

1984

University of Southern Maine Graduate Catalog 1984-1985

University of Southern Maine

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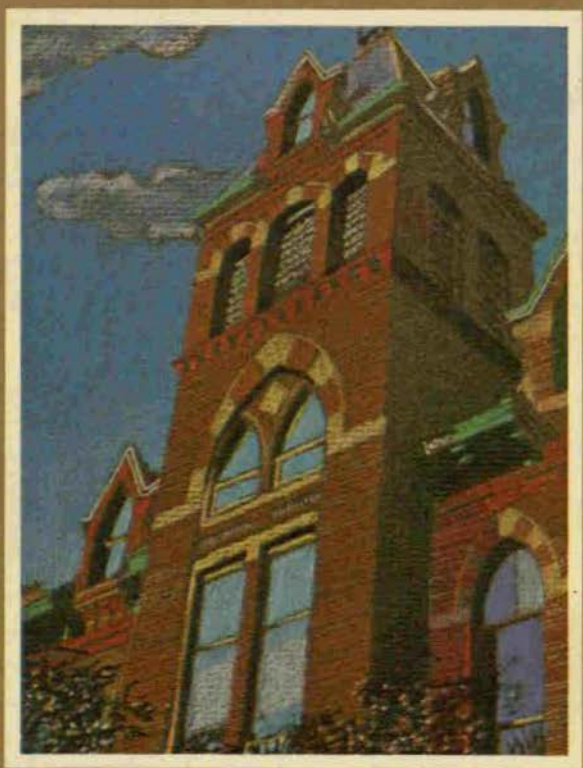
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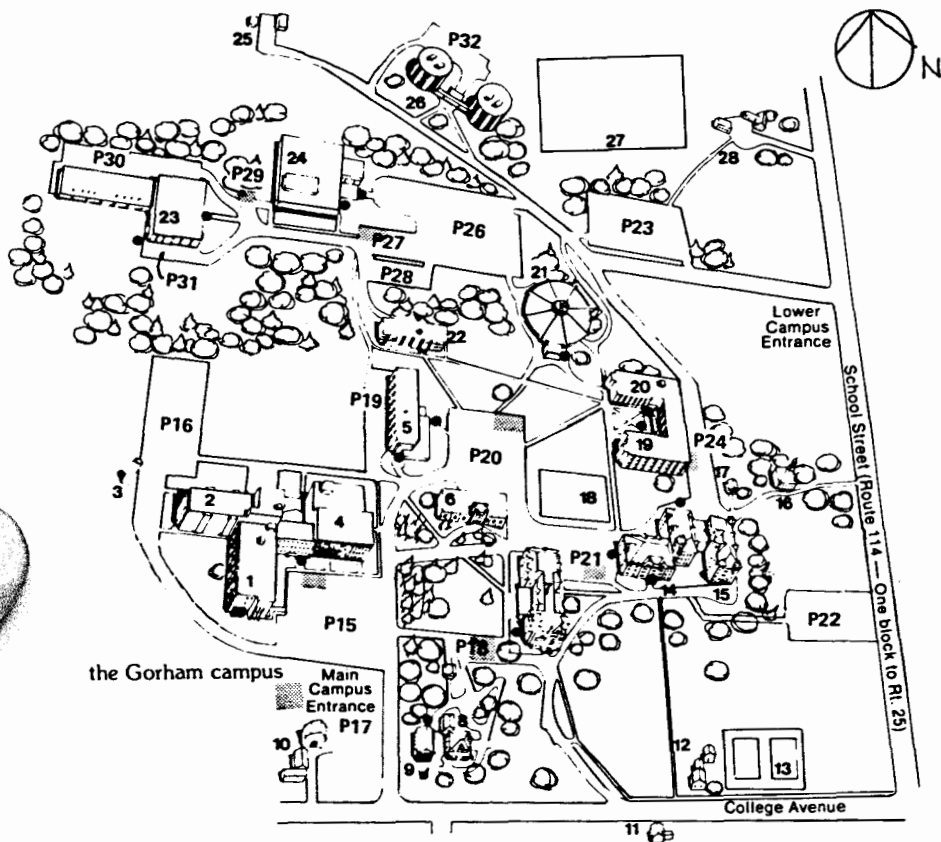
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University of Southern Maine

