and Techniques	3
THR	370	Therapeutic Recreation and Mental Health	3
THR	380	Therapeutic Recreation and Physical Disabilities	3
THR	390	Therapeutic Recreation and Developmental Disabilities	3
THR	480	Seminar in Management, Supervision and Consultation in Therapeutic Recreation	3
THR	490	Seminar in Therapeutic Recreation	3
THR	494	Pre-internship	0
THR	494	Internship	9

Required courses outside of the program			
THE	170	Public Speaking	3
HRD	331	Group Dynamics	3
OR			
COM	290	Small Group Communication	3
BIO	111	Human Anatomy and Physiology	3
BIO	112	Practical Human Anatomy and Physiology	1.5
SWE	266	Concept of Self and the Handicapped Person	3
Advanced Science — elect one of ANY 302; BIO 200; BIO 201; BIO 331; or BIO 345			

Recreation Elective Courses (select 12 credits)

*THR	100	Recreation and Leisure Activities (1 credit per activity)	
		Racquetball	Karate
		Handball	Lifeline-Walk/jog
		Horsemanship	Lifeline-Weight Training
		Tennis	Lifeline-Aerobic Dance
		Cycling	Lifeline-Aquatic Fitness
		Volleyball	
THR	215	Social Recreation	3
THR	217	Small Boat Handling and Seamanship	2
THR	219	Personal Fitness	3
THR	221	Development and Utilization of Therapeutic Recreation Resources	3
THR	222	Recreation Activities for Special Populations	3
THR	223	Dance in Recreation/Leisure	3
THR	226	Leadership in Recreation/Leisure Activities	3
THR	231	Arts and Crafts in Therapeutic Recreation	3
THR	233	Environmental Recreation for Special Populations	3
THR	235	Urban Recreation	3
THR	250	Adapted Aquatics	
THR	314	Leisure Counseling Methods and Techniques	
THR	343	Perceptual-Motor Development and Learning	
THR	357	Parks and Recreation Facilities and Design	
THR	398	Independent Study in Recreation/Leisure	

*Only 6 credit hours in this area may be used to fulfill graduation requirements.

General Elective Courses The number of general electives will depend upon the number of credits remaining after the student has fulfilled the Core curriculum basic competence requirements.

COM	310	Nonverbal Communication
SWE	267	Relating Professionally to Homosexuality
SWE	274	Aging and Social Policy: A Cross Cultural View
SWE	275	Developmental Service to the Aging
SWE	278	Professional Practice with Older People
SWE	288	Substance Use and Abuse: Alcohol and Other Drugs
PSY	220	Developmental Psychology
PSY	330	Social Psychology
PSY	333	Psychopathology
PSY	335	Deviations of Childhood
PSY	340	Behavior Modification
ESCI	110	Environmental Science
NUR	402	Patterns of Emotional Disorders
HRD	333	Human Growth and Development
EDU	311	Introduction to Learning Disabilities
EDU	363	Emotional Problems of Exceptional Children
EDU	368	Introduction to Communication Disorders
SOC	333	Sociology of Medicine
THE	122	Contemporary Dance I

THR 100 Recreation and Leisure Activities

The course provides the student with the opportunity to learn and participate in *one* of the following activities: Racquetball; Handball; Horsemanship; Tennis; Cycling; Volleyball; Karate; Lifeline-Walk/Jog; Lifeline-Aerobic Dancing; Lifeline-Aquatic Fitness. Two-hour laboratory. 1 Cr per activity.

THR 110 Introduction to Recreation and Leisure Services

Concepts of leisure and recreation and play are covered from historical to contemporary societies. Leisure awareness and all the intricacies of the leisure/recreation experience and how these experiences relate to concepts of time and work are included. Cr 3.

THR 113 Pre-Professional Field Experience

This course will provide students with the opportunity to observe, analyze, and evaluate therapeutic recreation programs in various settings. Students will visit the Center for the Blind, the Baxter School for the Deaf, the Cerebral Palsy Center, two nursing homes, Maine Medical Center's Department of Rehabilitation, and the Woodford's West Educational Center. Written reports on each one of these visitations will be required. In addition, students will be expected to read four articles relating to therapeutic recreation and write summary reports on each of the articles read. Prerequisite: THR 110. Cr 3.

THR 120 Introduction to Therapeutic Recreation and Disabilities

Concentrated study of recreation service to the disabled. Inquiry into the Inquiry into the elements of therapeutic recreation and a clinical study of selected disabilities is included. Cr 3.

THR 130 Introduction to Therapeutic Recreation Services

Examination of the development of therapeutic recreation in treatment and community settings. Concentrated study of the elements of therapeutic recreation service stressing rehabilitation, leisure education, and diversional recreation. Examination of interaction problems between special population members and members of the nondisabled public. (Four-year majors only). Cr 3.

THR 211 Programming Leadership in Recreation

This course provides the student with the principles of program planning. In particular, the course addresses the process of identifying the problems that exist in recreation,

setting goals and objectives, selecting and implementing the program design, and developing an evaluation procedure. In addition, the student learns many of the detailed technical skills that are essential to achieve positive results in programming. Prerequisite: THR 110. Cr 3.

THR 215 Social Recreation

Techniques of leadership, participation, planning for recreation in social settings for all ages -- parties, programs, special events. Repertoire -- mixers, dances, games, songs, and skits. Creativity stressed. Cr 3.

THR 216 Advanced First Aid and Emergency Care

This course will cover the topics prescribed by the American Red Cross in their advanced first aid course, including respiratory emergencies, artificial respiration, wounds, poisoning, water accidents, drugs, burns, emergency childbirth, emergency rescue and transfer, and other topics. Successful completion of the course requirements will lead to advanced Red Cross first aid certification. Cr 3.

THR 217 Small Boat Handling and Seamanship

The objective of this course is to inform the student on all phases of boating. Information of purchasing, annual and continual maintenance, equipment, safety, rules, piloting, and navigation. All of this should insure the student's full enjoyment of this popular recreational pursuit. Two hours lecture. Cr 2.

THR 219 Personal Fitness

This course is intended to help the student understand the basics of health/ physical fitness and the importance of it in relation to total lifestyle. In addition to lecture/discussion, all students will go through a fitness evaluation and be expected to attend exercise lab three times per week. Offered both semesters, 90-minute lecture, three hours lab. Cr 3.

THR 221 Development and Utilization of Therapeutic Resources

This course is designed to provide basic instruction in audiovisual and media production techniques for people working with the handicapped and in homes for the elderly. It will include the basic operation of audiovisual equipment such as 16mm projectors, slide projectors, and tape recorders. Hands-on preparation of visual displays, bulletin boards, schedule boards, lettering techniques, duplication and mimeo techniques. The course will focus on locally available

resources for program planning for the handicapped. Prerequisite for associate degree candidates: THR 120. Cr 3.

THR 222 Recreation for Special Populations
An overview of recreation activity classifications and curricula. Examination of activities for special populations including movement and dance, music, drama, arts and crafts, and adapted sports and games. Cr 3.

THR 223 Dance in Recreation/Leisure
Students will be given an opportunity to learn how to plan, organize, and administer various types of dance and movement programs as they pertain to both regular and special populations. Cr 3.

THR 226 Leadership in Recreation/Leisure Activities
Students will learn a variety of recreation activities through participation. Classroom sessions cover the rules and techniques of the sports as well as efficiency of movement. Cr 3.

THR 230 Methods and Materials in Therapeutic Recreation
Philosophy, motivational techniques, utilization of equipment, methods of instruction, and organizing materials and groups relating to special populations. Prerequisite for associate degree candidates: THR 120. Cr 3.

THR 231 Arts and Crafts for Special Populations
This course will explore and assist students in learning how to make various crafts in a laboratory setting. Examples of crafts that students will be taught to make are hooked rugs, macrame, and other appropriate projects. Prerequisite for associate degree candidates: THR 120. Cr 3.

THR 232 Methods in Therapeutic Recreation Program Design
Emphasis on therapeutic processes and the development of individualized rehabilitation programs utilizing recreational activities. Assessment and evaluation methods, goal-setting strategies, activity analysis, and task analysis are examined as well as the contents of selected activity programs. (Four-year majors only). Prerequisite: THR 130. Cr 3.

THR 233 Environmental Recreation for Special Populations
Overview of basic environmental education concepts and teaching strategies as they apply to resource-based recreation. Examination of selected resource-based recreation activities for general and special population members. Participation in outdoor learning

experiences are required. Prerequisite for associate degree candidates: THR 120. Cr 3.

THR 235 Urban Recreation
A course designed for those interested in exploring contemporary urban life in an experimental manner. Students will participate in a variety of field investigations, lectures, and discussions which address the problem of orienting oneself to new urban environments, and will explore the values held by each student that might affect their ability to meet the leisure-time needs of urban residents. Cr 3.

THR 241 Leadership and Supervision in Recreation
This course provides students with a basic knowledge of the theories, supervisory skills, techniques, and specific communication skills for effective leadership and supervision in recreation. Prerequisite: THR 110. Cr 3.

THR 250 Adapted Aquatics
This course is designed for therapeutic recreation majors who are interested in organizing swimming programs for the handicapped and for experienced swimming instructors desiring to update their background in this field. It will offer all the necessary skills and techniques for teaching handicapped people how to swim and to discover the joys of participating in water activities. Cr 3.

THR 270 Perspectives on Aging and Human Kinetics
Study of prevalent aging theories and the physical, psycho-social, and medical changes associated with the aging process with implications for recreation program planning. Examination of community-based and institutional recreation services and programs for older adults. Cr 3.

THR 277 Weight Training: An Approach to Strength, Health, and Fitness
Designed for both men and women, this course will examine various methods and routines of weight training for the development of muscular strength, endurance, cardiovascular benefits, and weight control. The course will consist of both theory and practical application. Cr 3.

THR 290 Organization and Administration of Recreation
This course acquaints students with the need for, and nature of, recreational programs, with special consideration given to skills and techniques necessary to organize and administer recreation programs. Prerequisite: THR 110. Cr 3.

THR 294 Pre-internship

In this course students will develop objectives for Internship (THR 295) and complete all business necessary to secure an Internship placement. This must be taken immediately prior to Internship. Cr 0.

THR 295 Internship

Preprofessional assignment in appropriate recreation settings (e.g., nursing homes for the aged, institutions, agencies, halfway houses, hospitals, parks, camps, playgrounds, schools for the handicapped, penal institutions, and rehabilitation centers). Faculty supervision and guidelines provided. Prerequisite: THR 113, 294, and 30 credit hours. Cr 9.

THR 314 Leisure Counseling Methods and Techniques

The intent of this course is for students to study and learn how to help people plan for and find enjoyment in leisure. Theories and techniques of counseling will be included. Students will also study problems which individuals and groups encounter in their search for recreation and leisure experiences which have intrinsic value and give meaning to their lives. Prerequisite: THR 110 or permission of the instructor. Cr 3.

THR 343 Perceptual-Motor Learning

An introduction to motor development and motor learning including psychological theories and implications for skill instruction and research. Cr 3.

THR 357 Parks and Recreation Facilities and Design

An introduction to the general principles of modern design and maintenance of recreation and park facilities at the federal, state, municipal, and commercial levels. Resource people, field trips, and films are an integral part of this course as well as a written project. Cr 3.

THR 370 Therapeutic Recreation and Mental Health

A psycho-social analysis of the determinants and sequences of leisure behavior as related to mental health. This course introduces the student to the broad perspectives of leisure in relation to mental health, then focuses upon specific uses of recreation as a behavioral change agent for people with mental health problems. Prerequisites: THR 130, THR 232. Cr 3.

THR 380 Therapeutic Recreation and Physical Disabilities

The psycho-social aspects of physical disabilities with specific reference to planning,

implementing, and evaluating leisure activities. Various approaches to human growth and development, and to ways in which experiential exercises will facilitate the learning process. Prerequisites: THR 130, THR 232. Cr 3.

THR 390 Therapeutic Recreation and Developmental Disabilities

An analysis of the motor and psycho-social behavioral dimensions related to developmental disabilities. The specific and direct uses of recreation as a rehabilitation agent will be examined. Classroom and practical exercises will provide experience in supervision and programming techniques. Prerequisites: THR 130, THR 232. Cr 3.

THR 398 Independent Study in Recreation Leisure

This course is intended to provide students with an opportunity to pursue a project independently, to chart a course and explore an area of interest bearing upon it based on previous course experiences. A course outline must be prepared by the student and a final written paper is required. Prerequisite: permission of the instructor. Cr 3.

THR 480 Seminar in Management, Supervision and Consultation in

Therapeutic Recreation This course will examine management roles, therapeutic recreation service-delivery systems, and supervision techniques for promoting the professional growth of personnel. Consultation in therapeutic recreation will be explored as a professional function. Prerequisites: THR 290, THR 494, THR 495. Cr 3.

THR 490 Senior Seminar in Therapeutic Recreation

Intensive small-group discussions designed to integrate and synthesize previous learning as a unified, personal philosophy. This course will provide an overall perspective of the discipline, some insights into current issues, and a view of the future of therapeutic recreation. Prerequisites: THR 494, THR 495. Cr 3.

THR 494 Pre-internship

In this course students will develop objectives for Internship (THR 495) and complete all business necessary to secure an Internship placement. This must be taken immediately prior to Internship. Cr 0.

THR 495 Internship

This course is to be taken in the senior year. Students are required to work a minimum of 32 to 40 hours a week at a camp, recreation

department, school, agency, hospital, institution, or nursing home. Students are expected to select three different experiences, approximately five weeks at each, when possible, and must keep a daily log of their expe-

riences to be passed in to the instructor at the end of the semester. A University supervisor will visit and evaluate each student at least three times during the internship. Prerequisite: THR 494. Cr 9.



Division of Basic Studies

Director: George P. Connick

Director, Learning Assistance Systems: Robert Lemelin; *Coordinator, Instructional Systems:* Caroline Hendry; *Acting Coordinator, Off-Campus Counseling Services:* Susan Silvernail

The Division of Basic Studies, an academic unit of the University established in 1973, has responsibility for offering courses and administering associate degree programs at a number of off-campus locations in Maine as well as delivering courses via television and newspaper. The Division sponsors or co-sponsors off-campus centers in Bath, Saco, Sanford, and downtown Portland (Intown Center). Each of these centers offers comprehensive academic counseling services to assist students who wish to take courses or to pursue associate degree programs. Also available are selected courses that meet the needs of baccalaureate students.

Programs of Study

Associate Degree Offerings

Through the Division of Basic Studies, students may pursue a variety of associate degree programs at locations that are geographically convenient. Specific degree offerings include:

Selected Studies (A.S.)	Human Services (A.S.) (with options in gerontology, mental health, and developmental disabilities)
Liberal Arts (A.A.)	
Business Administration (A.S.) (with options in accounting, business, computer programming, management, marketing, and real estate)	

General Admission Requirements Students desiring to pursue any associate degree program through the Division of Basic Studies are required to meet the admissions requirements as outlined under the specific degree program. Students questioning their qualifications should contact an academic counselor at the off-campus center of their choice to discuss possible alternatives.

Changing to a Baccalaureate Degree Program Students desiring to change to one of the University's baccalaureate degree programs are advised to consult with an academic counselor regarding the process and the applicability of coursework toward their intended program.

Developmental Studies

The Developmental Studies Program provides students with courses designed to help them achieve proficiency in writing (ENG 009) and in mathematics (MS 009, MS 010, MS 011). Prior to enrollment in any of these courses, students will be administered the Writing Placement Examination and the Mathematics Placement Examination.

Off-Campus Locations

Bath Center

The University of Maine at Augusta and the University of Southern Maine (through the Division of Basic Studies) coordinate course offerings in the town of Bath. A full range of counseling and student services is provided and classes are held in local facilities in the towns of Bath, Wiscasset, and Topsham both during the day and evening. Degree program offerings include associate degree programs in business. Those desiring information about counseling services, financial aid, courses, and degree programs should contact: Bath Center; 72 Front Street; Bath, Maine 04530; (207) 442-7070.

Intown Center

Two programs, Selected Studies and Human Services (with options in gerontology, developmental disabilities, and mental health), are offered at the

Intown Center located at 68 High Street, in downtown Portland. Intown Center offerings meet the needs of persons who might otherwise find the doors to higher education closed to them. Support services are provided and a program in writing and mathematics has been carefully worked out to meet the needs of students who wish to strengthen their academic skills. For more information about the Intown Center and programs contact: Intown Center; 68 High Street; Portland, Maine 04101; (207) 780-4115.

Saco Center

Located at Thornton Academy (Fairfield Street), the Saco Center offers a variety of associate degree offerings as well as a range of courses that meet the needs of baccalaureate students. Associate degree programs currently available at the Saco Center are liberal arts, selected studies, business (with options in accounting, business computer programming, management, marketing, and real estate) and human services (with options in gerontology, developmental disabilities, and mental health). Courses are offered in the day and evening for the convenience of students who work or wish to attend college part-time. All courses are held on site at Thornton Academy. For more information about programs, financial aid, or other academic counseling services contact: Saco Center; Fairfield Street; Saco, Maine 04072; (207) 282-4111.

Sanford Center

The University, through the Sanford Center, offers degree program opportunities in liberal arts, selected studies, and business (with options in accounting, business computer programming, marketing, management, and real estate). Additionally, selected courses which satisfy requirements of most two- or four-year programs are available. Computer science, chemistry, biology, math, and English are examples of curriculum diversity. Courses meet at a variety of times to accommodate part-time or full-time students. Persons interested in more information (academic, admissions, financial aid, registration, career counseling, veterans advising, etc.) should contact: Sanford Center; 195 Main Street; Sanford, Maine 04073; (207) 324-6012.

Other Locations

The Division of Basic Studies also offers courses at the Portsmouth Naval Shipyard, Brunswick Naval Air Station, Pineland Center, and Pratt-Whitney Aircraft.

Programs and Requirements

Selected Studies

Selected studies is a program which leads to an associate degree. Students may design their own programs, thereby ensuring maximum flexibility in course scheduling. This program is often used by students who desire other associate or baccalaureate degree programs but who do not meet the requirements for admission to that program. In addition, to assist students who may later wish to transfer to a baccalaureate program, the selected studies program requirements are closely akin to the University Core curriculum requirements. As a part of the selected studies curriculum, students enroll in courses designed to develop basic educational skills in writing and mathematics and academic skills to help ensure their future success in college.

Admission Requirements: Open to persons holding a high school diploma (or its equivalent) or who are 18 years of age or older.