Gorham Campus



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

- | | |
|--|-------------------------------------|
| 1. Bailey Hall (Science) | 23. Industrial Education Center |
| 2. Bailey Hall (Classroom) | 24. Warren G. Hill Gymnasium |
| 3. Water Tower | 25. Heating and Sewage Plants |
| 4. Bailey Hall (Library) | 26. Dickey-Wood Residential Towers |
| 5. Woodward Hall | 27. Athletic Field |
| 6. Russell Hall | 28. McLellan House |
| 7. Corthell Hall (Admissions) | Parking |
| 8. President's House | P15. Faculty/Staff |
| 9. Art Gallery | P16. Student Commuter |
| 10. Facilities Management | P17. Faculty/Staff |
| 11. University College of Education,
24 College Avenue | P18. Visitor |
| 12. Maine Children's Resource Center,
10 College Avenue | P19. Student Commuter |
| 13. Tennis Courts | P20. Faculty/Staff |
| 14. Robie Hall | P21. Faculty/Staff |
| 15. Andrews Hall | P22. Student Resident |
| 16. The "Academy" | P23. Student Resident |
| 17. Service Building | P24. Student Resident |
| 18. Tennis Courts | P26. Student Resident |
| 19. Hastings Hall | P27. Faculty/Staff/Student Commuter |
| 20. Upton Hall | P28. Student Resident |
| 21. Dining Center | P29. Faculty/Staff |
| 22. Anderson Hall | P30. Student Commuter |
| | P31. Faculty/Staff |
| | P32. Faculty/Staff |

University of Southern Maine

Graduate Catalog
1984-1985

University of Southern Maine

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

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

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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. Bouchard, 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.

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Academic Calendar 1984-1985

Fall Semester

First Day of Classes Fall Vacation Begins	Tuesday, September 4 at 8:00 a.m. After classes on Thursday, October 18
Classes Resume Veterans Day Break Begins	Monday, October 22 at 8:00 a.m. After all classes on Friday, November 9
Classes Resume	Tuesday, November 13 at 8:00 a.m.
Thanksgiving Vacation Begins	Tuesday, November 20 at 4:00 p.m.
Classes Resume	Monday, November 26 at 8:00 a.m.
Last Day of Classes Examinations	Friday, December 14 Monday, December 17, through Friday, December 21

Spring Semester

First Day of Classes Winter Vacation Begins	Monday, January 14 at 8:00 a.m. After classes on Friday, February 15
Classes Resume Spring Vacation Begins	Monday, February 25 at 8:00 a.m. After classes on Friday, March 29
Classes Resume Last Day of Classes Examinations	Monday, April 8 at 8:00 a.m. Friday, May 3 Monday, May 6, through Friday, May 10
Commencement	Saturday, May 11

University of Maine School of Law

Fall Semester

Registration Fall Term Begins Thanksgiving Recess Begins	September 4-5 Thursday, September 6, 8:00 a.m. Wednesday, November 21, 5:00 p.m.
Thanksgiving Recess Ends Last Day of Classes Examination Period Begins Examination Period Ends	Monday, November 26, 8:00 a.m. Friday, December 14, 5:00 p.m. Wednesday, January 2, 9:00 a.m. Friday, January 11

Spring Semester

Classes Begin Spring Break Begins Spring Break Ends Classes End Examinations Begin Examinations End Commencement	Monday, January 21, 8:00 a.m. Friday, March 8, 5:00 p.m. Monday, March 18, 8:00 a.m. Friday, May 3, 5:00 p.m. Thursday, May 9, 9:00 a.m. Thursday, May 23 Sunday, May 26
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The University

The University of Southern Maine, one of seven campuses of the University of Maine system, has been serving the higher educational needs of the region for just over one hundred years, although this institution has had its present name only since 1978. The University traces its antecedents back to two institutions, Gorham State College (established in 1878) and the University of Maine in Portland (established in 1933). Today, the University is the second largest institution of higher education in the state of Maine and enrolls over 8,000 students who pursue degree programs in the College of Arts and Sciences, School of Business, Economics and Management, College of Education, School of Law, School of Nursing, and the Division of Basic Studies. Thirty-eight baccalaureate degree programs as well as graduate and professional studies are available. The University is served by 264 full-time faculty, most of whom hold terminal degrees in their respective fields and who distinguish themselves by a strong commitment to teaching, scholarly research, and service to the community. As a unit of the University of Maine, the University of Southern Maine, through its students, faculty, and programs, benefits from its association and cooperation with its sister campuses.

Graduate study is today an integral part of the educational activity of the University of Southern Maine, although graduate programs, with the exception of law, are of relatively recent development. The oldest post-baccalaureate program at the University is the juris doctor, offered by the University of Maine School of Law. The study of law has been available in Maine since the establishment of the then College of Law in 1898. The master's degree in education was the next program to be made available, enrolling students in 1964. The master of business administration degree followed in 1971. Today, all are strong programs serving the preparatory and continuing professional and educational needs of their constituencies.

More recently, in recognition of its responsibility to serve as the second center of graduate study in the University of Maine system, the University of Southern Maine has developed several new programs, some professional in nature, others interdisciplinary in emphasis. The master of science program in nursing, first offered in 1982, is designed to meet the present and emerging health-care needs of the region by providing an opportunity for advanced study and clinical training in a profession that nationally has assumed greater responsibility for the preparation of its members. The master of science program in computer science, begun in 1982, is primarily professional in nature and is directed to individuals pursuing careers in industry.

The new graduate program in public policy and management offers students an interdisciplinary preparation for leadership careers in local, state, and regional public, governmental, and private organizations. Through a cooperative arrangement with the University of Maine at Orono, two master of science degree options are possible: the master of science in electrical engineering and the master of engineering in electrical engineering.

The University affirms that graduate education should provide the subject matter and require study at a level that builds upon the knowledge and intellectual skills acquired through undergraduate experience. It should strengthen and broaden professional competence and stimulate independent research. Indeed, research, involving both faculty and students, is a critical component of all graduate education. To support these objectives, the University is served both by a strong faculty and the resources of associated facilities, including the Center for Research and Advanced Study (its staff and library), the University Library, and computing services. In association with the Center for Research and Advanced Study, faculty address projects related to social, environmental, economic, and health-related issues.

In addition to the regular academic semesters, the Summer Session of-

fers a wide range of coursework at the graduate level. For a schedule of summer graduate courses, please consult the Summer Session catalog.

Graduate Affairs

The Office of Graduate Affairs, in association with the Faculty Graduate Advisory Council and the academic deans, coordinates graduate activities at the University of Southern Maine. The Graduate Council is made up of elected faculty representing programs in law, business, education, nursing, computer science, and public policy and management, as well as the engineering program extended from the University of Maine at Orono. The Council, through the Associate Provost, provides advice regarding the quality and standards of graduate education, review of existing and proposed programs, and policy and procedures regarding admissions, degree requirements, and related matters. The Associate Provost is responsible for the operation of the Office of Graduate Affairs. All graduate students are invited to visit this Office, located at 209 Deering Avenue, on the Portland campus.

Graduate students in particular programs are also advised to maintain close contact with the appropriate director or graduate coordinator in that school, college, or program.

The Portland Area

The University of Southern Maine has two campuses. The Gorham campus is located on a hill overlooking the town of Gorham, a community of approximately 9,000. The campus has many of the desirable features of a small college: attractive rural setting, close proximity to faculty and facilities, and intimate atmosphere. The Portland campus, where most graduate programs are based, is located in Maine's largest city and the center of financial, business, and cultural activities. The University is thus able to offer its students the cultural, social, and recreational amenities of both an urban and rural setting to complement their educational programs.

Portland is approximately 100 miles north of Boston, 300 miles north of New York, and about 300 miles from Montreal. The city is served by Bar Harbor, Delta, United, and People Express airlines, by Greyhound busline, and is contiguous to the Maine Turnpike.

Graduate Degree Programs

Master's Degrees

College of Arts and Sciences

Computer Science

College of Education

Adult Education

Counselor Education

Educational Administration

Exceptionality

Instructional Leadership

Reading

School of Business, Economics and Management

Business Administration

School of Nursing

Nursing

Public Policy and Management Program

Public Policy and Management

Doctoral Degree

Public Policy and Management Program

Public Policy and Management

Law Degree

University of Maine School of Law

Law (Juris Doctor)

Program Extended from the University of Maine at Orono

Master's degrees in Electrical Engineering

Admissions

The following policies and procedures apply generally; consult the particular degree program for specific information. For procedures governing application to the School of Law, see page 70, and for Electrical Engineering, see page 68.