The number of credits required for the degree: 60.

Required Courses

*ENG	100	College Writing
*MS	010	Beginning Algebra or above
USM	100	Freshman Seminar
Humanities Elective		
Fine Arts Elective		
Social Science Elective		
Natural Science Elective		
Electives		

*Prior to enrollment in Writing and Mathematics, students are administered the Writing Placement Examination and the Mathematics Placement Examination. Students are placed in the course that most closely coincides with their skill level.

Change from Selected Studies to Another Major/School/College

To be eligible to change from the Selected Studies Program to another associate degree program of the University, a student must meet the following requirements:

1. A grade point average of at least 2.00
2. Completion of the English Composition requirement of the Core Curriculum (see page 28 for ways of meeting this requirement).
3. Completion of at least nine semester hours of graded coursework, not including courses taken on a pass/fail basis.
4. Completion of any other requirements called for by the program to which the student wishes to change.

To be eligible to change from the Selected Studies Program to a baccalaureate degree program in the College of Arts and Sciences, College of Education, to the pre-nursing program in the School of Nursing, or to the pre-business program in the School of Business, Economics and Management, a student must meet the following requirements:

1. A grade point average of at least 2.00
2. Completion of the English Composition requirement of the Core Curriculum (see p. 28 for ways of meeting this requirement).
3. Completion of at least 15 semester hours of graded coursework, not including courses taken on a pass/fail basis.
4. Completion of at least three courses in different areas of the Methods of Inquiry/Ways of Knowing section of the Core curriculum or courses required by the program to which the student wishes to change.
5. Completion of any other requirements called for by the program to which the student wishes to change.

Students wishing to change to associate or baccalaureate level programs in other schools or colleges of the University are urged to see the dean of that school or college to discuss the intended transfer.

Liberal Arts

This two-year program is offered in conjunction with the College of Arts and Sciences. Graduates may change to a baccalaureate degree program with a maximum transferability of credits.

Admission Requirements: Admission is based upon the candidate's academic background and is consistent with admission requirements for the University's baccalaureate programs in the College of Arts and Sciences. Details of this program may be found on p. 45 of this catalog.

Business Administration

The associate program in business administration is offered off-campus in conjunction with the School of Business, Economics and Management and is designed to serve two purposes: to prepare students who wish to complete their education in two years for employment in junior management positions in several different careers; and to provide a sound foundation for those students who perform well and who wish to transfer to a baccalaureate program in business administration at this University or another institution.

While the program emphasizes business, it contains liberal arts courses including composition, fine arts, social sciences, humanities, and mathematics. Options within the associate program offered off-campus include accounting, business computer programming, management, marketing, and real estate.

Admission Requirements: Any high school graduate may apply for admission to the two-year associate degree program. A college preparatory background is not necessary. On their application, students should specify the associate in

business administration program. Candidates must also take the Scholastic Aptitude Test. Details of this program may be found on p. 190.

Human Services (with options in Developmental Disabilities, Mental Health, and Gerontology)

The human services program (offered through the University and extended from the University of Maine at Orono) is designed to provide liberal arts education and professional courses (including supervised practica in the area of the student's program option). Graduates will be prepared for entry and middle-level positions within the human service delivery system. The human services programs are approved by the National Council for Standards in Human Service Education.

Although the curricula below are recommended, students may not be able to plan their coursework in this way if courses are not available or if part-time attendance is desired. Students are encouraged to consult with an academic counselor.

Admissions Requirements: Candidates for admission must demonstrate the ability to do college-level academic work and be committed to a career working in the human service profession.

Developmental Disabilities Curriculum

The developmental disabilities option is designed to prepare individuals to work primarily in direct service under professional supervision within an area of specialization, such as: mental retardation, cerebral palsy, epilepsy, autism, or other handicapping conditions.

The minimum number of credits required for the degree: 62.

Semester I

HSV	050	Introduction to Human Services
HSV	010	Group Processes
ENG	100	College Writing
PSY	101	General Psychology I
SOC	100	Introduction to Sociology

Semester II

HSV	020	Practicum I
HSV	041	Nature and Needs of the Developmentally Disabled
BIO	019	Biological Basis of Human Activity
THE	170	Public Speaking

OR

COM	171	Interpersonal Communication
PSY	102	General Psychology II

Semester III

HSV	011	Psycho-Social Evaluation
HSV	012	Interviewing and Counseling
HIST	200	Reference, Research and Report Writing
HSV	021	Practicum II
PSY	220	Developmental Psychology

Semester IV

HSV	043	Working with the Developmentally Disabled
HSV	023	Practicum III
HSV	044	Behavior Modification Techniques
HSV	045	Resource Awareness and Utilization

Mental Health Curriculum

The mental health program is designed to meet the needs of middle-level workers in the field. It provides the graduate with skills to work, under professional supervision, in a variety of mental health settings — mental health institutes, comprehensive mental health centers, and public and private human service community agencies.

The minimum number of credits required for the degree: 62.

Semester I

HSV	050	Introduction to Human Services
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HSV	010	Group Processes
ENG	100	College Writing
PSY	101	General Psychology I
SOC	100	Introduction to Sociology
Semester II		
HSV	020	Human Service Practicum
BIO	019	Biological Basis of Human Activity
THE	170	Public Speaking
OR		
COM	171	Interpersonal Communication
PSY	102	General Psychology II
Elective		
Semester III		
HSV	011	Psycho-Socio Evaluation
HSV	012	Interviewing-Counseling
HIST	200	Reference, Research and Report Writing
HSV	021	Human Service Practicum
PSY	220	Developmental Psychology
Semester IV		
HSV	023	Human Service Practicum
Elective (Psychology or Sociology)		
SOC	170	Social Issues
PSY	333	Psychopathology

Gerontology Curriculum

This program is designed to prepare the graduate for a number of existing and new entry-level jobs in community-based and institutional programs for the elderly.

The minimum number of credits required for the degree: 63.

Semester I		
ENG	100	College Writing
PSY	101	General Psychology I
SOC	100	Introduction to Sociology
HSV	050	Introduction to Human Services
HSV	010	Group Processes
Semester II		
HSV	013	Introduction to Gerontology
HSV	020	Human Service Practicum
BIO	019	Biological Basis of Human Activity
THE	170	Public Speaking
OR		
COM	171	Interpersonal Communication
PSY	102	General Psychology II
Semester III		
HSV	012	Interviewing and Counseling
HIST	200	Reference, Research and Report Writing
HSV	015	Physiology and Pathology of the Elderly
HSV	021	Human Service Practicum
PSY	220	Developmental Psychology
Semester IV		
HSV	023	Human Service Practicum
HSV	025	Activity/Recreation Leadership
OR		
THR	215	Social Recreation
SWE	275	Developmental Services to the Elderly
SOC	170	Social Issues
Elective		

The course descriptions listed below are for courses offered by the Division of Basic Studies. Descriptions of other courses may be found under the catalog section of the specific department(s) offering those courses.

DBS 016 Biosurvival

This course presents material to help the individual develop basic skills and knowledge for a greater enjoyment of the out-of-doors and, if necessary, a better chance of survival. The course consists of lectures, demonstrations, student participation and individual projects. Besides written exams, students will be expected to participate in a cooking demonstration involving common wild edibles. A 48-hour survival experience will be offered as an optional part of the work. Examples of topics covered are: alternatives in firemaking, shelter and clothing, traps and tracks, survival tools and first aid. There is a strong emphasis on the proper identification and use of wild plants for food. Cr 3.

DBS 017 Marine Biology of the Southern Coast of Maine

This course, a basic though intensive introduction to the animals and plants commonly found along the Maine coast, will emphasize field collections and laboratory identification. Trips to rocky coast, mud flat, sand beach and tidal marsh habitats are planned. This will permit students to collect, describe, identify and compare the organisms found in several distinct marine habitats. In this way, students will develop an understanding of how different environmental characteristics select the different animal and plant communities found. classroom discussions, audio-visual presentations and lab exercises will supplement the field work where appropriate. Car-pooling for field trips will be arranged in class. Cr 3.

ENG 009 Developmental English

This course is designed to help students who need to develop writing proficiency to enter ENG 100, College Writing. This course is taken on a pass/fail basis and may be repeated as many times as necessary to achieve the appropriate writing level. This course is the responsibility of the Division of Basic Studies. Cr 3.

ENG 019 Written Business Communication

Training in the writing of effective business reports, letters, and related material. All students are given a diagnostic test at the initial class session to determine their basic skills. Cr 3.

HSV 010 Group Processes

Directed to an understanding of group functioning and leadership, this course considers factors involved in group cohesions and group conflict. Attention is given to communication systems, emotional styles, and role functions in groups. Techniques of role playing, psychodrama, and socio-drama are considered. During the laboratory experience, the small group studies itself and puts communication and sensitivity skills into practice. Prerequisite: PSY 101 Cr 3.

HSV 012 Interviewing-Counseling

An examination of and practice with the techniques of psychological interviewing for the purposes of gathering data and/or modifying human behavior. Current theories and techniques of counseling and psychotherapy will be studied and experience with interviewing and counseling techniques will be gained under professional supervision. Lec. 2. Cr 3.

HSV 013 Introduction to Gerontology

An introduction to the theory and practice of gerontology. This course will (1) trace the historical, legal and political aspects of services to the elderly; (2) consider the economic, physiological, psychological adjustments of older persons, as well as the transportation, communication, learning, and social aspects; (3) give consideration to the unique cultural, social, and communication needs of ethnic minorities, and (4) provide understanding of the role and function of a gerontology specialist. Cr 3.

HSV 014 Behavioral Research Methodology

An introduction to the nature, methods, principles, and techniques of behavioral research. Emphasis is placed upon understanding the journal reports of research and the potential application of research to human services. Cr 3.

HSV 015 Physiology and Pathology of Elderly

This course is designed to familiarize the student with the developmental, physiological process of aging and commonly occurring pathophysiology of the elderly. The signs and symptoms, diagnosis, treatment, and prognosis of geriatric illnesses are presented. Emergency treatment procedures and referral mechanisms are discussed. Cr 3.

HSV 020 Practicum in Human Service

This course offers experiential learning in three of the functional human service areas (e.g. mental health, mental retardation, gerontology, chemical addiction, child development, etc.). The student begins to practice

skills of objective observing, reporting and recording, interpersonal relationships, interviewing, and other helping relationship skills under professional supervision. In a small weekly group seminar with the course instructor, each student should acquire an in-depth understanding of the human service delivery system, and explore topics such as confidentiality, ethics, professionalism, values, and human rights and dignity. Each student will spend five weeks within three different agencies. Prerequisites: open only to students who are HSV degree candidates; HSV 011 and permission of the instructor. Lec. 2, 8 hours field experience per week. Cr 4.

HSV 021 Practicum in Human Service

This second practicum course is designed to offer students experiential learning within the human service options of their choice. This course begins a specialization within a functional area (e.g., gerontology, chemical addiction counseling, mental health). Students are exposed to the delivery system of their human service options with consideration to four elements of the system: prevention, non-residential care, residential care, and after care services. Within this context students continue to refine helping relationship skills and acquire functional specialization. A weekly conference will provide interaction sessions in which students will share experiences, and demonstrate acquisition of helping skills. Students will be assigned to two human service agencies within their service option. Prerequisites: open only to students who are HSV degree candidates, HSV 020 and permission of the instructor. Lec. 2, 8 hours field experience per week. Cr 4.

HSV 023 Practicum in Human Service

This is the third sequential experiential learning practicum course. Students spend the entire semester in a human service agency related to their chosen functional area. Students gain a deeper understanding of the delivery system within their specialty area and an increased sophistication in helping relationship skills. A weekly seminar provides interaction sessions in which the student will share experiences and demonstrate the acquisition of the helping and change-agent skills. Prerequisites: open only to students who are HSV degree candidates; HSV 021 and permission of the instructor. Lec. 2, 16 hours field experience. Cr 6.

HSV 025 Activity/Recreational Leadership

This course introduces the student to the procedures, practices, and aids for organizing

and conducting programs to maintain the physical, social, and emotional functioning of the elderly. A variety of existing programs sponsored by a range of public and private agencies, organizations, and community groups will be examined in order to understand the underlying goals that guide those in position to direct and influence services provided for the elderly. Prerequisite: HSV 013 or permission of the instructor. Cr 2.

HSV 030 Senior Seminar

Students select from a series to be arranged by the coordinator each spring semester. Topics may include such specialties as behavioral engineering, community service methods, mental health methods, activity therapies, corrections. Professionals with specialties in topic area will teach the seminars. Reading, discussions, and practical experience integrated in the seminar. Prerequisite: open to program majors, or with permission. Cr 3.

HSV 041 Nature and Needs of the Developmentally Disabled

An overview of developmental disabilities. The physiological, psychological, educational, and familiar characteristics of developmental disabilities. Mental retardation, cerebral palsy, epilepsy, autism, and other handicapping conditions closely related to mental retardation. The historical development of treatment for the developmentally disabled. Current definitions and concepts. The practicum site will be used to assist in the identification and knowledge of the developmentally disabled. Prerequisite: HSV 050 and/or permission of instructor. Cr 3.

HSV 043 Methods of Working with the Developmentally Disabled

Methods to improve physical, social, educational, and perceptual-motor skills of the developmentally disabled. Recreational and leisure time resources within the community. Social adjustment of the developmentally disabled. Basic tenets of personal and social guidance. Students expected to directly apply course content to their practicum setting. Prerequisite: HSV 041 and/or permission of instructor. Cr 3.

HSV 044 Behavior Modification Techniques

Concepts and techniques of behavior modification as it applies to the developmentally disabled. The practicum site supplements classroom experience. Identifying and recording behavior, outlining consequences, and identifying and implementing procedures to modify behavior. Students expected

to develop modification program which could effectively be used at their practicum site. Cr 3.

HSV 045 Resource Awareness and Utilization
Community, regional, state and federal resources discussed with the goal of establishing a better awareness of resource utilization. Interrelationships between public and private programs, development of program financing, and discussion of program models. Current provisions and programs relative to educational planning. Development of an in-depth awareness of sheltered workshop and boarding home programs. Guest lecturers from local and state agencies. Open discussion. Cr 3.

HSV 050 Introduction to Human Services
A non-theoretical course designed as an orientation to the national, state and local human service delivery system. The human service specialty areas, the service models, and the human service profession will be presented. Interrelationships within all human service and health professions will be discussed in addition to professional ethics, confidentiality, and relevant professional terminology. Basic helping skills will be presented and practiced. This course is designed to afford the student more confidence entering the practicum situation and is a prerequisite to all practicum placements. Cr 3.

MS 009 Developmental Mathematics
The Math Lab is a course designed for students who need to review math fundamentals. Instruction takes into consideration the individual differences people have in learning. This course is offered in a self-pacing for-

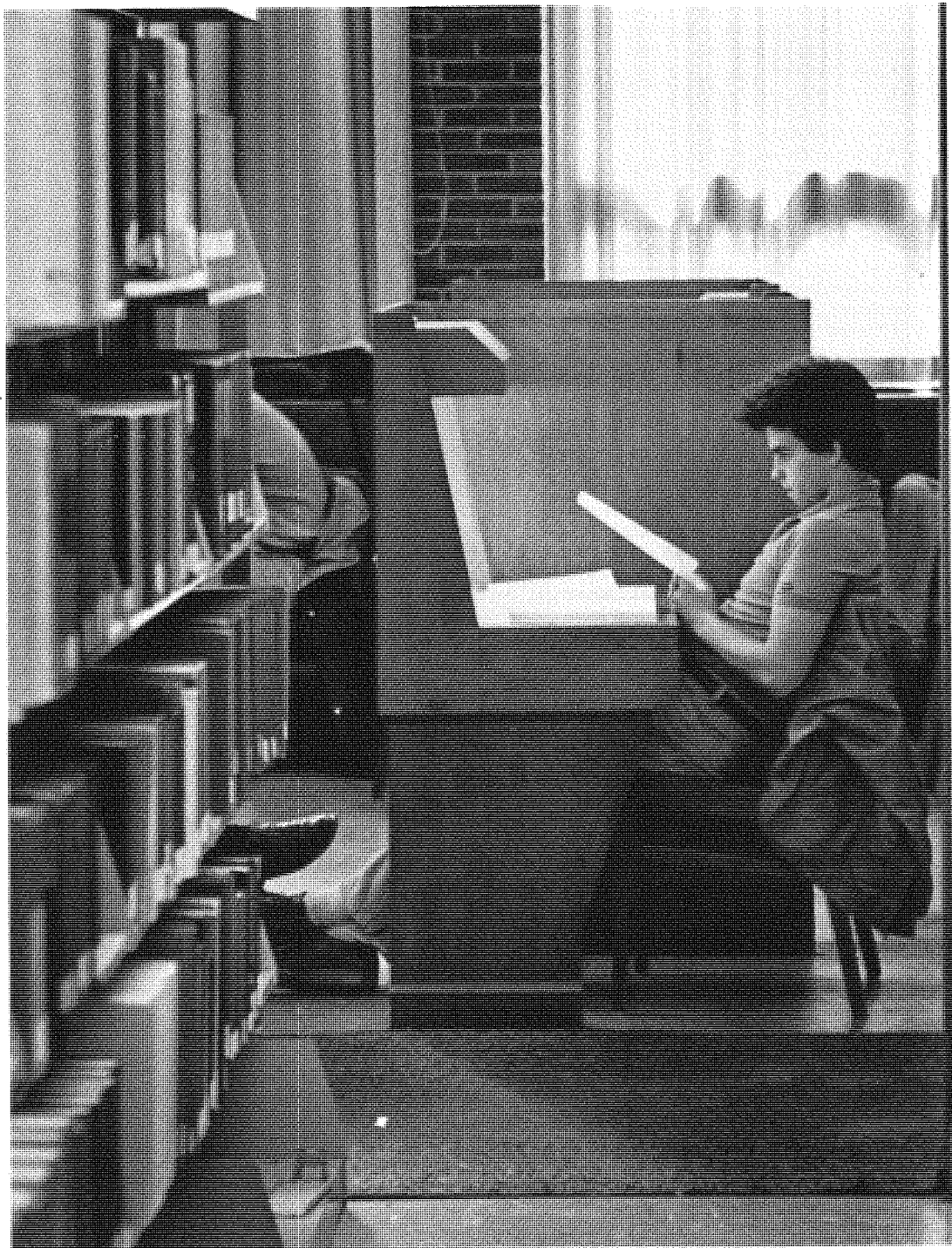
mat with a great deal of individual assistance. All students are given a diagnostic test prior to enrollment to determine their basic skills. Credit earned in MS 009 does not apply or accumulate for any degree program at the University of Southern Maine. Students may register for this course more than once. Cr 3.

MS 010 Elementary Algebra
The first course of a two-course sequence designed for students who are deficient in high school algebra. Topics covered include number systems, functions, graphs, the solution of equations, and the solution of problems with a business orientation. No prerequisites. Cr 3.

MS 011 Intermediate Algebra
A continuation of MS 010. Prerequisite: MS 010 or one year of high school algebra. Cr 3.

MS 140 Pre-Calculus Mathematics
A brief review of elementary algebra followed by a study of the algebraic, exponential, logarithmic, and trigonometric functions. Prerequisites: two years of high school algebra and one year of geometry, and a passing grade on an algebra competency test which will be administered at the first class meeting. Cr 3.

USM 100 Freshman Seminar
An orientation to the University emphasizing its purpose, programs, and services. Basic academic skills, expectations, career planning and other topics will be covered. Pass/Fail; this course may be counted for elective credit only. Enrollment open only to freshmen with less than 25 credits. Cr 3.



Reserve Officers Training Corps

Director: Major Jackson R. Kurtzman (U.S. Army)

Air Force ROTC Students at the University of Southern Maine may earn a commission in the United States Air Force by taking appropriate coursework at the University of New Hampshire (Durham). Students are required to spend one day per week at U.N.H. and must provide their own transportation. For information, contact the U.S. Army ROTC office at 780-5255.

Army ROTC Army ROTC offers male and female students of the University an opportunity to earn a commission in the United States Army while pursuing a bachelor's degree. Students register for military science courses as part of their regular undergraduate curriculum. For information, contact the ROTC office at 780-5255.

Curriculum

The ROTC program consists of a basic course and an advanced course. Normally, the basic course is taken during the student's freshman and sophomore years. However, other students may enroll in the basic course by receiving permission from the professor of military science. Students who have received previous military training (veterans, military academies, Junior ROTC, etc.) may be granted credit for the Basic Course or portions thereof as determined by the professor of military science. ROTC Basic Camp may be taken in lieu of the Basic Course as outlined in the course descriptions.

Students who complete or receive credit for the basic course may apply to the professor of military science for admission to the advanced course. If admitted the student receives \$100 per month during his/her junior and senior years. Students who complete the advanced course are appointed second lieutenants in the United States Army, and can be commissioned in the National Guard, the Army reserve, or the active Army.

Scholarships Army ROTC scholarships for 1, 2, and 3 years are available on a competitive basis. The scholarships are awarded annually and defray the cost of tuition, books, lab fees, and school supplies. You can receive more information on these scholarships by calling 780-5255 or by visiting the ROTC office.

The Basic Course

To complete the basic course, the student must complete the core curriculum or the student must complete ROTC Basic Camp (MT 29). The core curriculum consists of MT 11, 12, 21, and 22. The student may enter the basic course by taking any of the courses listed below, provided the course is listed in the schedule of classes for the semester concerned.

UMO-MTL Leadership Laboratory

Leadership Lab is a requirement for all ROTC cadets. The purpose of Leadership Lab is to provide an environment wherein cadets can develop and improve their military leadership skills. Counseling and periodic evaluation of cadet performance are the primary methods used. (In case of class conflicts, an alternate Leadership Lab will be arranged to meet student requirements.)

Cr 0.

UMO-MT 11 Introduction to ROTC and the U.S. Army

The purpose and organization of the ROTC Program. The role of officers. The development of military customs, courtesies and traditions. An overview of the defense establishment is presented. The importance of the Reserve Components (U.S. Army Reserve and Army National Guard) is outlined; the future direction of the U.S. Army is discussed. Student participation in Leadership Laboratory is required.

Cr 1.

UMO-MT 12 National Security

Soviet and United States principles of war are presented. Technological advances are highlighted and their influence on warfare. The organization of the U.S. Army and the national defense structure are discussed. Factors and instruments of national power and the attainment of national objectives. Partic-

ipation in Leadership Laboratory is required. Cr 1.

UMO-MT 21 Map Reading and Squad Tactics

Reading and interpreting maps and aerial photographs is taught. Marginal information, map grid coordinates, scale and distance, directions, use of the compass, intersection/resection, elevation and relief, GM angle, and map substitutes are a part of the map reading instruction. Squad organization, movement techniques and actions are taught and practiced in a field environment. Student participation in Leadership Laboratory is required. Cr 2.

UMO-MT 22 American Military History

Development of the United States Military system from colonial times to present. Examination of the principles of war and how they impact on military organizations and tactics are discussed. Student participation in Leadership Laboratory is required. Cr 2.

UMO-MT 29 ROTC Basic Camp

A six-week summer camp conducted at Fort Knox, Kentucky. The student receives pay, and travel costs are defrayed by the Army. The environment is rigorous, and is similar to Army Basic Training. No military obligation incurred. The training includes the role and mission of the U.S. Army, map reading and land navigation, first aid, marksmanship, leadership, physical training, drill and parades, and tactics. Completion of MT 29 satisfies all basic course requirements. Six different cycles offered during the summer. Basic course applicants are accepted during the spring semester. Students apply for enrollment to the professor of military science. Selection for attendance is based on qualifications and merit. Cr 6.

UMO-MT 31 Leadership

Exposure to the branches of the Army. The development and conduct of military instruction is outlined. Exposure to the various leadership theories and to the leadership environment are discussed and experienced. Fundamentals of leadership, human behavior, communication, and contemporary human problems are reviewed and practiced. Student participation in Leadership Laboratory is required. Cr 3.

UMO-MT 32 Advanced Tactics

Exposure to military equipment and military tactics at the squad, platoon, and company level. Advanced Camp prerequisites are

completed. Student participation in Leadership Laboratory is required. Cr 2.

The Advanced Course

The courses listed below are required for completion of the advanced course. In addition, students are required to attend a six-week ROTC Advanced Camp at Fort Bragg, North Carolina between their junior and senior year. In exceptional cases, ROTC Advanced Camp may be deferred by the professor of military science until the student completes the senior year. Selected students may attend Ranger School in lieu of ROTC Advanced Camp.

UMO-MT 41 Military Management

Students are exposed to military law. An analysis of legal problems facing small unit leaders is conducted. The Code of Conduct, management theory, motivation theory, training, personnel, and logistics management practices are taught. Management by Objective (MBO) and Organizational Effectiveness (OE) theories are discussed. The modern volunteer Army (MVA) and total Army goals are reviewed. Framework of ethical actions are discussed and practiced. Student participation in Leadership Laboratory is required. Cr 3.

UMO-MT 42 Operations Seminar

Students are exposed to larger unit operations at the brigade and battalion level. The sequence of command and staff actions and the problem-solving process are taught. The organization of the division, the brigade, and the battalion is outlined. Preparation of combat orders is taught and practiced. A discussion of current military problems in the leadership/management area is conducted. Student participation in Leadership Laboratory is required. Cr 3.

UMO-PT

A physical training program designed to evaluate the physical abilities of advanced course cadets and to sustain that ability. The class is a requirement for advanced course cadets and is optional for basic course cadets. The class will meet for one hour a week. Cr 0.

UMO-Special Courses

Special courses are available to individuals in the ROTC program on a competitive and voluntary basis. Those courses are: Airborne School, Ranger School, Air Assault School, and the Northern Warfare Training School. Information on these courses is available through the Army ROTC office. Cr 0.

Graduate Programs

The following graduate programs are available at the University of Southern Maine. The programs are described in detail in the Graduate Catalog.

Master's Degree

College of Arts and Sciences: Computer Science; *College of Education:* Adult Education, Counselor Education, Educational Administration, Professional Teacher, Reading; *School of Business, Economics and Management:* Business Administration; *School of Nursing:* Nursing; *Inter-College Program:* Public Policy and Management; and *The University of Maine at Orono:* Master's Degree in History.

Law Degree

University of Maine School of Law: Law (Juris Doctor)

School of Law

Dean: L. Kinvin Wroth

Associate Dean: Martin A. Rogoff

Professors: Delogu, Gregory, LaFrance, Loper, McGuire, Potter, Rogoff, Ward, Wroth, Zarr; *Associate Professors:* Carson, Cluchey, Freehling, Friedman, Kandoian, Seibel, Shulman; *Lecturers:* Gibbons, Hathaway, Maiman, Morris, Priest, Wernick; *Adjunct Professors:* Hudon, Petrucelli

The University of Maine School of Law is a small school that has long offered a high quality of legal education to a carefully selected student body. With a fine faculty, excellent library resources, and a nationally oriented curriculum strong in basic legal courses, the Law School takes pride in educating men and women who will become capable and motivated attorneys.

The academic program is rigorous and demanding. Thanks to the School's size, however, its students have the benefit of small classes, frequent and informal contact with the faculty, and a friendly atmosphere. These factors do much to ease the strains attendant upon entry into an exacting profession.

The School averages 75-80 students per class, of whom approximately 40 percent are women; the number of students in the School is about 225, 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 14 full-time and a number of part-time instructors. It is drawn from many specialties and represents a diversity of backgrounds and interests.

The School is fully accredited by the American Bar Association and is a member of the Association of American Law Schools.

Established at Portland in 1961, the Law School is the successor to the University of Maine College of Law which existed in Bangor from 1898 to 1920. It is an administrative unit of the University of Southern Maine, but has responsibilities to the statewide University system. The school is located in a modern building, fully accessible for handicapped students, that provides excellent facilities for classroom and seminar discussion, library research, moot court participation, clinical practice, legal publications, and student activities. The Law School shares the building with the University of Southern Maine's Center for Research and Advanced Study and the University administration.

For more information on the Law School, contact the Office of the Dean, University of Maine School of Law, 246 Deering Avenue, Portland, Maine 04102 (207) 780-4340.

Summer Session

Director: Joseph F. Hearn

During the summer the University offers over 250 credit and noncredit courses, and a number of institutes and programs. The Stonecoast Writers' Conference, the Institute on Human Genetics, an Elderhostel program, and a music camp for talented high school musicians are some of the special offerings. Over 6,000 people attend summer conferences held in University facilities, in addition to the 3,000 students who enroll in academic courses. Cultural events such as musicals, concert series, poetry readings, and nature and history walks are also featured. Classes are held days and evenings in several schedule formats. The Gorham campus offers modern dormitory accommodations at reasonable rates.

For further information, contact the Summer Session Office, University of Southern Maine, 228 Deering Avenue, Portland, Me. 04103 or telephone 780-4076.

Center for Research and Advanced Study

Director: Robert J. Goettel

The purpose of the Center for Research and Advanced Study is to contribute to the development of Maine's economic, social, and environmental well-being through applied research and advanced study. The Center serves and assists governments, industries, institutions, and the people of Maine to solve policy, operational, organizational, and employee problems. The staff of the Center and associated faculty work in interdisciplinary teams to address issues related to economic development, the formation and management of business enterprises, health and human services, education, marine resources, and state and local agencies in Maine, other New England states, the federal government, private foundations, and the business community.

Staff of the Center come from a wide range of research and leadership roles in state, local, and federal governments, private business, not-for-profit organizations and institutions, research and development organizations, and university appointments. The academic fields in which Center staff have been trained include economics, sociology, psychology, political science, biomed-

cine, business administration, public administration, law, education, health, social work, communications, and counseling.

The Center for Research and Advanced Study is organized in three cooperating institutes.

Human Services Development Institute

Director: Stephen P. Simonds

The Human Services Development Institute's projects are concerned with health, rehabilitation services, social services, services for the mentally ill and mentally retarded, and alcoholism. Institute projects include program evaluations, policy/planning materials, job analyses, employment projections, training systems, training and curriculum materials, policy forums, and communication technologies.

Marine Law Institute

Director: Alison Rieser

The Marine Law Institute is committed to research and education on significant marine law issues. It researches marine-related issues for local, state, and federal agencies and provides interpretations of marine law to interested professionals in government and private industry. The Institute is jointly sponsored by the University of Maine School of Law and the Center for Research and Advanced Study. It is a component of the Center for Marine Studies of the University of Maine at Orono.

New Enterprise Institute

Director: Jay C. Lacke

The New Enterprise Institute was formed in 1974 as a business development and research project in the Center for Research and Advanced Study. Its purpose is to help strengthen the Maine economy and improve the material well-being of Maine people by setting in motion events which will stimulate business and industrial enterprise in the state. Supported by both public and private sources, the New Enterprise Institute provides management counseling to entrepreneurs, businessowners and executives; offers graduate courses in entrepreneurship and executive development through the School of Business, Economics and Management; organizes technical and marketing programs and seminars for trade and professional associations; and provides business, financial, and market information and assistance through the Enterprise Information Service and the Small Business Development Center.

In addition to the three institutes the Center provides research and development services in several program areas including economic studies, science and technology, and organized camping.

Division of Public Service

Director: William G. Mortensen

Administrative Associate: Ellen M. Trask

The Division of Public Service is responsible for the development, coordination, and support of the University's noncredit programs. It offers a wide range of noncredit activities to meet the professional and personal needs of the residents of southern Maine. During 1982-1983, over 26,000 persons participated in conferences, seminars, workshops, short courses, symposia, briefings, and certificate programs sponsored by the Division.

CEU Award System The Division administers the Continuing Education Unit (CEU) Award System. One CEU is awarded for 10 hours of participation in an approved program of continuing education. Students completing professional courses receive CEU awards rather than semester hour credit on grade sheets and permanent records. The CEU is a nationally accepted unit of measurement applicable to noncredit continuing education. CEU courses are generally designed for a specific audience and are often used for professional development in a particular industry or profession. The CEU permits the individual to participate in many kinds of programs while accumulating a uniform record available for future reference.

The CEU system for grade sheets and permanent records has been officially adopted by the New England Council of Deans and Directors of Continuing Education.

The following information indicates the variety and scope of the University's noncredit activities. Specific inquiries about these programs should be directed to the appropriate department. General inquiries should be directed to the Division of Public Service at 96 Falmouth Street, Portland, Maine 04103, 780-4092.

Department of Continuing Education for Business and Industry

Director: William G. Mortensen

The Department of Continuing Education for Business and Industry (CEBI) creates, develops, and administers noncredit programs for the business and industrial community throughout southern Maine. A wide range of programs are planned each year for all levels of management, as well as special activities related to timely business issues. The role of the department is to bring the University and the business community closer together through noncredit and in-house training at times and locations convenient to the adult learner.

For additional information, please contact the Division of Public Service at 780-4092.

Department of Conferences

Director: Kevin P. Russell; *Conference Specialist:* Beth Gleason

The Department of Conferences provides planning and coordination to groups wishing to use the University's conference facilities and services. The Department occasionally provides workshops and seminars which bring together qualified individuals to share new information and ideas, upgrade professional skills, or to impart new techniques.

The Department's conference planning and management services are extended to professional and trade associations, governmental agencies, private business and community groups and organizations. Programs can be conducted on either campus, or off-campus wherever an appropriate meeting site can be arranged.

An experienced conference staff is available to plan, coordinate, and facilitate the delivery of programs of virtually any size or duration. By using the University's conference services, the program initiator is free to concentrate fully on program content.

During the summer and, to a lesser extent, during the academic year, the University's classrooms, auditoriums, recreational facilities, and dining services are available for use by conference groups. Residence halls are also available for housing during the period mid-May to end of August. All meetings are within easy reach of major educational facilities on both campuses. Two libraries allow conference participants ready access to reference materials. The University also maintains a well-equipped audio-visual department, as well as a print shop.

Conference fees are determined by the Department of Conferences with the assistance of the conference sponsor's planning committee. While program costs will vary with the number of participants, duration of program, and special requirements, program fees are kept reasonable by utilizing University facilities and services whenever possible. The staff prepares a budget for each conference or workshop and presents to the sponsor a financial statement at the successful completion of the program.

Each summer the Department of Conferences offers a number of camps for junior and senior high school age students. Offerings for the summer included Soccer School, "SWISH" Basketball Camp, "STIX" Field Hockey Camp, Southern Maine Music Camp, and the Computer Camp. The Department also offers Elderhostel each summer for people over 60 years of age.

For information about these and other conference services at USM please call 207-780-4074.

Department of Continuing Education for Nursing and Health Professions

Director: Mary Ann Rost

The Department of Continuing Education for Nursing and Health Professions develops, offers, and evaluates noncredit programs in a variety of formats to meet the learning needs of nurses and other health professionals at locations throughout the state of Maine. Programs offered by the Department are held at college campuses, in health facilities, and other appropriate locations and include workshops, seminars, conferences, and briefings. Programs are available either on a fee basis or through specifically designed contracts with health care agencies.

Programs offered by the Department of Continuing Education for Nursing and Health Professions are conducted in cooperation with health agencies, health care officials in the state of Maine, or at the request of a group or individual. Examples of groups served are: nurses, pharmacists, dieticians, physical therapists, occupational therapists, social workers, radiology technicians, and laboratory technicians.

All programs are awarded CEUs and are approved by professional associations including The Maine State Nurses Association, and Maine Commission of Pharmacy. The following are examples of programs recently offered by the Department: Ethical Issues with Health Care; Trends in the Birth Experience; Family Violence; Women's Health Care Issues; Holistic Health; Cardiac Rehabilitation; Keys to Power; Managing Change; Briefings in Medical Surgical Nursing.

Department of Community Programs

Director: Joanne Spear

Program Specialists: Judith Burwell, Nancy Viehmann; *Administrative Staff*

Associate: Lucille Sheppard

The Department of Community Programs offers a wide range of programs including professional development in selected areas, personal enrichment, and career and skill enhancement. The Department seeks to bring the University and community closer together through the development of timely and relevant noncredit programs. Community Programs are generally designed for adults with full-time home and career responsibilities who desire practical courses which meet a specific need and which are offered at convenient times and locations.

Courses are taught by full-time and part-time instructors who are recognized experts in their fields. Instruction is usually personalized so that participants can apply the knowledge and skills obtained to their specific problem.

Because of the rapidly changing programs within the personal enrichment category, only professional certificate programs are described in this catalog. Please contact the Department of Community Programs at 780-4045 for specific information regarding programs and courses of study in both categories.