General Policy

To be admitted to graduate study, an applicant must have received a baccalaureate degree or the equivalent from an accredited college or university and show promise of ability to pursue advanced study and research in the appropriate program.

Required Submissions

- A. A completed application.
- B. Letter(s) of recommendation.
- C. Official transcript(s) of all previous undergraduate and graduate work.
- D. Official score(s) from standard tests (e.g., Graduate Record Exam, Miller Analogy) if required.
- E. Such other materials as may be defined by the school or college.
- F. A nonrefundable \$15 application fee with the application.

Submission Of Application

All documents relating to an application for admission to graduate study are to be sent to the Office of Graduate Affairs. All materials relating to graduate study in the College of Education should be sent directly to the Office of Graduate Education. Once all materials are received they will be forwarded to the appropriate graduate unit for review. Final action on the status of the application is taken by the respective graduate program. Notification of final action is made by the Office of Graduate Affairs or the Office of Graduate Education. All papers relating to an application become the property of the University of Southern Maine.

Application Deadlines

Applications for admission and supporting material must be received by the Office of Graduate Affairs or the Office of Graduate Education by October 1 for a January 1 acceptance and by March 1 for a May 1 or September 1 acceptance. For the business administration program, these dates are: November 15 for a January 1 acceptance, August 1 for a September 1 acceptance, and May 1 for a summer acceptance. For the School of Nursing, applications must be received by March 15 for September 1 acceptance.

Deadline For Enrollment

An applicant admitted for full-time or part-time study must register that semester for which he or she has been admitted unless other arrangements are made.

Readmission

A student previously registered in a graduate program who has failed to maintain continuous enrollment or who has withdrawn or been withdrawn from the program or a student who has failed to matriculate in accordance with the enrollment deadline and who wishes to resume studies must file an application for readmission to graduate school by the regularly published deadlines for the semester or summer session and register during the usual registration period. The application for readmission is to be accompanied by official transcripts of any work attempted in the interim.

Classification Of Admissions

Regular admission is granted a student who has a record of high scholarship and about whom there is no question of ability to carry on graduate study.

Conditional admission is granted to a student who does not meet the established requirements or standards provided there is sufficient evidence to show that the student is capable of doing satisfactory graduate work. The College of Education does not admit students conditionally.

Each graduate program determines the conditions to be met to change to a regular status.

Foreign Student Applications

Students whose first language is not English are required to take the Test of English as a Foreign Language (TOEFL) and submit scores as part of the application documents. Transcripts from foreign universities should provide the student's rank in class.

Admissions Credit

Admissions credit is credit earned for coursework completed after the student has made formal application to a graduate program but prior to admission into the program.

Admissions credit must be approved by the appropriate graduate program prior to course registration and is subject to the condition that a grade of B or better is received for the coursework. A maximum of six credit hours may be approved for admissions credit. Exceptions to the maximum must be approved by the appropriate program faculty.

Transfer Credit

Transfer credit is credit earned for coursework prior to matriculation in a graduate program at the University of Southern Maine. Such credit may be approved only at the time of admission and request for approval must be included as part of the admissions application. Up to a total of 9 credit hours may be approved as transfer credit provided these credits were earned no more than three years prior to matriculation; the amount of credit accepted is determined by each graduate program. Additional credit may be approved by the appropriate graduate program in unusual circumstances. Transfer credit will not be approved for: 1) courses which would not have received graduate credit if taken at the University of Southern Maine; 2) correspondence courses; 3) courses which exceed time limits prescribed for a particular degree program; 4) courses in which a grade lower than a B was received; 5) courses which are inappropriate for inclusion in the student's program of study.

Admission Of The Handicapped

Physical and mental health are basic considerations in admitting any applicant to the University, but a physical handicap, such as confinement to a wheelchair or visual impairment, is not in itself a necessary barrier to admission. All classroom buildings and two dormitories are equipped with ramps for wheelchair access. The University Library contains a Kurzweil Reading Machine to assist the visually impaired. Most elevator buttons are coded in braille. An applicant reporting a physical handicap will be advised to schedule an interview with the University Coordinator of Handicapped Student Services.