Personal Enrichment Areas of Study: career development; interpersonal skills; creative skills: self-help; arts; parapsychology; personal enhancement

Professional Programs (carry CEUs)

Certificate Program for Legal Assistants

Certificate Program in Quality Control

Certificate Program in Small Business Management

Certificate Program in Quality Control This program is planned to benefit all personnel engaged in controlling quality and maintaining quality assurance, including working crew leaders, as well as supervisory personnel and managers. Courses will be of special benefit to manufacturing and product engineers, purchasing agents, production control personnel, material expeditors, inspectors, and operators interested in improving their skills and contributing to the manufacture of quality products.

Courses are designed to be flexible and practical. Topics are selected to provide basic tools and techniques for setting up new quality assurance systems, or improving the effectiveness of already existing programs. The class size in all subjects is limited depending upon the type of course offered.

Certificate Program in Small Business Management This program is designed to meet the specific needs of the small business community. Techniques taught in the program should enable the small business entrepreneur to operate a more efficient business, develop the potential of employees, and plan more effective strategies for the future.

Subjects of the program will vary as current topics emerge. For the most part, courses will be directed to the practical as opposed to the theoretical aspects of current business practices. A Certificate of Completion will be awarded to those who successfully complete a total of 12 CEUs. Some of the courses available on a rotating basis include: CSSB 10-51 Managing a Small Business; CSSB 11-51 Utilizing Financial Tools in Decision-Making; CSSB 28-51 Human Relations; CSSB 14-51 Advertising and Marketing Techniques; CSSB 15-51 Effective Personnel Practices; and CSSB 16-51 Increasing Sales and Profits.

Certificate Program for Legal Assistants This paraprofessional program will provide a sequence of training leading to a certificate in the broad range

of legal services known as general practice, in addition to more in-depth study in several areas of specialization.

The Legal Assistant Program is designed primarily for part-time students and courses are offered either twice a week in the evenings or in a one- or two-day seminar format.

Those wishing to obtain the certificate must apply for acceptance to the program and meet admission requirements. Those who do not plan to earn the certificate but wish to take selected courses need not apply for formal admission but will be enrolled on a space-available basis. The curriculum for the beginning level includes the following courses.

Level I: Introduction to Law and Paralegalism; Legal Research and Source Materials; Litigation; Estates, Wills and Trusts; Real Estate; Business Organizations; Bankruptcy/Secured Transactions; Domestic Relations; Legal Writing. Required seminars: Orientation to the Legal Assistant Profession, Interpersonal Skills and Interview Techniques

Level II: In the second level, advanced courses in several areas of specialization are offered on a demand basis. Internships are also available with the approval of the Program Coordinator.

Lifeline Program

Director: Robert Folsom

Admissions Director: Robert Frazier; *Program Director:* Thomas Downing

The Lifeline Adult Fitness Program is a comprehensive approach to cardiovascular disease prevention, intervention, and rehabilitation. Thousands of members of the University community as well as Greater Portland participate in numerous Lifeline activities.

Lifeline also promotes adult learning through noncredit courses in stress management, smoking cessation, and nutrition/weight control. All Lifeline activities are designed to promote positive healthy lifestyles through education and exercise. Many of the fitness activities require medical clearance. Application to all programs should be made well in advance. All inquiries are welcome at 780-4170.

Aerobics Program

Walk/Jog is a program designed for the sedentary person who, for one reason or another, is not in good physical condition. It is essentially a routine of walking/jogging, calisthenics, stretching, and relaxation techniques. Exercise begins slowly and progresses each week. At the end of ten weeks, one may elect to go into the intermediate program.

Aquatics is a cardiovascular exercise program for those who prefer swimming. Non-swimmers may also participate, as many of the exercises can be performed in the shallow end of the pool: A combination warmup/water calisthenics routine is followed by a peak exercise period where heart rates are elevated to improve cardiorespiratory endurance. The exercise session will end with a cool down period of slow walking and swimming and final stretch downs on the pool deck.

Aerobic Dance is a choreographed exercise program focusing on aerobic conditioning, muscular endurance, postural flexibility, and relaxation. Simple dances ranging from slow stretching warm-ups to strenuous rhythmical routines are followed by mat work to improve muscle tone, strength, and flexibility. The program develops proper body alignment and maximum range of motion. The final movements of each class are devoted to explore various relaxation techniques.

Bodyshop helps people improve their posture and strength in a supervised program of weight training. A complete assortment of weight training equip-

ment is available including Nautilus, Universal, and free weights. The Bodyshop Program is a sensible approach to progressive resistance weight training for improving body tone, muscular strength, power, and endurance. Individually prescribed programs of exercise are designed to meet the particular goals and needs of each participant.

Each applicant will be interviewed. At this time a body assessment will be conducted which includes height, weight, flexibility, strength, body composition, blood pressure, and girth measurements as well as an evaluation of respiratory function. Objectives and goals of each individual are also discussed at this time.

Senior Lifeline is designed for persons over 60 years of age, including those who require a low level of exercise. Cardiovascular conditioning, determined by individual age-predicted heart rates, includes stationary bike riding, walking, or a combination of walking and jogging. Emphasis is placed on flexibility and postural muscle strength, accomplished through slow stretches and muscular improvement of specific muscle groups. Senior Lifeline should be considered a maintenance exercise program where individuals progress at their own rate.

Heartline is a program of cardiac rehabilitation for post-coronary and high risk individuals. This is a physician-supervised class, utilizing walking and jogging to recondition persons who need close supervision while exercising. All participants must be referred to Heartline by their personal physician. While Heartline provides medical supervision during the exercise session, it is not intended to replace the role of the primary physician. Throughout the program, periodic reports are sent to the primary physician and all significant events are promptly reported. Heartline is intended to improve communications between the participant and his or her personal physician. All necessary forms are provided by the Heartline office. All participants must enter the program at the start of a new session.

The Heartline Cardiac Rehabilitation Program provides exercise three times a week for twenty weeks. Exercise progresses from low-level stretching calisthenics and walking during the first ten weeks, to moderately vigorous developmental calisthenics and perhaps jogging during the second ten weeks. Although done in a group, all exercise is individually prescribed and suited to each individual's functional capacity.

Pulmonary Rehabilitation is a comprehensive, intensive program of exercise, education, and proper medical management for patients with chronic obstructive pulmonary disease. This is accomplished by increasing their awareness of their disease and its management, and through participation in a progressive cardiopulmonary exercise program, thereby enabling adaptation to improve lifestyles. Participants are enrolled in the program only after referral from their primary care physician.

This program provides the opportunity for patients and their families to have instruction in anatomy and physiology or respiration; the conditions that interfere with normal respiration; medications; diet; breathing exercise; relaxation; and respiratory hygiene. Personal counseling and community resources are made readily available to all participants. Because Lifeline believes that learning is active rather than passive, patients are considered as part of the involved team and are expected to share responsibility for their care. Class and activities are planned so that the patient has an opportunity to practice skills, integrate knowledge, and be involved in individualizing his or her home program. Participants who are accepted into this program should express a need for help, offer personal goals, and quit smoking or be willing to attend non-smoking classes.

Low Back Rehabilitation is a ten-week program consisting of progressive low-level exercise routines combined with periodic educational sessions.

Emphasis is placed upon the improvements of postural and muscular strength and endurance, body flexibility, and relaxation techniques. Along with the exercise sessions specific time is devoted to topics relating to low back problems. Such items as body anatomy and physiology, causation factors, body mechanics, and nutrition will be integrated into the ten-week program. Medical clearance is required for all participants regardless of age. Appropriate medical forms will be provided for your physician to sign.

Food and Fitness is a program designed for those individuals who are overweight and have limited exercise experience. Classes consist of individualized exercise routines and support group discussions. There are also lecture presentations on nutrition and weight control skills. Medical clearance is required of all participants.

Youth Weight Training/Conditioning Program is a supervised training program for boys and girls 14 to 18 years of age. Courses are offered throughout the year utilizing the Lifeline Bodyshop. The program is designed to teach proper conditioning values and techniques; increase muscular strength and endurance; increase flexibility; and increase cardiovascular conditioning.

Lifeline Leisure Learn Program provides group activities, leagues, clinics, and physical fitness opportunities for its members. Leisure-Learn offers participants activities and equipment for racquetball, handball, squash, volleyball, basketball, weight training, sauna baths, badminton, jogging, tennis, table tennis, dance, and many others.

Lifeline Lifestyle Courses

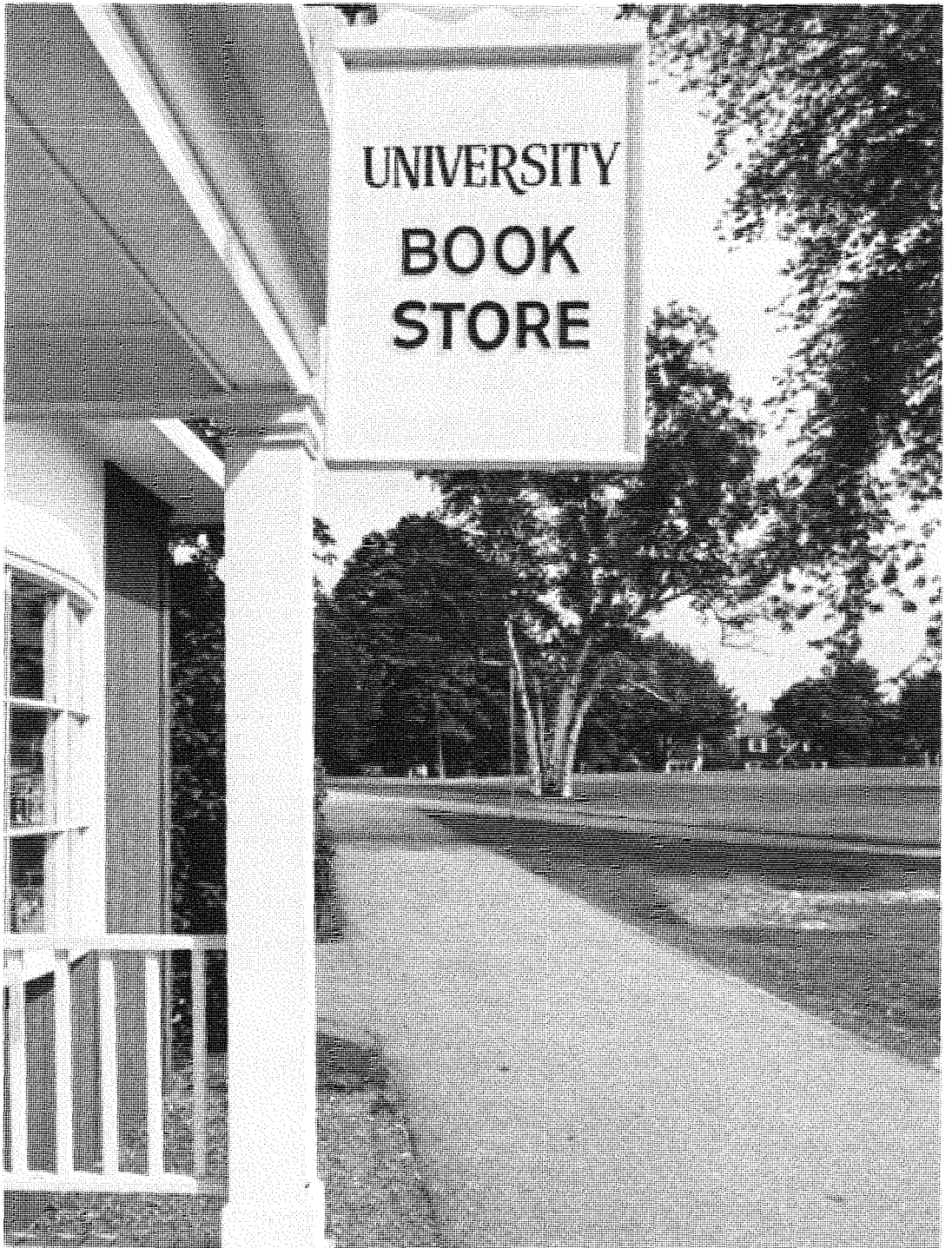
Stress Breaker is a four-week course which deals with stress theory and management. Physical, psychological, and socio-cultural dimensions of stress will be discussed. Methods of stress management will be presented for discussion and experimental involvement. Topics will include relaxation training, aerobic exercise, and personality factors.

Weight Reduction is a nine-week course using a many-sided approach to weight reduction. The primary emphasis is on the individual identification and solution to problem eating behaviors which may lead to or maintain overweight conditions. Proper nutrition and eating plans are emphasized and developed for participants, along with discussion on the value and myths of exercise.

No-Smoking — "I Quit" This course, offered for four weeks, two times per week, is designed to assist the smoker in making the decision to stop smoking and does not offer false hopes of 100 percent success. The primary purpose is to help the smoker identify reasons for smoking and through group support make some decisions about possibly stopping.

Cooking for the Health Of It Periodically throughout the year Lifeline offers cooking classes co-sponsored with the Whip 'n' Spoon, Commercial Street, Portland.

Note: Certain Lifeline programs may be taken for academic credit. Information on these courses may be found in the course registration outline.



University of Southern Maine Alumni Association

Director: Anne M. Theriault

The University of Southern Maine Alumni Association enrolls more than 18,000 active members representing alumni of Gorham Normal School, Gorham State Teachers College, Portland Junior College, Portland University, University of Maine in Portland, Gorham State College, Gorham State College of the University of Maine, University of Maine at Portland-Gorham, and the University of Southern Maine.

The Association is governed by a 16-member Board of Directors and a 30-member Advisory Council.

The Alumni Center is maintained at the Alumni House on the Portland campus. The Alumni Association of USM works to expand the tradition of service both to the alumni and the USM community, carrying on a tradition established some 90 years ago at the Gorham campus, and more recently at the Portland campus. Students are urged to visit the Alumni Center and to get acquainted with the personnel and programs of the Alumni Association before graduation. All students, as well as former students, are cordially welcomed.

The Alumni House on the Portland campus, also known as the Deering Farmhouse, is an approved Greater Portland Landmark. Criteria for such approval are: minimum age of 50 years, physical condition displaying original architectural intent, and reasonable documentation of the date of construction and history.

Administration of the University of Southern Maine

Administrative Organization as of August 1, 1983

President: Robert L. Woodbury, 228 Deering Avenue, Portland tel: 780-4480

Provost: Helen L. Greenwood, 228 Deering Avenue, Portland tel: 780-4485

Executive Assistant to the President: William B. Wise, 228 Deering Avenue, Portland tel: 780-4482

Executive Director for Budget and Institutional Research: Samuel G. Andrews, 209 Deering Avenue, Portland tel: 780-4484

Executive Director for Employee Relations: Beth I. Warren, 102 Corthell Hall, Gorham tel: 780-5486

Executive Director for University Relations: Alyce S. O'Brien, 602 Research Center, Portland tel: 780-4440

Administrative Staff of the President

Administrative Assistant to the President: Virginia L. Emery, 228 Deering Avenue, Portland tel: 780-4480
Director of Intercollegiate Athletics: Richard A. Costello, 108 Hill Gymnasium, Gorham tel: 780-5430
Director of the University of Southern Maine Alumni Association: Anne M. Theriault, Alumni House, Portland tel: 780-4110

Administrative Staff of the Provost

Associate Provost: Stephen J. Reno, 228 Deering Avenue, Portland tel: 780-4487
Assistant to the Provost and Director of Summer Session: Joseph F. Hearn, 228 Deering Avenue, Portland tel: 780-4076
Dean of College of Arts and Sciences: Robert J. Hatala, 118 Bailey Hall, Gorham tel: 780-5376
Acting Dean of College of Education: Dorothy D. Moore, 119 Bailey Hall, Gorham tel: 780-5371
Dean of School of Business, Economics and Management: Duane R. Wood, 113 Bonney Hall, Portland tel: 780-4020
Dean of School of Law: L. Kinvin Wroth, 105 School of Law, Portland tel: 780-4344
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Associate Dean: Carla H. Mariano, 55 Exeter Street, Portland tel: 780-4130

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Street, Portland tel: 780-4470
Acting Coordinator of Off-Campus Counseling and Coordinator: Susan M.
Silvernail, Intown Center, 68 High Street, Portland tel: 780-4470
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04072 tel: 282-4111
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04073 tel: 324-6012
Associate Director: Deborah F. Meehan, Bath Center, 72 Front Street, Bath
04530 tel: 442-7070
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Bailey Hall, Gorham tel: 780-5304

Academic Counselor: William Jackson, Intown Center, 68 High Street, Portland tel: 780-4115

Academic Counselor: Marcia J. Merritt, Sanford Center, 195 Main Street, Sanford 04073 tel: 324-6012

Counselor: Donald T. Osier, Bath Center, 72 Front Street, Bath 04530 tel: 442-7070

Educational Services

Dean: Gordon S. Bigelow, 119 Payson Smith Hall, Portland tel: 780-4035

Assistant Dean: John F. Keysor, 113 Corthell Hall, Gorham tel: 780-5236

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Dickey, Edna F. (1946-1973) University of New Hampshire, B.A., 1933; M.A., 1936; Associate Professor Emerita of History
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Hopkinson, David B. (1959-1983) University of Maine, B.S., 1942; University of Vermont, M.S., 1949; University of Maine, M.E., 1961; P.E. (Maine); Associate Professor Emeritus of Engineering
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
Lawrence, Harold Merrill (1946-1972) Boston University, B.S., 1940; Business Manager Emeritus
MacLean, Jean (1958-1975) Boston University, B.S., 1930; Yale University, B.N., 1933; University of Chicago, M.S., 1948; Professor Emerita of Psychiatric Nursing
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 Emeritus of Industrial Arts
Peabody, Mildred (1952-1973) Gorham State College, B.S., 1939; Boston University, Ed.M., 1952; Associate Professor Emerita of Education
Romanyshyn, John M. (1953-1981) University of Oklahoma, B.A., 1942; University of Chicago, M.A., 1952; Professor Emeritus of Social Welfare
Sawtelle, Gwen D. (1938-43;53) University of Minnesota, B.S., 1935; George Peabody Col-

lege for Teachers, M.S., 1939; Associate Professor Emerita of Arts
Sawyer, Elizabeth C. (1943-1971) University of Maine, B.S., 1928; Boston University, M.A., 1943; Middlebury College, M.A., 1963; Assistant Professor Emerita of English
Weeks, Ernest E. (1951-59;67-83) Bowdoin College, A.B., 1939; Tufts University, M.A., 1949; Columbia University, Ph.D., 1965; Professor Emeritus of English
Whitten, James M. (1951-1982) Colby College, A.B., 1944; University of Maine, M.A., 1955; Associate Professor Emeritus of Education
Whitten, Maurice M. (1955-1983) Colby College, A.B., 1945; Columbia University, M.A., 1949; 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, Esther E. (1930-1972) Colby College, A.B., 1926; Radcliffe College, M.A., 1929; Associate Professor Emerita of Social Sciences

Faculty and Staff

Abrams, Richard H. (1979) Assistant Professor of English; McGill University, B.A., 1964; University of Pennsylvania, M.A., 1965; University of New York, Ph.D., 1968
Ackerman, John R. (1980) Law School Placement and Alumni Director; University of Maine, B.A., 1966; M.Ed., 1971
Adams, Julia (1978) Artist in Residence, Music; Oberlin College, B.A., 1962; San Francisco State College, M.A., 1966
Albee, Parker B., Jr. (1966) Associate Professor of History; Dartmouth College, A.B., 1961; Duke University, M.S., 1964; Ph.D., 1968
Allen, Bruce A. (1970) Associate Professor of Mathematics Education; Gorham State College, B.S., 1960; M.S., 1967; Boston University, Ed.D., 1973
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 Graphic Communication; University of

- Wisconsin at Platteville, B.S., 1973; M.S., 1975; Iowa State University, Ph.D., 1983
- Andrews, Bruce H.** (1974) Associate Professor of Business Administration; University of Connecticut, B.A., 1967; Polytechnic Institute of New York, M.S., 1969; Ph.D., 1980
- Andrews, Samuel G.** (1966) Executive Director for Budget and Institutional Research; Babson College, B.S., 1964; University of Maine, M.S., 1966
- Anspach, Donald F.** (1970) Associate Professor of Sociology; Franklin and Marshall College, A.B., 1964; Western Reserve University, M.A., 1966; Case Western Reserve University, Ph.D., 1970
- Armentrout, Charles E.** (1960) Associate Professor of Physics; University of Maine, B.A., 1955; Wesleyan University, M.A., 1958; Columbia University, M.S., 1970
- Arsenault, Melanie J.** (1981) Resident Director/Counselor; University of Maine at Farmington, 1981
- Ashley, Kathleen M.** (1978) Associate Professor of English; Duke University, B.A., 1969; M.A., 1970; Ph.D. 1973
- Austin, Joseph M.** (1983) Assistant Director of Residence Life; University of Maine at Orono, B.A., 1976; M.Ed., 1981
- Ayers, George H.** (1959) Associate Professor of Physical Science; University of Maine, B.A., 1951; Ohio State University, M.A., 1959
- Bader, Joyce** (1983) Director of Development; University of Michigan, B.A., 1973
- Baier, Lee S.** (1966) Associate Professor of English; Reed College, A.B., 1948; Columbia University, M.S., 1952; Ph.D., 1965
- Bailow, Judith K.** (1978) Assistant Professor, School of Nursing; Ohio State University, B.S., 1961; Boston University, M.S.N., 1967
- Banner, Gerald T.** (1968) Reference Librarian; New School for Social Research, B.A., 1965; Pratt Institute, M.L.S., 1967
- Barton, Winston** (1981) Media Productions Specialist; University of Maine at Orono, B.S., 1976; Utah State University, M.Ed., 1980
- Bauer, Lu** (1983) Assistant Professor of Accounting; Northeastern University, B.S., 1969; University of Southern Maine, B.S., 1979; Bentley College, M.S., 1982
- Bay, John W.** (1965) Coordinator, Title III, Associate Professor of Economics; Saint Ambrose College, B.A., 1961; Boston College, M.A., 1964, Ph.D., 1966
- Bearce, Jeana Dale** (1965) Professor of Art; Washington University, B.F.A., 1951; New Mexico Highlands University, M.A., 1954
- Beirne, Piers** (1982) Associate Professor of Sociology and Legal Studies; Essex University (England), B.A., 1971; Durham University (England), Ph.D., 1975
- Bemis, A. Nye** (1970) Assistant Professor of Education and Director of Professional Development Center and International Exchange; Gorham State College, B.A., 1964; M.S., 1969
- Benamati, Dennis C.** (1979) Assistant Law Librarian for Technical Services; St. Francis College (PA), B.A., 1970; Fordham University, M.A., 1974; Southern Connecticut State College, M.L.S., 1975
- Benson, Mary Ann** (1982) Coordinator of Placement and Academic Internships; SUNY at Cortland, B.A., 1973; SUNY at Plattsburgh, M.S., 1976
- Benton, Kathie L.** (1980) Assistant Dean for Student Academic Services, College of Arts and Sciences and Director, Office for Prior Learning Assessment; University of Mississippi, B.A., 1969; Memphis State University, M.Ed., 1975; Ed.D., 1980
- Bergstrom, Linda** (1980) Instructor, School of Nursing; Gustavus Adolphus College, B.A., 1973; Teacher's College, Columbia University, M.Ed., 1980
- Bernard, Anne** (1978) Research Assistant, Human Services Development Institute, Center for Research and Advanced Study
- Bernotavicz, Freda D.** (1974) Research and Advanced Study Associate, Human Services Development Institute, Center for Research and Advanced Study; Nottingham University, B.A., 1963; Syracuse University, M.S., 1966
- Berry, Arthur O.** (1955) Professor of Industrial Education; Gorham State College, B.S., 1950; Pennsylvania State University, Ed.M., 1954; University of Connecticut, Ph.D., 1967
- Bethel, James A.** (1981) Associate Professor of Communication; University of Tulsa, B.A., 1964; University of Oklahoma, M.A., 1971; Ph.D., 1974
- Bibber, Joyce K.** (1967) Associate Professor of History; Westbrook Junior College, A.A., 1956; Barnard College, B.A., 1958; Stanford University, M.A., 1962; Ph.D., 1969
- Bigelow, Gordon S.** (1971) Dean, Educational Services; Brown University, A.B., 1954; University of Maine, Ed.M., 1962; Brigham Young University, A.M., 1966; Ph.D., 1967
- Bishop, John S.** (1968) Professor of Psychology; University of New Brunswick, B.A., 1953; Dalhousie University, M.A., 1957; University of London, Ph.D., 1958
- Birtolo, Pat Delaney** (1982) Special Needs Child Development Specialist, Maine Children's Resource Center; Boston College, B.A., 1974; Wheelock College, M.S., 1970
- Boden, John C.** (1981) Assistant Professor of Music; Northwestern University, B.M., 1974; University of Missouri at Kansas City Conservatory, M.M., 1981
- Bondeson, Janice M.** (1981) Research Assis-

- tant, New Enterprise Institute, Center for Research and Advanced Study; Wheaton College, B.A., 1960
- Bouchard, Joey A.** (1968) Associate Professor of Physical Education; Springfield College, B.S., 1960; M.Ed., 1961; Boston University, C.A.S., 1968
- Bouchard, Kathleen H.** (1969) Director of Equal Employment Opportunity; Western Michigan University, B.A., 1966; Indiana University, M.S., 1969
- Bowder, Jerry L.** (1960) Professor of Music; University of Washington, B.A., 1952; Lewis and Clark College, M.M., 1956; Eastman School of Music, Ph.D., 1960
- Boyle, Conrad L.** (1982) Assistant Professor of Marketing; United States Military Academy, B.S., 1959; University of Florida, M.B.A., 1964; University of Washington, Ph.D., 1982
- Brady, James B.** (1969) Head of Special Services, Library; State University of New York at Albany, B.S., 1967; M.L.S., 1969; University of Illinois, C.A.S., 1977
- Branch, Nicholas G.** (1980) Lifeline Exercise Counselor; Beloit College, B.A., 1973
- Braziel, Lawrence** (1977) Director of Management Information Systems; Southwest Missouri State University, B.S., 1966; Florida State University, M.A., 1974
- Brett, Tybe Ann** (1983) Visiting Associate Professor of Law; Barnard College, B.A., 1977; Columbia University School of Law, J.D., 1979
- Bridges, Ronda** (1983) Staff Associate for Student Advising, School of Business Economics & Management
- Briggs, Wayne F.** (1965) Director of Purchasing/Payroll; University of Maine at Portland-Gorham, B.S., 1975
- Brown, William A.** (1960) Associate Professor of Mathematics; Bowdoin College, B.A., 1954; University of Maine, M.A. 1959
- Brysh, Janet F.** (1976) Librarian, Center for Research and Advanced Study; Marymount College, B.A., 1958; Hunter College, M.A., 1964; Rosary College, M.L.S., 1968
- Bugbee, Jerie L.** (1980) Lifeline Exercise Specialist; University of Buffalo, B.S., 1973; University of New Hampshire, M.S., 1981
- Bullock, William B.** (1970) Business Manager; Cornell University, B.S., 1953; M.B.A., 1959
- Burke, Kathy Ann** (1983) Financial Aid Specialist; University of Southern Maine, B.A., 1981
- Burke, L. Morrill** (1959) Associate Professor of English; Bowdoin College, A.B., 1949; University of Washington, M.A., 1951; Columbia University, Ph.D., 1971
- Burnham, Harold N.** (1972) Physician, Student Health Services; University of Pennsylvania, M.D., 1959
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- Burtchell, Veda** (1972) Coordinator of Space and Scheduling
- Burwell, Judith K.** (1982) Program Specialist, Department of Community Programs; University of Maine at Orono, B.S., 1967; M.P.S., 1977
- Callender, Willard D., Jr.** (1962;1972) Senior Fellow, Center for Research and Advanced Study; Professor, Department of Human Resource Development, College of Education; Bates College, A.B., 1958; University of Connecticut, M.A., 1960; Ph.D., 1967
- Cameron, Julia M.** (1983) Director of Publications; Bates College, B.A., 1972
- Campbell, Anne B.** (1978) Project Coordinator/Child Development Specialist, Maine Children's Resource Center and Assistant Professor of Education; Vermont College, A.A., 1961; Scarritt College, B.A., 1965; George Peabody College, M.A., 1967; Ed.S., 1969; University of Illinois, Ph.D., 1975
- Campbell, Richard R.** (1973) Director, Student Financial Aid; University of Maine at Portland-Gorham, B.S., 1974
- Carner, Frank K.** (1970) Associate Professor of English; Temple University, B.S., 1964; M.A., 1967; Ph.D., 1976
- Carper, Barbara** (1982) Professor, School of Nursing; Texas Women's University, B.S., 1959; Teacher's College, Columbia University, M.Ed., 1966; Ed.D., 1975
- Carper, Thomas R.** (1967) Associate Professor of English; Harvard University, A.B., 1958; New York University, M.A., 1967; Boston University, Ph.D., 1973
- Carson, Loftus C. II** (1980) Associate Professor of Law; Cornell University, B.S., 1968; Princeton University, M.P.A., 1970; Harvard University, J.D., 1973; University of Pennsylvania, M.B.A., 1980
- Carter, Richard H.** (1964) Associate Professor of Industrial Education; Gorham State College, B.S., 1954; University of Maine, Ed.M., 1964; Boston University, C.A.S., 1971
- Caswell, Robert S.** (1980) Director of Media Relations; University of Southern Maine, B.A., 1974
- Chabot, Maurice J.** (1965) Associate Professor of Mathematics; Assistant Dean for Administration, College of Arts and Sciences; University of Maine, B.A., 1961; Bowdoin College, M.A., 1965
- Chandler, Joseph** (1968) Associate Professor of Business and Economics; Bowdoin College,

- A.B., 1942; University of Maine, M.B.A., 1967; University of New Hampshire, M.A., 1971
- Chipman, Carol K.** (1980) Admissions Counselor; University of Southern Maine, B.A., 1976
- Chronister, Floyd B.** (1966) Associate Professor of Education; Conservatory of Music, U.M.K.C., Missouri, B.M., 1953; University of Kansas, B.M.E., 1955; M.M.E., 1959; Ed.D., 1969
- Ciampi, Louis A.** (1969) Physician, Student Health Services; Dalhousie, M.D., 1959
- Cipollone, Domenica T.** (1977) Director, Student Affairs; University of Cincinnati, B.A., 1969; University of the Americas (Mexico), M.A., 1974
- Clarey, Joanne H.** (1982) Curriculum Coordinator, Committee on Changing Roles of Women and Men; Colby College, A.B., 1962; University of Maine at Orono, M.Ed., 1979, Ed.D., 1983
- Clarey, Richard J.** (1979) Associate Professor of Management; Senior Fellow, New Enterprise Institute, Center for Research and Advanced Study; Bowdoin College, B.A., 1961; Dartmouth College, M.B.A., 1963; Cornell University, Ph.D., 1968
- Clasby, Miriam** (1983) Associate Professor of Education and Director of Graduate Education; Emmanuel College, B.A., 1950; Boston University, M.A., 1957; Harvard University, Ed.D., 1971
- Cluchey, David P.** (1979) Associate Professor, School of Law; Yale University, B.A., 1968; State University of New York, M.A., 1970; Harvard Law School, J.D., 1973
- Coburn, Andrew F.** (1981) Research and Advanced Study Associate, Human Services Development Institute, Center for Research and Advanced Study; Brown University, A.B., 1972; Harvard Graduate School of Education, Ed.M., 1975; Brandeis University, Ph.D., 1981
- Coffin, Richard N.** (1964) Associate Professor of English; Bowdoin College, B.A., 1951; Harvard University, A.M., 1952; Boston University, Ph.D., 1962
- Cohen, Libby G.** (1980) Associate Professor of Special Education; University of Connecticut, B.A., 1967; Russell Sage College, M.S., 1971; Boston University, Ed.D., 1977
- Coit, Charles S.** (1977) Director, Center for Real Estate Education and Assistant Professor of Associate Business Administration; Yale University, B.S., 1966; Boston College, J.D., 1971
- Cole, Phillip A.** (1957) Professor of History; Boston University, B.S., 1954; M.A., 1955; Ph.D., 1963
- Cole, Ronald F.** (1963) Associate Professor of Music; Bowdoin College, B.A., 1961; Eastman School of Music, M.A., 1963; Indiana University, Ph.D., 1975
- Collins, Mary I.** (1976) Research and Advanced Study Associate, Human Services Development Institute, Center for Research and Advanced Study and Manager, Policy Project, Executive Office for Employee Relations; Boston University, B.A., 1963; University of Colorado, M.A., 1968
- Colucci, Nicholas D., Jr.** (1969) Associate Professor of Education; Gorham State College, B.S., 1963; University of Connecticut, M.A., 1964; Ph.D., 1969
- Conley, Audrey J.** (1979) Dean and Professor, School of Nursing; Case Western Reserve University, M.S., 1957; Columbia University, Ed.D., 1972
- Connick, George P.** (1966) Director, Division of Basic Studies and Off-Campus Program Delivery and Associate Professor of History; Stanford University, B.A., 1957; San Jose State College, M.A., 1960; University of Colorado, Ph.D., 1969
- 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
- Corson, Doane B.** (1970) Maintenance Project Coordinator; Southern Maine Vocational Technical Institute, 1958
- Costello, Melissa H.** (1953) Associate Professor of Education and Director of Clinical Experiences; Gorham State College, B.S., 1952; University of Maine, Ed.M., 1957; C.A.S., 1960
- Costello, Richard A.** (1953) Director, Intercollegiate Athletics and Professor of Health and Physical Education; University of Alabama, B.S., 1952; University of Illinois, M.S., 1953; Springfield College, D.P.E., 1965
- Cotton, Jean** (1967) Associate Professor, School of Nursing, Simmons College, B.S., 1960; Boston University, M.S., 1962
- Critchley, Judith A.** (1974) Staff Associate for Employee Benefits Management
- Crochet, Monique Y.** (1970) Associate Professor of French; University of Paris, Sorbonne, Licence d'Anglais, 1959; Diplome d'Etudes superieures and C.A.P.E.S., 1960; Doctorat de l'Universite de Paris, 1969
- Crosby, Marilyn C.** (1970) Coordinator of Gorham Student Health Services and Family

- Nurse Associate; Clara Maass Hospital, R.N., 1960; University of Maine at Portland-Gorham, B.S., 1978; University of Southern Maine, F.N.P., 1982
- Czupryna, Louise** (1980) Assistant Professor, School of Nursing; Northeastern University, B.S., 1973; University of Colorado, M.S., 1976
- Dalvet, Yves F.** (1968) Associate Professor of French; Laval College, B.A., 1940; New York University, M.A., 1965; Yale University, M.Phil., 1969
- Darling, Dana R.** (1983) Coordinator of the Department of Continuing Education for Business and Industry; University of Southern Maine, B.S., 1972; M.S., 1977
- Davis, Carol Lynn** (1982) Assistant Professor, Department of Human Resource Development, College of Education; University of Maine at Orono, B.A., 1968; M.S., 1977
- Davis, Everett A.** (1966) Assistant Professor of Education; Gorham State College, B.S., 1961; Indiana University, M.S.Ed., 1966; Ed.S., 1972
- Deady, John E.** (1981) Associate Professor of Education; Amherst College, B.A., 1947; University of Massachusetts, M.S., 1950; Harvard University, Ed.D., 1956
- Delogu, Orlando E.** (1966) Professor of Law and Legal Studies; 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
- diBenedetto, Lucia A.** (1970) Associate Professor of French; Emmanuel College, B.A., 1963; Middlebury College, M.A., 1965; New York University, Ph.D., 1975
- Dietrich, Craig** (1968) Associate Professor of History; University of Chicago, A.B., 1961; Ph.D., 1970
- Dorbacker, Beatrice M.** (1974) Associate Professor, School of Nursing; Columbia University, B.S., 1950; M.S., 1957; Boston University, Ed.D., 1973
- Dorsey, F. Donald, Jr.** (1967) Assistant Professor of Biology; Bowdoin College, A.B., 1950; Syracuse University, M.S., 1960; Simmons College, M.S., 1964
- Doty, Elizabeth** (1981) Adjunct Faculty, School of Nursing
- Downey, Loren W.** (1974) Dean, College of Education and Professor of Education; Drake University, B.A., 1949; University of Oregon, M.S., 1950; University of Arizona, Ed.D., 1966
- Downing, Thomas J.** (1976) Lifeline Program Director; University of New Hampshire, B.S., 1973
- Drew, David** (1972) Instructor in Physical Education; Springfield College, B.S., 1967; M.Ed., 1971
- Drew, Judith C.** (1978) Assistant Professor, School of Nursing; Northeastern University, B.S., 1972; Boston University, M.S., 1977
- Dubowick, Dorothy B.** (1968) Associate Professor, School of Nursing; Colby College, A.B., 1948; University of Maine at Portland-Gorham, M.S., 1971
- Duclos, Albert J.** (1965) Associate Professor of Theatre; University of Maine, B.S., 1963; M.A., 1965
- Duclos, Gloria S.** (1962) Professor of Classics; Radcliffe College, A.B., 1949; M.A., 1953; Oxford University, B.A., 1951; M.A., 1955
- Dunn, Caroline H.** (1980) Assistant Professor, School of Nursing; Arizona State University, B.S., 1976; University of California, M.S., 1978
- Durgin, Frank A., Jr.** (1964) Professor of Economics; Tufts University, B.A., 1949; University of Toulouse, France, License en Droit, 1954; Docteur en Droit, 1956
- Duval, Marjorie A.** (1962) University Archivist and Reference Librarian; New England Conservatory of Music, B.Mus., 1945; Simmons College, M.S., 1962
- Dyer, Jane M.** (1982) Instructor, School of Nursing; University of Maine at Portland-Gorham, B.S., 1971; University of Utah, M.S., C.N.M., 1978; University of Utah, F.N.A., 1981
- Dyer, Mary Lou** (1981) Assistant Dean, School of Law; University of Rhode Island, B.A., 1972; University of Maine, J.D., 1980
- Eastman, Joel W.** (1970) Associate Professor of History; University of Maine at Orono, B.A., 1962; M.A., 1965; University of Florida, Ph.D., 1973
- Elliott, Elizabeth K.** (1982) Instructor, School of Nursing; Fitchburg State College, B.S.N., 1972; Boston University, M.S.N., 1976
- Emerson, Horton W., Jr.** (1962) Professor of History; Colby College, A.B., 1949; Yale University, Ph.D., 1957
- Emery, Virginia L.** (1966) Administrative Assistant to the President; Shaw's Business College, 1938
- 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
- Farrar, John N.** (1966) Coordinator of Academic Counseling Services/Academic Counselor; University of Maine, B.A., 1951; M.Ed., 1958; C.A.S., 1962
- Farrell, Dennis P.** (1981) Director of Admissions; Boston College, B.A., 1964; Worcester State College, M.Ed., 1973