Appeal Of Admissions Decision

Applicants may appeal an admissions decision by submitting a written appeal to the dean or director of the appropriate program. The appeal will be reviewed by the appropriate graduate program faculty; and the dean or director will notify the student of action taken on the appeal. Should the student wish to pursue the appeal process further, a written appeal should be submitted to the Associate Provost. The applicant's letter should include all information she/he believes should be taken into account in reviewing the decision. Still further appeal of the admissions decision may be made to the Provost.

Tuition and Fees 1984-85

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 an application.

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

Student Activity Fee — Law School (Compulsory) Students are required to pay a \$6.00 Student Activity Fee.

School of Nursing (Compulsory) Students are required to pay a \$15.00 materials fee for select courses and practica.

Materials Fee—Law School (Compulsory) Students are required to pay a \$10.00 materials fee each semester.

Tuition Charges

<i>Graduate Tuition</i>	<i>Semester</i>	<i>Year</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

Note: For matriculated students: Undergraduate students taking graduate courses will pay undergraduate tuition for those courses. Graduate students taking undergraduate courses will pay the graduate tuition rate for those courses. For non-matriculated students: Students taking all graduate courses will pay the graduate tuition rate for those courses. Students taking both graduate and undergraduate courses will pay the graduate tuition rate for those courses.

School of Law Tuition

Maine Resident—\$74.00 per credit hour; 15 or more credit hours	\$1,110.00	\$2,220.00
Non-Resident—\$185.00 per credit hour; 15 or more credit hours	\$2,775.00	\$5,550.00

Room and Board Charges

Double Room and Board (19-meal plan)	\$1,230.00	\$2,460.00
Single Room and Board (19-meal plan)	\$1,330.00	\$2,660.00

Optional meal plans available for off-campus students.

Other Charges

USM Health Sources Fee and Insurance Package (Optional)

This optional package is available to all students who are carrying at least three credit hours. Students may elect to pay this fee of \$100.00 per year (includes \$42 USM Health Service Fee and \$58 Insurance Fee) with their fall semester bill.

USM Health Services Fee (Optional)

Students may elect to pay this fee of \$42.00 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 specified deadline. Students will also be liable to a \$25.00 reinstatement fee if their registration is revoked for any reason.

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.

Commencement Fee (Excluding Law)

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

Tuition For Other Classifications Of Students

Auditing of Courses—Tuition and fees are charged for audited courses at the usual hourly rate. Students who are already paying the maximum tuition may audit courses at no charge.

Adding Courses—Any adds must be paid for at the time of the add if it results in an additional tuition charge. The \$25.00 late fee will apply if this is not done.

Tuition and Fee Grants—Tuition and fee grants are restricted to those specifically authorized by the Board of Trustees. For further information about these grants contact the Office of Student Financial Aid.

Deposits

If a residence hall room is requested, a \$75 deposit is required. This deposit will be applied toward the student's account when the student registers and is subject to the refund policies below.

The deposit is forfeited if an applicant withdraws after June 1 for the fall semester or after January 1 for the spring semester. If the applicant notifies the Office of Residence Life of withdrawal prior to June 1 for September enrollment or January 1 for spring semester, the deposit will be refunded. Notification must be in writing.

Students desiring to live in a residence hall must pay a room deposit of \$75 during the spring in order to assure 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 is nonrefundable.

School of Law

A nonrefundable tuition deposit of \$150 is due by April 15, or within two weeks of acceptance if the applicant is accepted after April 1. Although this deposit is applicable to tuition charges for students who remain enrolled, the deposit is forfeited by students who withdraw. It may be postponed upon evidence of extreme hardship; it should be mailed directly to the Law School Registrar.

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 completing 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 August 31 for the fall semester and on or before January 11 (January 18 for School of Law) 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.

Returned Check: A \$5.00 penalty is imposed if any institutional charges are paid by a 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 payment of their semester bill in full at the time prescribed would work 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 due the 5th of October, November, and December for the fall semester and the 15th of February, March, and April for the spring semester.

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 a minimum of six credit hours at the University 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 & 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

<i>Academic Year (Fall & Spring Terms)</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%

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. Refunds, if any, for students who remain enrolled but vacate a dormitory room will be governed by the 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. 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.

*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.

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

A student is classified as eligible or non-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

once having registered as an out-of-state student is eligible for in-state classification unless he or she has been a resident of the state of Maine for at least a 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" 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 of 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.