- Faulkner, Howard M.** (1970) Associate Professor of Industrial Education; Massachusetts State College of Fitchburg, B.S., 1957; Northeastern University, M.Ed., 1960
- Field, Patricia D.** (1970) Instructor in Physical Education; University of Oregon, B.A., 1964; Boston University, M.Ed., 1967
- Findlay, Robert W.** (1967) Professor of Accounting; Boston University, B.S., 1955; M.B.A., 1964; C.P.A. (Massachusetts and Maine)
- Fish, Lincoln T., Jr.** (1959) Professor of Mathematics; University of Maine, B.S., 1948; M.A., 1949; Boston University, Ed.D., 1951
- Fisher, Irving D.** (1967) Associate Professor of Political Science; University of Connecticut, B.A., 1946; Columbia University, M.A., 1953; Ph.D., 1976
- Folsom, Robert E.** (1968) Director, Lifeline Adult Fitness Program; Springfield College, B.S., 1953; Boston University, Ed.M., 1962
- Foster, Carolyn N.** (1966) Associate Professor of Mathematics; Douglass College, (Rutgers), A.B., 1958; Purdue University, M.S., 1961; Bowdoin College, A.M., 1966
- Fournier, Margaret A.** (1976) Associate Professor, School of Nursing; Fitchburg State College, B.S.N., 1972; Boston University, M.S.N., 1976
- Fournier, Wayne M.** (1980) Superintendent of Maintenance; Maine Maritime Academy, B.S., 1968
- Fralich, Julie T.** (1981) Research and Advanced Study Associate, Human Services Development Institute, Center for Research and Advanced Study; Hampshire College, B.A., 1974; Boston University, M.B.A., 1978
- Franklin, Patt R.** (1970) Associate Professor of Art; Pratt Institute, B.F.A., 1962; Tulane University of Louisiana, M.F.A., 1970
- Frazier, Robert R.** (1977) Lifeline Admissions Director; University of Maine at Orono, B.A., 1968; University of Maine at Portland-Gorham, M.S.Ed., 1972
- Freehling, Dan J.** (1982) Law Librarian and Associate Professor, School of Law; Huntington College, B.S., 1972; University of Alabama, J.D., 1975; M.L.S., 1977
- Freeman, Ardith** (1979) Lecturer in Music; Eastman School of Music, B.M., 1972; M.M., 1974
- Fremd, Lynn** (1978) Assistant Director, Student Financial Aid; Towson State College, B.A., 1974; M.Ed., 1978
- French, Robert J.** (1969) Associate Professor of Geography and Director, Museum of Culture Change, Dartmouth College, A.B., 1957; Northeastern University, M.Ed., 1967; Clark University, M.A., 1972
- Friedman, James** (1980) Associate Professor of Law and Legal Studies; 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) Associate Professor of Biology; Florida State University, B.S., 1969; M.S., 1972; Ph.D., 1976
- Gallant, Roy A.** (1980) Planetarium Director; Adjunct Professor of English; Bowdoin College, B.A., 1948; Columbia University, M.S., 1949
- Gavin, William J.** (1968) Professor of Philosophy; Fordham University, B.A., 1965; M.A., 1967; Ph.D., 1970
- Gayton, William F.** (1974) Associate Professor of Psychology; Springfield College, B.S., 1963; University of Maine, M.A., 1965; Ph.D., 1968
- Gianopoulos, Christine** (1978) Research and Advanced Study Associate, Human Services Development Institute, Center for Research and Advanced Study; University of Pittsburgh, B.A., 1968; Syracuse University, M.P.A., 1970
- Giguere, Madeleine D.** (1967) Professor of Sociology; College of New Rochelle, B.A., 1947; Fordham University, M.A., 1950; Columbia University, M.Phil., 1973; D.H.L., 1980
- Giroux, Gayle G.** (1980) Specialist, Student Financial Aid; Kennebec Valley V.T.I., A.A., 1979
- Gish, Nancy K.** (1979) Associate Professor of English; Western Michigan University, B.A., 1964; University of Michigan, M.A., 1965; Ph.D., 1973
- Gleason, Beth** (1983) Conference Specialist, Conference Department; Simmons College, B.A., 1975
- Goettel, Robert J.** (1981) Director, Center for Research and Advanced Study; State University, Fredonia, New York, B.A., 1955; Columbia University, M.A., 1963; Ed.D., 1970
- Gold, Joel I.** (1973) Associate Professor of Associate Business Administration; Pace University, B.B.A., 1968; Bernard Baruch College, M.B.A., 1972
- Gorman, Gerald E.** (1976) Associate Professor of Special Education; State College at Bridgewater, Massachusetts, B.S., 1962; Indiana University, M.S., 1964; Ed.D., 1971
- Graham, Anita K.** (1966) Staff Associate for Purchasing/Loan Programs
- Grange, Joseph** (1970) Professor of Philosophy; St. Joseph's College, B.A., 1961; Fordham University, M.A., 1965; Ph.D., 1970
- Greenberg, Gretchen A.** (1980) Co-Director, University Day Care Center; Ohio State Uni-

- versity, B.S., 1972; Wheelock College, M.S., 1977
- Greene, Nathanael N.** (1980) Acting Coordinator, Saco Center; University of Southern Maine, B.A., 1967; University of Washington, M.L.S., 1970
- Greenleaf, Nancy P.** (1982) Assistant Professor, School of Nursing; Boston University, B.S., 1964; M.S., 1967; D.N.Sc., 1982
- Greenwood, Helen L.** (1969) Provost and Associate Professor of Biology; Northeastern University, B.S., 1958; University of New Hampshire, M.S., 1960; University of Connecticut, Ph.D., 1969
- Greer, John** (1979) Staff Development Consultant, College of Education; Gorham State College, B.S., 1950; Pennsylvania State University, M.Ed., 1954; University of Connecticut, Ph.D., 1967
- Gregory, David D.** (1972) Professor, School of Law; Duke University, B.A., 1964; University of Maine, LL.B., 1968; Harvard University, LL.M., 1972
- Groskin, Debra P.** (1982) Special Needs Child Development Specialist, Maine Children's Resource Center; State University of New York, B.S., 1976; Wheelock College, M.S., 1979
- Grzelkowski, Slawomir A.** (1973) Associate Professor of Sociology; University of Warsaw, Poland, M.A., 1962; Indiana University, Ph.D., 1974
- Guay, Merle D.** (1969) Professor of Mathematics; Tufts University, B.S., 1958; University of Maine, M.A., 1960; Michigan State University, Ph.D., 1967
- Gutmann, Jean E.** (1977) Associate Professor of Associate Business Administration; State University of New York at Albany, B.S., 1971; University of Maine at Orono, M.B.A., 1974
- Hackett, George F.** (1968) Director of Labor Relations; Central Michigan University, B.A., 1952; University of Michigan, M.A., 1957
- Hanisko, SandraLee M.** (1983) Assistant Professor of Communication; University of Wisconsin-Milwaukee, B.A., 1976; University of Nebraska-Lincoln, M.A., 1979
- Hanna, John G.** (1963) Professor of English; Trinity College, B.S., 1936; Harvard University, M.A., 1946; Boston University, Ph.D., 1958
- Hare, Parnell S.** (1963) Associate Professor of Physical Sciences; University of Maine, B.S., 1956; University of New Hampshire, M.S., 1960
- Harper, Kathleen Irons** (1978) Child Development Specialist; Albertus Magnus College, B.A., 1973; Bank Street College of Education, M.S., 1978
- Hatala, Robert J.** (1980) Dean, College of Arts and Sciences, Professor of Chemistry; Juniata College, B.S., 1952; Yale University, Ph.D., 1957
- Hauk, Coin P.** (1983) Director of Police and Safety; Michigan State University, B.A., 1963
- Healy, Phyllis F.** (1980) Assistant Professor, School of Nursing; Hunter College, B.S.N., 1971; University of California, M.S.N., 1972
- Hearns, Joseph F.** (1970) Associate Professor of Psychology and Assistant to the Provost; Boston College, B.S., 1964; University of Massachusetts, M.S., 1966; Ph.D., 1967
- Heath, John R.** (1976) Associate Professor of Computer Science; University of Maine at Orono, B.A., 1968; M.A., 1970; University of Minnesota, M.S., 1976; Ph.D., 1982
- Heidema, Charlotte F.** (1981) Instructor, School of Nursing; University of Colorado, B.S., 1967; M.S., 1969
- Henderson, Joyann S.** (1978) Assistant Professor, School of Nursing; University of Maine, B.S., 1970; Boston University, M.S., 1978
- Hendry, Caroline L.** (1974) Coordinator of Instructional Systems, Division of Basic Studies; University of Southern Maine, B.A., 1983
- Hewitt, Duncan A.** (1976) Associate Professor of Art; Colby College, B.A., 1971; University of Pennsylvania, M.F.A., 1975
- Higgins, George M.** (1971) Director, Business Management Systems; University of Maine in Portland, B.S., 1971
- Hilyard, Stevens W.** (1982) University Librarian; Bowdoin College, A.B., 1962; University of Michigan, A.M.L.S., 1964
- Hodgdon, Paula D.** (1967) Professor of Physical Education and Coordinator of Women's Athletics; Lasell Junior College, A.A., 1948; Beaver College, B.A., 1950; Columbia University, M.A., 1952; Springfield College, D.P.E., 1973
- Hodges, Franklin D.** (1966) Associate Professor of Geography; Farmington State College, B.A., 1961; Clark University, M.A., 1966
- Hodgkin, Brian C.** (1976) Coordinator, Graduate Engineering Program and Associate Professor of Electrical Engineering; University of Maine at Orono, B.S., 1963; M.S., 1964; Johns Hopkins University, Ph.D., 1969
- Hodson, D. Bradlee** (1973) Associate Professor of Accounting; University of Maine at Orono, B.S., 1968; University of Pennsylvania, M.A., 1969; C.P.A. (Massachusetts)
- Holmes, Peter K.** (1968) Associate Professor of Biology; Bowdoin College, A.B., 1956; Wesleyan University, M.A., 1958; University of Illinois, Ph.D., 1964
- Honey, Irene** (1982) Career Development Specialist; Georgetown University, B.S.N., 1969; Syracuse University, M.S., 1971
- Hornby, Helaine** (1974) Research and

- Advanced Study Associate, Human Services Development Institute, Center for Research and Advanced Study; Simmons College, B.S., 1968
- Horne, Edwin C.** (1971) Associate Director of Admissions; University of New Hampshire, B.A., 1958; M.Ed., 1968
- Hornstein, John** (1979) Special Needs Child Development Specialist, Maine Children's Resource Center; Colby College, B.A., 1973; Tufts University, M.Ed., 1976
- Houlihan, John J.** (1975) Associate Professor of Business Law; Holy Cross College, A.B., 1969; Harvard Law School, J.D., 1972
- Howard, Albert A.** (1970) Head of Cataloging Services; Brown University, A.B., 1951; University of Kentucky, M.S. in L.S., 1955
- Howe, Elaine** (1978) Placement Specialist, College of Education
- Hudon, Edward G.** (1979) Adjunct Professor, School of Law; Bowdoin College, B.S., 1937; LL.D., 1977; Georgetown University, J.D., 1947; LL.M., 1950; Catholic University of America, M.L.S., 1956; George Washington University, S.J.D., 1962; Laval University, Doctor en Droit, 1976
- Hughes, Carolyn C.** (1968) Head of Periodicals Services; University of Maine, B.A., 1968; M.L.S., 1974
- Hunt, H. Draper III** (1965) Professor of History; Harvard University, B.A., 1957; Columbia University, M.A., 1960; Ph.D., 1968
- Huntoon, Dexter A.** (1979) Coordinator of Career Planning and Handicapped Student Services; University of Maine, B.A., 1969; University of Southern Maine, M.S., 1979
- Hyde, Stephen P.** (1977) Associate Director, New Enterprise Institute, Center for Research and Advanced Study; University of Maine at Portland-Gorham, B.A., 1972; University of Maine School of Law, J.D., 1977
- Hymoff, Ira H.** (1971) Director of Counseling and Career Development; Colby College, B.A., 1965; University of Maine at Orono, Ph.D., 1970
- Irish, Eleanore** (1980) Adjunct Faculty, School of Nursing; Teachers College, Columbia University, B.S., 1949; University of Michigan, M.P.H., 1954
- Irish, Joel W.** (1971) Associate Professor of Mathematics; Colby College, B.A., 1967; University of New Hampshire, M.S., 1969; Ph.D., 1975
- Jackson, William** (1975) Academic Counselor, Intown Center; University of Connecticut, B.A., 1975; University of Southern Maine, M.S., 1982
- Jagolinzer, Philip** (1966) Associate Professor of Accounting; Clark University, A.B., 1958; University of Rhode Island, M.S., 1960; University of Arizona, Ph.D., 1978; C.P.A. (Maine, Maryland)
- Jaques, John F.** (1946) Professor of English; Bowdoin College, A.B., 1943; Columbia University, A.M., 1946; Ph.D., 1971
- Jensen, Helena M.** (1967) Associate Professor, School of Nursing; University of Maine, B.S., 1943; Pennsylvania State University, M.Ed., 1951
- Jepsen, Patricia A.** (1978) Coordinator of Veterans Affairs/Academic Counselor; Pennsylvania State University, B.A., 1978
- Johnson, Sheila A.** (1968) Reference Librarian; Boston College, B.S., 1967; University of Maine, M.L.S., 1975
- Jones, Eugene** (1979) Lecturer in Music; New England Conservatory, B.M., 1965; M.M., 1967
- Jordan, Percival L.** (1979) Lifeline Exercise Specialist; ACSM Exercise Technician Certification, 1980 (Dallas, Texas); Advanced Physical Fitness Specialist, 1979; ALS Certification, 1980
- Kading, Charles S.** (1978) Associate Professor of Theatre; California State University, B.A., 1973; University of Washington, M.A., 1975; California State University-Fullerton, M.F.A., 1982
- Kandoian, Ellen Arpen** (1981) Associate Professor of Law; Yale College, B.A., 1971; Columbia University, M.A., 1972; Yale Law School, J.D., 1975; Boston University, LL.M., 1981
- Karpeles, Kathy** (1980) Counseling Psychologist; SUNY at Brockport, B.A., 1971; University of Southern California, Ed.D., 1977
- Kecksemethy, Stephen** (1978) Artist in Residence, Music; Eastman School of Music, B.M. and Performer's Certificate, 1966
- Kerrigan, Jean F.** (1977) Academic Counselor; University of Southern Maine, B.A., 1977
- Keyser, John F.** (1974) Assistant Dean of Educational Services and Registrar; University of Wisconsin, B.S., 1962; M.S., 1966
- Kim, Young** (1980) Assistant Professor of Associate Business Administration; Hunter College, B.A., 1965; M.A., 1968; Rutgers University, M.B.A., 1972
- Kirk, Albert S. III** (1977) Associate Professor of Manufacturing/Construction; Florida College, A.A., 1961; University of Tampa, B.S., 1963; Northern Illinois University, M.S., 1967
- 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
- Knowlton, Gayle K.** (1981) Assistant to the Dean, School of Law; Eastern Nazarene College, A.B., 1964

- Knowlton, Suzanne L.** (1968) Associate University Librarian; University of Kansas, B.A., 1960; University of Denver, M.A., 1963
- Koenig, Judith R.** (1977) Coordinator, Student Activities and New Student Programs; University of South Florida, B.F.A., 1974; University of Southern Maine, M.A., 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
- Kreisler, Joseph D.** (1972) Associate Professor of Social Welfare; Oklahoma University, B.A., 1947; Columbia University, M.A., 1949; M.S.W., 1959
- Kurtzman, Jackson R.** (1980) Major, U.S. Army; Professor of Military Science, ROTC; Vanderbilt University, B.A., 1967; University of Southern California, M.A., 1980
- Lacke, Jay C.** (1983) Director, New Enterprise Institute, Center for Research and Advanced Study; Lehigh University, B.S., 1964; Columbia University, M.B.A., 1966; Lehigh University, M.A., 1972
- Lacognata, Angelo A.** (1965) Professor of Sociology; University of Buffalo, B.A., 1957; University of Rochester, M.A., 1959; Michigan State University, Ph.D., 1962
- Laffin, Catherine A.** (1962) Coordinator of Administrative Services
- Libberte, Ann** (1980) Teacher, University Day Care Center; Wheelock College, 1976, B.S.Ed.; Wheelock College, 1979, M.S.Ed.
- Lamb, Charles H.** (1977) Director, Residence Life; State University of New York at Geneseo, B.S., 1972; State University of New York at Albany, M.S., 1973
- Lang, Michael** (1983) Associate Professor, School of Law; Harvard University, A.B., 1972; University of Pennsylvania, J.D., 1975
- Lantz, Ronald** (1978) Artist in Residence, Music; Indiana University, B.M., 1967; Juilliard School of Music, Graduate Studies, 1968
- Lapointe, Norman J.** (1967) Program Director, Maine Children's Resource Center and Assistant Professor of Education; University of Maine, B.S., 1956; University of Massachusetts, M.A., 1960
- Law, Eleanor** (1980) Volunteer Assistant to the Executive Director of Employee Relations; Simmons, B.A., 1950
- Lazar, Bonnie** (1975) Associate Professor of Social Welfare; State University of New York at Buffalo, B.A., 1970; Boston University, M.S.S.S., 1972
- Leh, Sharon J.** (1983) Academic Counselor; Lake Erie College, B.A., 1969; University of New Hampshire, M.Ed., 1974; CAS, 1979
- Lehman, Peter M.** (1974) Associate Professor of Sociology; Oberlin College, A.B., 1968; Meadville Theological School, University of Chicago, M.A., 1970; University of Massachusetts, Ph.D., 1978
- Leino, Ruth M.** (1976) Head Start/Preschool Handicapped Child Coordinator, Maine Children's Resource Center; University of Maine at Portland-Gorham, B.S., 1976
- Lemelin, Robert** (1977) Director, Learning Assistance Systems, Division of Basic Studies; Southern Connecticut State College, B.S., 1959; University of Maryland, M.A., 1963; Ph.D., 1967
- Lepelley, Edith** (1965) Associate Professor of French; Lycee de Jeunes Filles de Chartres, Baccalaureat 1950; University of Rennes (France), License en Lettres, 1956
- Levere, Ronald W.** (1976) Associate Director for Media Services and Instructional Development; State University of New York, B.S., 1965; University of Connecticut, M.A., 1976
- Levine, Frank M.** (1975) Coordinator, Organized Camping Resources, Center for Research and Advanced Study; Cambridge College, A.A., 1950
- Libby, Marcia H.** (1982) Exercise Counselor, Lifeline Program; Bryant College, A.A., 1970; Springfield College, Fitness Specialist Certification, 1981
- Libby, Philip C.** (1961) Coordinator of Property Management
- Lieberman, Alice A.** (1982) Assistant Professor of Social Welfare; University of Texas at Austin, B.A., 1974; University of Texas at Arlington, M.S.W., 1976; Washington University, St. Louis, Missouri, Ph.D., 1978
- Locke, Phyllis R.** (1968) Serials Reference Librarian; University of Toronto, B.A., 1951; University of Maine, M.L.S., 1968
- Lohmeyer, James** (1980) Assistant Professor of Associate Business Administration; University of Maine at Orono, B.A., 1972; Carnegie-Mellon University, M.B.A., 1974
- Loper, Merle W.** (1971) Professor, School of Law; Northwestern University, B.A., 1962; University of Chicago, J.D., 1965; Harvard University, LL.M., 1971
- Louden, Robert D.** (1982) Assistant Professor of Philosophy; University of California at Santa Cruz, B.A., 1975; University of Chicago, M.A., 1976; Ph.D., 1981
- Lumbert, Lanier P.** (1978) Circulation Librarian; University of Maine at Orono, B.A., 1971; University of Denver, M.A., 1974
- Lyons, Charles M.** (1973) Interim Director, Health Professions Education/Associate Professor of Education; St. Francis Xavier University, B.A., 1966; University of Hartford, M.Ed., 1970; Boston University, Ed.D., 1978
- MacDonald, Stephen A.** (1970) Associate Pro-

- essor of Mathematics; Gorham State College, B.S., 1963; University of Maine, M.A., 1964; Case Western Reserve University, Ph.D., 1972
- Macdougall, Ronald J.** (1962) Reference Librarian; Plymouth State College, B.Ed., 1953; Rutgers University, M.L.S., 1963; Middlebury College, M.A., 1974
- MacPherson, Kathleen I.** (1974) Associate Professor, School of Nursing; Boston University, B.S., 1963; M.A., 1965; M.S., 1974
- Maiman, Richard J.** (1971) Associate Professor of Political Science; 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
- Major, Cherie** (1982) Assistant Professor of Education; University of Wyoming, B.A., 1973; M.A., 1977; Utah State University, Ed.D., 1983
- Mariano, Carla H.** (1979) Associate Dean and Associate Professor, School of Nursing; University of Connecticut, B.S., 1967; Columbia University, M.Ed., 1970; Ed.D., 1978
- Martin, Joyce** (1980) Professional Staff Developer, Professional Development Center, College of Education; Simmons College, B.A., 1965; New York University, M.A., 1973
- Martin, Laurie L.** (1980) Student Financial Aid Specialist; University of Maine at Orono, B.A., 1980
- Martin, Peter J.** (1980) Assistant Professor of Music; Northern Illinois University, B.A., 1971; Wichita State University, M.M.E., 1973
- Martin, Thomas A.** (1965) Assistant Professor of Physical Education and Recreation, Director of Intramurals; University of Maine, B.S., 1963; M.Ed., 1969
- Mason, Edith C.** (1973) Registered Nurse, Student Health Services; Maine Medical Center, R.N., 1954
- Massaro, John L.** (1983) Associate Professor of Political Science; Assumption College, B.A., 1963; Niagara University, M.A., 1964; Southern Illinois University, Ph.D., 1973
- Massey, Karen A.** (1982) Staff Attorney, Marine Law Institute, Center for Research and Advanced Study; Middlebury College, A.B., 1974; Yale Law School, J.D., 1978
- Masure, Lorraine D.** (1973) Director, Sanford Center, University of Southern Maine; Nason College, B.A., 1970; University of Southern Maine, M.S., 1976
- Matson, Robert S.** (1982) Assistant Professor of Chemistry; Western Washington State University, B.A., 1969; M.S., 1971; Wayne State University, Ph.D., 1975
- Maxwell, David H.** (1978) Assistant Professor of Music; University of Illinois, B.M., 1968; M.M., 1969; Ed.D., 1979
- Mazurkiewicz, Michael, Jr.** (1969) Associate Professor of Biology; Rutgers University, B.S., 1961; M.S., 1964; University of Connecticut, Ph.D., 1970
- McCoy, James C.** (1982) Resident Director/Counselor; University of Delaware, B.A., 1980; M.Ed., 1982
- McCrillis, George** (1980) Exercise Instructor, Lifeline Adult Fitness Program
- McCullough, William T.** (1978) Instructor, Therapeutic Recreation; Southern Connecticut State College, B.S., 1971; M.S., 1977
- McDonald, Thomas P.** (1983) Research and Advanced Study Associate, Human Services Development Institute, Center for Research and Advanced Study; Bucknell University, B.S., 1971; University of Pennsylvania, M.S.W., 1973; University of Wisconsin-Madison, Ph.D., 1977
- McDonnell, Polina C.** (1975) Research Assistant, Human Services Development Institute, Center for Research and Advanced Study; University of Maine at Portland-Gorham, B.A., 1972
- McKeil, Richard L.** (1966) Professor of Associate Business and Economics; University of Maine, B.A., 1959; M.A., 1965
- McLin, Kay** (1975) Manager, Portland Bookstore and Gorham Bookcellar; Bates College, A.B., 1956; El Colegio De Mexico, M.A., 1967
- McMahon, Robert C.** (1969) Associate Professor of Economics; University of Washington, B.A., 1959; M.A., 1964; Lehigh University, Ph.D., 1970
- McManamy, Jean** (1981) Research Assistant, Human Services Development Institute, Center for Research and Advanced Study; Smith College, A.B., 1970; Harvard University, Ed.M., 1977
- McMullen, Faith** (1980) Teacher, University Day Care Center; University of Maine at Orono, B.S., 1968
- Medley, Joseph E.** (1983) Assistant Professor of Economics; State University of New York-Albany, B.A., 1973; University of Massachusetts, Amherst, M.A., 1976; Ph.D., 1981
- Meehan, Deborah F.** (1979) Associate Director, Bath Center; Colgate University, B.A., 1974
- Merritt, Marcia J.** (1981) Academic Counselor, Sanford Center; Bates College, B.A., 1959; Framingham State College, M.Ed., 1971
- Miaoulis, George** (1983) Professor of Marketing; New York University, B.S., 1965; M.B.A., 1969; Ph.D., 1974

- Milbury, Allen W.** (1963) Associate Professor of Education; University of New Hampshire, B.S., 1960; Indiana University, M.S., 1963; Ed.D., 1969
- Milligan, Patricia M.** (1975) Cataloger, School of Law Library; Ohio State University, B.A., 1971
- Mirochnick, Linda** (1980) Instructor, School of Nursing; State University of New York, B.S., 1972; M.S., 1979
- Monsen, S. Henry** (1969) Professor of Sociology; Florida State University, B.A., 1957; University of California, Los Angeles, M.A., 1959; University of Texas, Ph.D., 1967
- Moore, Dorothy D.** (1968) Acting Dean and Associate Professor, College of Education; University of Maine, B.S., 1966; M.Ed., 1968; Ed.D., 1978
- Moore, Edward** (1982) Circulation Associate, University Library; St. Anselm College, B.A., 1974
- Moore, Jo-Anna J.** (1983) Assistant Professor of Art Education; Syracuse University, B.F.A., 1965; Massachusetts College of Art, M.S., 1980
- Moore, Michael G.** (1967) Associate Professor of Art; Syracuse University, B.F.A., 1963; University of Washington, M.F.A., 1967
- Moore, Ramona L.** (1972) Serials Law Librarian, School of Law
- Moore, William H.** (1971) Associate Professor of Industrial Education and Technology; Gorham State College, B.S., 1969; University of Maine at Portland-Gorham, M.Ed., 1970; University of Tennessee, D.Ed., 1979
- Morrill, David** (1970) Associate Professor of Education; Moorehead State College, B.S., 1967; Texas A & M University, M.Ed., 1968; Ed.D., 1970
- Morrill, Robert R.** (1979) Senior Counselor, New Enterprise Institute, Center for Research and Advanced Study; University of Arizona
- Mortensen, William G.** (1966) Director of Public Service; University of Maine, B.S., 1961; M.S., 1966
- Murphy, Kathleen** (1981) Assistant Professor, School of Nursing; Program Coordinator Fort Kent Campus; University of Maine at Portland, B.N.S., 1973; University of Pennsylvania, M.S.N., 1978
- Najarian, Haig H.** (1966) Professor of Biology; University of Massachusetts, B.S., 1948; Boston University, M.A., 1949; University of Michigan, Ph.D., 1953
- Nannay, Robert W.** (1972) Associate Professor of Industrial Education and Technology; Trenton State College, B.A., 1964; M.A., 1967; University of Maryland, Ed.D., 1970
- Nelson, Gordon E., Jr.** (1981) Superintendent of Services; Brown University, B.A., 1975
- Nelson, Leonard M.** (1962) Lecturer, School of Law; Harvard University, A.B., 1957; LL.B., 1960
- Neuberger, Harold T.** (1957) Professor of Science Education; Iowa-Wesleyan College, B.S., 1952; University of New Mexico, M.S., 1953; Boston University, Ed.D., 1964
- Neveu, Raymond P.** (1982) Director of Graduate Program in School of Business, Economics and Management and Professor of Finance; Providence College, A.B., 1959; Boston College, M.A., 1961; University of Pittsburgh, Ph.D., 1968
- Newell, Alma H.** (1969) Assistant to the Director, Maine Children's Resource Center
- Normandeau, Jeanne G.** (1968) Associate Professor, School of Nursing; Boston College; B.S., 1964; M.S., 1967
- Norris, Barbara E.** (1983) Assistant Professor in Nursing; Good Samaritan Hospital School of Nursing, Diploma, 1958; Indiana University, BSN, 1978; University of Kentucky, M.S.N., 1982
- Novak, Irwin D.** (1971) Associate Professor of Geology; Hunter College, A.B., 1966; University of Florida, M.S., 1968; Cornell University, Ph.D., 1971
- O'Brien, Alyce S.** (1982) Executive Director for University Relations; Wilmington College, B.A., 1965; Ohio University, M.A., 1967
- O'Donnell, Michael P.** (1970) Professor of Education; University of Maine, B.S., 1958; M.S., 1961; Syracuse University, Ed.D., 1968
- O'Mahoney, Patricia M.** (1977) Assistant Professor of Biology; Long Island University, B.S., 1971; State University of New York at Buffalo, M.A., 1974; Ph.D., 1977
- O'Neil, Cheryl** (1982) Library Acquisitions Associate
- Osier, Donald T.** (1982) Counselor, Bath Center; Bates College, B.S., 1973; Michigan State University, M.A., 1976
- Padula, Alfred L.** (1972) Associate 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
- Palmacci, Viola** (1963) Coordinator, Portland Student Health Center/Family Nurse Associate; Maine Eye and Ear Infirmary, R.N., 1944
- Papa, Joseph P.** (1980) Director of Facilities Management; University of Rhode Island, B.S., 1973
- Paradise, Noel E.** (1967) Professor of Psychology; University of Maryland, A.B., 1948; University of Michigan, Ph.D., 1960
- Parsons, Gregory L.** (1983) Adjunct Professor

- of Business Administration; University of Minnesota, B.S., 1974; Purdue University, Ph.D., 1980
- Parsons, Henry L.** (1983) Assistant Professor of Productions/Operations Management; Michigan State University, B.S., 1960; University of Oregon, M.S., 1968; Ph.D., 1974
- Peake-Godin, Helen** (1980) Instructor, School of Nursing; Spalding College, B.S., 1969; Emory University, M.N., 1979
- Pearson, Karen M.** (1981) Instructor, School of Nursing; University of Maine at Portland-Corham, B.S., 1977; Boston University, M.S., 1981
- Peirce, John A.** (1965) Professor of Political Science; University of Maine, B.S., 1962; University of Virginia, M.A., 1965; Ph.D., 1971
- Pelletier, Suzanne I.** (1975) Acquisitions Law Librarian, School of Law; University of Maine, B.A., 1975
- Pendleton, James W.** (1967) Associate Professor of Physical Science; Keene State College, B.Ed., 1959; Oregon State University, M.S., 1963
- Perry, Caryn** (1983) Instructor in Nursing; University of Maine at Portland-Corham; B.S., 1978; Certificate/Adult Nurse Practitioner
- Petrucelli, Gerald F., Jr.** (1968) Adjunct Professor, School of Law; Boston College, A.B., 1964; LL.B., 1967
- Phillips, William A.** (1980) Assistant Professor of Economics; Florida State University, B.S., 1961; M.S., 1975; Ph.D., 1979
- Plasencia, Gonzalo** (1981) Assistant Professor of Spanish; St. John University, B.A., 1966; Brooklyn College, M.A., 1970; City University of New York, Ph.D., 1979
- Podgajny, Marjorie T.** (1982) Lifeline Exercise Specialist; Pennsylvania State University, B.S., 1974; M.Ed., 1977; University of Pittsburgh, M.Ed., 1981
- Pollock, Stephen G.** (1979) Assistant 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 and Director, Clinical Practice Program; Cornell University, B.A., 1960; University of Michigan Law School, J.D., 1967
- Potts, Andrew J.** (1983) Visiting Associate Professor of Accounting; The George Washington University, A.A., 1959; 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
- Powers, Kathleen** (1977) Research Assistant, Human Services Development Institute, Center for Research and Advanced Study; University of Maine, B.A., 1969
- Pranger, Eugene B.** (1973) Assistant Director for Management and Finance, Center for Research and Advanced Study; Indiana University, B.S., 1971
- Purdy, Warren** (1980) Associate Professor of Associate Business Administration; Director, Small Business Development Center and Fellow, New Enterprise Institute, Center for Research and Advanced Study; Bethany College, B.A., 1970; Fordham University, M.B.A., 1974
- Rakovan, Lawrence F.** (1967) Associate Professor of Art; Wayne State University, B.S., 1967; Rhode Island School of Design, M.A.E., 1969
- Rand, Steven** (1972) Director, Computer Centers; University of Maine at Presque Isle, B.S., 1970
- Reitman, Eloise V.** (1982) Coordinator, Displaced Homemakers Project, Bath Center; University of Pittsburgh, B.A., 1970; University of Southern Maine, M.S., 1977
- Reno, Stephen J.** (1980) Associate Provost; St. John's College, B.A., 1965; University of California (Santa Barbara), M.A., 1968; Ph.D., 1975
- Reuter, John E.** (1969) Associate Professor of English; University of New Hampshire, A.B., 1958; University of Rochester, M.A., 1963; Ph.D., 1968
- Ricci, John S.** (1981) Associate 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; Columbia University, M.S.W., 1970
- Riciputi, Remo H.** (1965) Associate Professor of Biology; University of New Hampshire, B.A., 1954; M.S., 1958
- Rieser, Alison** (1980) Director, Marine Law Institute, Center for Research and Advanced Study and Lecturer, School of Law; Cornell University, B.S., 1973; George Washington University, J.D., 1976
- Roberts, James W.** (1967) Associate Professor of Political Science; San Diego State College, B.A., 1954; University of North Carolina, Ph.D., 1973
- Roberts, Rosemary A.** (1981) Research Associate in Institutional Research; University of Reading, B.A., 1969; University of Waterloo, M.Sc., 1971; Ph.D., 1981
- Roche, Mildred A.** (1982) Instructor, School of Nursing; Boston College, B.S.N., 1960; Catholic University, M.S.N., 1966; F.N.A., 1972