New England Regional Program

In cooperation with the New England Board of Higher Education the University offers certain graduate 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 available programs varies from year to year, candidates should consult the *New England Regional Student Program Graduate Catalogue*. Copies may be obtained from the Office of Graduate Affairs or from the New England Board of Higher Education, 45 Temple Place, Boston, Massachusetts, 02111. For the 1984-1985 academic year, the following programs are available:

<i>Program</i>	<i>Open to Students from</i>
Counselor Education (Rehabilitation)	N.H., Vt.
Nursing	N.H., Vt.
Law	Mass., N.H., Vt.

Student Financial Aid

Students admitted to a master's degree program at the University are eligible to apply for financial aid from a variety of sources. The Student Financial Aid Office administers loans and employment programs for financially needy students. Maine lending institutions offer low interest student loans to eligible students. Some employers offer assistance in the form of tuition reimbursement, flexible scheduling, or paid educational sabbaticals. Scholarship assistance may also be available from organizations, clubs, or religious groups of which the student or his/her family is a member.

The University is also approved by the Veterans Administration for payment of Veteran's benefits.

Eligibility For Aid

The University offers financial aid to needy students. Financial need exists when the student and his/her family lack the funds needed to pay educational costs.

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, 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

New graduate students may apply for financial aid at any time but are encouraged to apply as soon as possible. Continuing students are given priority in receiving aid if their FAF (Financial Aid Form) is received by the College Scholarship Service by April 15. Continuing students who miss the deadline may receive less aid than ontime applicants. The FAF is available from the Student Financial Aid Office. Students under age 26 must have at least one parent sign their FAF. If the student is dependent, this attests to the accuracy of the parents' financial information. If the student is independent, the signature certifies this.

All students must send a signed copy of their most recent federal income tax return to the Student Financial Aid Office. The information on the tax return will be used to verify the accuracy of the information on the FAF.

Students who are required to provide parents' information on the FAF must also submit a signed copy of the parents' most recent federal income tax return to the Student Financial Aid Office.

Some students and/or parents do not file income tax returns. In this case, the appropriate person must certify in writing to the Student Financial Aid Office that the information contained on the FAF is correct and no tax return will be filed.

Students who have attended colleges or universities other than the University of Southern Maine on at least a half-time basis are required to obtain a Financial Aid History form from the Student Financial Aid Office. One form must be sent to the financial aid office of each college the student has attended. The Financial Aid History form verifies what aid the student received while attending that institution and is required by federal regulation. Students who have attended other institutions without receiving financial aid must still send a Financial Aid History form.

How Financial Aid Is Allocated

The University begins reviewing student aid applications in early spring. Once a student is accepted, all necessary financial aid application materials are received, and the University is told how much federal aid it

will have for students, a notice of eligibility is sent. If a student receives outside scholarship funds, the amount of aid from the University may have to be reduced.

The amount a student receives is determined by subtracting the student's resources from a budget computed by the Office of 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 funds, the amount of aid may be adjusted if the student's financial situation changes. Students (and, when appropriate, 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 USM.

Types Of Aid Available

Graduate Assistantships are available in most graduate programs at the University. The assistant is expected to pursue graduate studies (at least 6 hours of credit per semester) and to assist in supervised undergraduate instruction. In compensation, the teaching assistant is paid a yearly stipend plus up to 9 hours of tuition each semester. Assistantships are awarded by the Office of Graduate Affairs on the recommendation of the individual graduate programs. Interested students should first contact the Office of Graduate Affairs.

College Work-Study is a program funded by the University of Southern Maine 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 are funded by the federal government, the University, and former borrowers repaying loans. No repayment is required until after the student ceases his/her education. Once repayment begins, the student is charged 5 percent 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.

Nursing Student Loan is a program similar to the National Direct Student Loan program, but charging a 6 percent rate of interest.

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

Indian Scholarships/Tuition Waivers 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.

Veterans Educational Benefits Students eligible for educational assistance from the Veterans Administration are encouraged to contact the Veterans Affairs Office 30 days before the start of each semester. The Veterans Affairs Office is located in the Advising and Information Department, Room 110, Payson Smith Hall, on the Portland campus (telephone 207/780-4040).

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

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

Academic Policies

The following policies apply generally to graduate programs. Consult each degree program for specific policies.