- Rodgers, Marianne W.** (1981) Instructor, School of Nursing; University of Maine, B.S.N., 1967; Boston University, M.S., 1981
- Rogers, Paul C.** (1965) Professor of Mathematics; College of the Holy Cross, B.N.S., 1945; Boston University, M.A., 1948
- Rogoff, Martin A.** (1972) Associate Dean and Professor, School of Law; Cornell University, B.A., 1962; University of California, Berkeley, M.A., 1963; Yale Law School, LL.B., 1966
- Rolfe, Frederick B.** (1966) Associate Professor of French; Bowdoin College, A.B., 1946; Middlebury College, A.M., 1948
- Romano, Paula J.** (1980) Adjunct Associate Professor of Biology; Catholic University, B.A., 1961; Duke University, Ph.D., 1974
- 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
- Ross, Paul** (1978) Artist in Residence, Music; Juilliard School of Music, B.M. in Performance, 1960
- Rost, Mary Ann** (1972) Director, Department of Continuing Education for Nursing and Health Professions and Adjunct Faculty, School of Nursing; Boston College, B.S., 1964; University of Massachusetts, M.S., 1972
- Russell, Kevin P.** (1980) Director, Department of Conferences; University of Idaho, B.S., 1973
- Russell, Robert J.** (1979) Assistant Professor of Music; Wake Forest University, B.A., 1971; University of North Carolina, M.M., 1975; University of Colorado, D.M.A., 1979
- Rutherford, Lou C.** (1967) Head of Media Services; East Texas State University, B.S., 1972; M.S.L.S., 1965
- Rutherford, Phillip R.** (1966) Professor of English; East Texas University, B.A., 1962; M.A., 1964; Ph.D., 1966
- Saldanha, Estelita L.** (1966) Professor of Psychology; University of Lisbon, B.A., 1943; University of Nebraska, B.S., 1946; M.A., 1947; Cornell University, Ph.D., 1950
- Salmon, Edward I.** (1966) Manager of Engineering and Technical Assistance; University of Maine, B.S., 1956
- Salvo, Gerard** (1979) Staff Assistant for Employee Assistance; University of Southern Maine, B.S., 1977
- Sanborn, Jane O.** (1961) Associate Professor of Psychology; Wilson College, A.B., 1942; University of California, Los Angeles, Ed.D., 1961
- Sandberg, Michael C.** (1978) Child Development Specialist, Maine Children's Resource Center, and Instructor in Education; Brandeis University, B.A., 1968; Wheelock College, M.S., 1977
- Sanders, John J.** (1982) Assistant Professor of Accounting; Plymouth State College, B.S., 1972; University of Southern Maine, M.B.A., 1977
- Sayers, Frances** (1981) Assistant Professor of Communication; Auburn University, B.G.S., 1974; M.A., 1977; Florida State University, Ph.D., 1980
- Schiferl, Ellen** (1980) Assistant Professor of Art; Grinnell College, B.A., 1971; University of Minnesota, M.A., 1974; Ph.D., 1980
- Schleh, Eugene, P.A.** (1965) Professor of History; Union College, B.A., 1961; Yale University, M.A., 1962; Ph.D., 1968
- Schroff, Roger** (1982) Associate Professor of Computer Science; Kansas University, B.A., 1966; M.A., 1978; M.S., 1979; Ph.D., 1980
- Schwanauer, Francis** (1962) Professor of Philosophy; Technical University of Stuttgart, D.Phil., 1959
- Schwanauer, Johanna** (1963) Lecturer in German; Wellesley College, B.A., 1957
- Schwinck, Lotte** (1969) Associate Professor of Biology; University of Tubingen, Dr. rer. nat., 1956
- Seibel, Robert F.** (1981) Associate Professor, School of Law; Bowdoin College, A.B., 1968; Northeastern University, J.D., 1971
- Selkin, Michael** (1970) Associate Professor of English; Columbia College, A.B., 1961; Cornell University, M.A., 1963; Columbia University, Ph.D., 1975
- Shedd, Mark R.** (1983) Director, Public Policy and Management Program; University of Maine, A.B., 1950; Ed.M., 1954; Harvard University, Ed.D., 1960
- Shedletsky, Leonard** (1979) Associate Professor of Communication; Brooklyn College, B.A., 1965; San Francisco State College, M.A., 1968; University of Illinois, Ph.D., 1974
- Sheppard, Lucille T.** (1972) Administrative Staff Associate, Department of Community Programs
- Shoobs, Dorothy S.** (1973) Associate Professor, School of Nursing; New York University, B.S., 1953; M.A., 1960; Ph.D., 1973
- Shulman, Jay A.** (1978) Associate Professor, School of Law; Cornell University, B.A., 1973; Northwestern University Law School, J.D., 1977
- Silvernail, David L.** (1977) Director of Academic Testing, Assessment, Student Tracking (Title III), and Associate Professor of Education; Indiana University, A.B., 1969; M.S., 1975; Ed.D., 1977

- Silvernail, Susan M.** (1979) Acting Coordinator, Off-Campus Counseling Services and Coordinator, Intown Center; Ball State University, B.S., 1975; University of Southern Maine, M.S., 1980
- Simonds, Stephen P.** (1971) Director, Human Services Development Institute, Center for Research and Advanced Study; University of New Hampshire, A.B., 1948; University of Chicago, M.A., 1953
- Sinclair, Gail M.** (1977) Registered Nurse, Student Health Services; Maine Medical Center, R.N., 1963
- Slavick, William H.** (1970) Professor of English; University of Notre Dame, B.A., 1949; M.A., 1951; Ph.D., 1971
- Small, William U.** (1967) Associate Registrar; Bowdoin College, A.B., 1949; Columbia University, M.B.A., 1951
- Smith, Alan G.** (1967) Professor of Chemistry; Mount Allison University (New Brunswick), B.Sc., 1949; University of New Brunswick, M.S., 1951; University of Maine, Ph.D., 1966
- Smith, Charles F.** (1969) Associate Professor of Education; Westfield State College, B.S., 1960; University of Massachusetts, M.S., 1963; Ed.D., 1969
- Sottery, Theodore W.** (1956) Professor of Chemistry; Dartmouth, B.N.S., 1946; University of Maine, M.S., 1956; Ph.D., 1966
- Southworth, Robert S.** (1963) Professor of Educational Psychology; Boston University, B.A., 1951; Ed.M., 1958; Ed.D., 1965
- Soychak, Anthony G.** (1965) Assistant Professor of Mathematics; University of Maine, B.S., 1959; Bowdoin College, M.A., 1963
- Spear, Joanne** (1977) Director, Department of Community Programs; University of Maine, B.S., 1974; M.S., 1977
- Sprague, Daphne** (1979) Research Assistant, Human Services Development Institute, Center for Research and Advanced Study; University of Maine at Orono, B.A., 1976
- Stebbins, Richard G.** (1983) Assistant Professor of Chemistry; Wesleyan University, B.A., 1965; Texas A & M University, Ph.D., 1970
- Steele, William P.** (1967) Associate Professor of Theatre; University of Maine, B.S.Ed., 1964; M.A., 1967
- Steinman, Richard** (1966) Professor of Social Welfare; University of Missouri, B.A., 1949; Columbia University, M.S., 1952; Brandeis University, Ph.D., 1968
- Stowell, Elizabeth** (1980) Instructor, School of Nursing; University of Vermont, B.S.N., 1972; University of North Carolina, M.P.H., 1976
- 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) Director, Advising and Information Department; University of Maine, B.S., 1960; M.Ed., 1966
- Sturner, William** (1978) Professor of Management; Fordham College, B.S.S., 1957; University of Wisconsin, M.A., 1960; Fordham University, Ph.D., 1966; Certificate, Gestalt Institute of Cleveland, 1978
- Sullivan, James V.** (1959) Coordinator and Professor, Therapeutic Recreation Programs and Director of Health and Recreation; University of Maine, B.S.Ed., 1951; University of Delaware, M.Ed., 1954; Boston University, Ed.D., 1971
- Sutton, John M., Jr.** (1978) Associate Professor of Education; Boston College, A.B., 1961; University of Maine, M.S., 1972; Ed.D., 1976
- Swanson, Mark T.** (1983) Assistant Professor of Geology; Northeastern University, B.S., 1975; Lehigh University, M.S., 1979; State University of New York at Albany, Ph.D., 1982
- Sytsma, Donald** (1972) Associate Professor of Psychology; Arizona State University, B.A., 1965; University of Waterloo, Ph.D., 1971
- Talbot, Franklin** (1963) Reference Librarian; University of Maine, B.A., 1946; Columbia University, M.S., 1949
- Taylor, Robert A.** (1982) Staff Attorney, Marine Law Institute, Center for Research and Advanced Study; University of Alabama, B.S., 1975; University of Oregon Law School, J.D., 1978; University of Washington, LL.M., 1982
- Therault, Anne M.** (1975) Director, University of Southern Maine Alumni Association; University of Maine in Portland, A.B.A., 1967
- Tibbetts, Kathie** (1979) Circulation and Reference Law Librarian, School of Law; University of New Hampshire, B.A., 1975
- Tiffany, Julia (Jill)** (1981) Assistant Professor, School of Nursing; University of Washington, Seattle, B.S., 1962; Rutgers, The State University, M.S., 1967
- Tizon, Judy** (1972) Associate Professor of Anthropology; University of Illinois, B.A., 1965; University of California, M.A., 1969; Ph.D., 1975
- Trask, Ellen** (1966) Administrative Associate, Division of Public Service; Husson College, A.B.A., 1966; University of Southern Maine, B.A., 1983
- Tryon, Phyllis A.** (1965) Associate Professor, School of Nursing; Boston University, B.S., 1958; Yale University, M.S.M. and C.N.M., 1962
- Tucker, Frances M.** (1970) Registrar, School of Law
- Tukey, Geraldine M.** (1970) Associate Professor, School of Nursing; Mercy College of

- Detroit, B.S., 1957; Boston University, M.S., 1964
- Turlo, Kathleen E.** (1980) Instructor in the College of Education; University of Maine, B.S., 1974; M.S., 1980
- 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 California, M.A., 1962; Ph.D., 1975
- Ullman, Sallie C.** (1980) Assistant Professor, School of Nursing; University of Delaware, B.S.N., 1973; University of Pennsylvania, M.S.N., 1979
- Ulrich, Nancy** (1983) Resident Director/Counselor; Salem College, B.S., 1980; Indiana University, M.S.Ed., 1983
- VanTine, John A.** (1981) Captain, U.S. Army; Associate Professor of Military Science; Troy State University, B.A., 1981
- Veazie, Carl E.** (1977) Senior Economist, Center for Research and Advanced Study; Whitman College, B.A., 1943; Columbia University, M.B.A., 1948
- Ventresco, Fiorello B.** (1966) Associate Professor of History; Boston University, A.B., 1959; University of Michigan, M.A., 1961
- Viehmman, Nancy H.** (1982) Program Specialist, Department of Community Programs; Marymount College, B.A., 1968; Boston State College, M.Ed., 1973
- Violette, George** (1983) Assistant Professor of Accounting; University of Maine at Augusta, B.A., 1978; University of Maine at Orono, M.S., 1982
- Wagner, Ann** (1980) Co-Director, University Day Care Center; University of Southern Maine, B.A., 1976; University of New Hampshire, M.Ed., 1979
- Walking, Robert A.** (1969) Associate Professor of Physics; Swarthmore College, B.A., 1953; Harvard University, M.S., 1954; Ph.D., 1962
- 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
- Warren, Beth I.** (1978) Executive Director for Employee Relations; Wheaton College, B.A., 1959; Simmons College School of Social Work, M.S.W., 1963
- Waxler, Lawrence I.** (1976) Coordinator of Contracts and Grants, Center for Research and Advanced Study; University of Maine at Portland-Gorham, B.S., 1975
- Welty, Charles** (1979) Associate Professor of Computer Science; University of California at Berkeley, B.S., 1967; M.S., 1968; University of Massachusetts, M.A., 1977; Ph.D., 1979
- Wescott, Madeline H.** (1956) Staff Associate for Payroll
- Westfall, James R.** (1983) Assistant Professor of Associate Business Administration; Dartmouth College, A.B., 1967; Amos Tuck School of Business Administration, M.B.A., 1968
- White, Virginia S.** (1963) Registered Nurse, Student Health Services; Rumford Community Hospital, R.N., 1945
- Whitmore, Allan R.** (1969) Associate Professor of History; University of Maine, B.A., 1962; Northwestern University, M.A., 1964; Ph.D., 1970
- Whitney, Sarah F.** (1973) Director, Nursing Learning Resource Laboratory, School of Nursing; Catharine Spaulding College, B.S.N., 1960; Catholic University of America, M.S.N., C.N.M., 1964
- Willard, Nancy L.** (1969) Assistant Professor of Physical Education and Recreation; Russell Sage College, B.S., 1958; State University College, Plattsburg, N.Y., M.S., 1967
- Williams, Michael G.** (1979) Assistant Professor of Education; San Jose State College, B.A., 1966; University of Arizona, Ph.D., 1972
- Wise, William B.** (1966) Executive Assistant to the President; University of Maine, B.S., 1961; University of Maine at Orono, M.Ed., 1971
- Wood, Duane R.** (1981) Dean, School of Business, Economics and Management and Professor of Management; Rose Polytechnic Institute, B.S., 1964; Butler University, M.B.A., 1968; Indiana University, D.B.A., 1974; P.E. (Indiana)
- Wood, Margo** (1980) Assistant Professor of Education; Vassar College, B.A., 1961; University of Southern Maine, M.S., 1979
- Woodbury, Robert L.** (1979) President; Amherst College, B.A., 1960; Yale University, M.A., 1962; Ph.D., 1966
- Wormley, Stanton L., Jr.** (1980) Assistant to the Dean, School of Nursing; Howard University, B.A., 1977; George Washington University, M.F.S., 1980
- Worsham, Jill** (1983) Resident Director/Counselor; University of Maine at Farmington, B.S., 1979; University of South Carolina, M.S., 1983
- Woshinsky, Oliver H.** (1971) Associate Professor of Political Science; Oberlin College, B.A., 1961; Yale University, M.A., 1967; M. Phil., 1968; Ph.D., 1971
- Wright, James L.** (1971) Vocational Education In-Service Staff Developer and Assistant Professor of Vocational Education; Boston University, B.S., 1950; Bridgewater State College, M.Ed., 1956; University of Maine at

Orono, Ed.D., 1973

Wroth, L. Kinvin (1964) Dean, School of Law; Yale, B.A., 1954; Harvard, J.D., 1960

Yesner, David R. (1977) Associate Professor of Anthropology; Cornell University, B.A., 1971; University of Connecticut, M.A., 1974; Ph.D., 1977

York, Robert M. (1962) Professor of History; Bates College, A.B., 1937; Clark University, M.A., 1938; Ph.D., 1941

Young, Anne P. (1965) Professor of History; Boston University, B.S., 1943; M.A., 1944; University of Chicago, Ph.D., 1951

Zaner, John A. (1974) Associate Professor of Industrial Education; Millersville State College, B.S., 1969; M.Ed., 1972; Pennsylvania State University, Ed.D., 1977

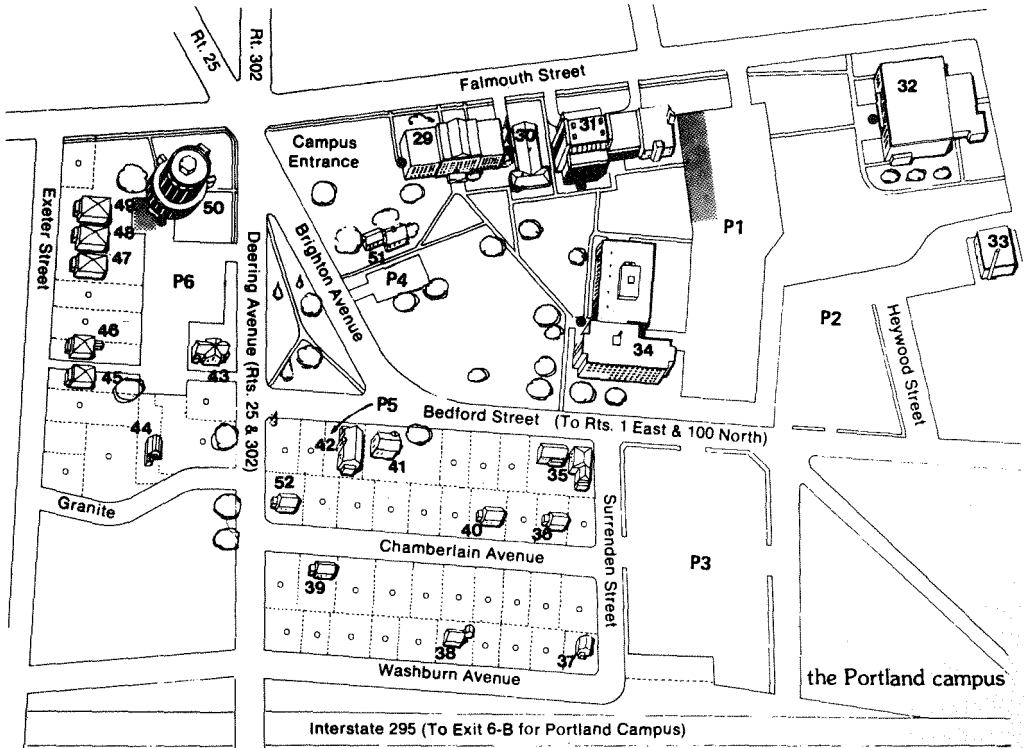
Zarr, Melvyn (1973) Professor, School of Law; Clark University, A.B., 1958; Harvard University, LL.B., 1963

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Accessible buildings provide entrances (indicated by dots) and elevators adequate for all handicapped persons. Parking areas for the handicapped are shown by dotted areas.

Portland Campus

- 29. Payson Smith Hall
- 30. Bookstore
- 31. Science Building
- 32. Portland Gymnasium
- 33. Central Heating Plant
- 34. Luther Bonney Hall and Library
- 35. Student Union Buildings, 92 & 94 Bedford Street
- 36. Faculty Offices, 7 Chamberlain Avenue
- 37. Faculty Offices, 3 Washburn Avenue
- 38. Faculty Offices, 25 Washburn Avenue
- 39. Faculty Offices, 38 Chamberlain Avenue
- 40. Cooperative Extension Services, 15 Chamberlain Avenue
- 41. Faculty Offices, 118 Bedford Street
- 42. Faculty Offices, 120 Bedford Street
- 43. President's and Provost's Offices 228 Deering Avenue

- 44. Faculty Offices 11 Granite Street
- 45. Faculty Offices, 39 Exeter Street
- 46. Maine Public Broadcasting Network, 45 Exeter Street
- 47. Faculty Offices, 55 Exeter Street
- 48. Faculty Offices, 59 Exeter Street
- 49. Faculty Offices, 65 Exeter Street
- 50. Law School/Center for Research and Advanced Study
- 51. Alumni House
- 52. Administrative Offices

Parking

- P1. Faculty/Staff/Student Commuter
- P2. Student Commuter
- P3. Student Commuter/Resident
- P4. Faculty/Staff/Visitor
- P5. Faculty/Staff
- P6. Faculty/Staff/Visitor

University of Southern Maine



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