Courses offered for graduate credit are those listed in the graduate catalog or other official publications. The determination of whether or not a particular graduate course fulfills degree requirements, however, is the responsibility of the individual graduate program. Courses numbered 600 are normally restricted to graduate-level students.

Grading Systems

Grades at the University, except for the School of Law, 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; B; C; D; F.

Other letter grades are as follows:

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 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 (failure) in the grade point average and so indicated on the student's permanent record. Under special circumstances, the instructor may request that the dean extend the time limit for a specific period.

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

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

MG Missing Grade: Occasionally, faculty may assign students invalid grades for a course, or may fail to submit a grade for a particular student in a course. In these cases, the Registrar's Office will note this act by designating a missing grade, or MG 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 departmental chairperson, 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 resolution to 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, audit basis.

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.

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 that student's academic achievements for a given semester, the only true and valid documentation of academic work and student status is an official transcript of the academic record, stamped with the Registrar's signature and embossed with the seal of the University. The transcript is available only with the signature of the student and will be released to that student or a designee 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. A Placement Transcript is unofficial, but may be reproduced by the Placement Office for prospective employers at no additional cost.

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.

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

A D or an F is not an acceptable grade for graduate work. Students receiving such grades will be reviewed for retention in the graduate program.

Add/Drop

During the first week of a semester, students may add courses and select or reverse the pass-fail option. A period of two weeks is permitted to drop courses with no grade notation. The 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 courses will receive the grade notation of W. If a student has not officially withdrawn by the end of the sixth week of the course, s/he 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 that course and must assume all financial obligations associated with it.*

Enrollment and Auditing

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.

A graduate student may be able to apply six credit hours of undergraduate work to his/her graduate program according to the determination of the particular program of study. In all cases, the following conditions must be met to apply undergraduate credit to a graduate program:

- A. Coursework must be earned after the student has been granted matriculation status in a graduate program.
- B. Coursework must add breadth or depth to the student's program of study.
- C. Coursework is not of a remedial nature to correct a deficiency.
- D. No equivalent or comparable graduate course exists at the University of Southern Maine.
- E. Coursework receives prior approval of the student's advisor, course instructor and graduate program director.
- F. Coursework is earned in upper level undergraduate courses (i.e., 300-400 level courses).
- G. Grade of B or better is earned for the coursework.
- H. Coursework meets all existing graduate course requirements except the course number requirement.

Repeat Course Policy

A student may not repeat the same course after receiving a grade of C or higher. If a student receives a grade of D or lower in a required course, the student must retake the course to remain in the program. If a D or lower grade is received in an elective course, the student may or may not elect to repeat the course. Whether the course is required or an elective, the grade of D or lower will be included in the student's grade point average. If the course is repeated, the student must pass the course with a minimum grade of C. When a course is repeated, only the new grade is computed in the grade point average.

The status of a student receiving a D or F will be reviewed by the graduate program in which s/he is registered.

Requirements of Graduate Study

Thesis Requirements

The requirement of a thesis is determined by each particular graduate program as the specific requirements and format for the thesis.

Oral and Comprehensive Examination

The requirement of an oral and/or comprehensive examination is determined by each graduate program.

Directed Study

A degree student may earn up to six hours of independent study and/or workshop credit. All independent study and workshop credit must be approved by the appropriate graduate program. Students are encouraged to consult with their faculty advisor regarding regulations governing independent study and workshop credit.

Foreign Language Requirements

Requirements for a foreign language are determined by each graduate program.

Continuous Enrollment and Residency

Continuous enrollment requires that every graduate student must earn at least six credits towards his/her degree program every calendar year from the time of the first registration until completion of all requirements for the graduate degree. Continuous enrollment fulfills the residency requirement.

Leave of Absence

In extenuating circumstances (e.g., military service or severe illness) a student may petition for exception to the continuous enrollment policy; the petition must bear approval of the student's advisor, director of the graduate program, department chair, and the Office of Graduate Affairs.

Time Limit

The time limit for completion of a graduate degree is dated from the date of first matriculation and is usually either five or six years, depending on the requirements of the particular graduate program.

Registration Policies

Registration

Prior to registering for a course each graduate student is required to consult with his/her advisor, complete a registration form, and obtain the signature of the advisor. The signed registration material must then be taken or sent to the Registrar's Office. College of Education graduate students must submit registration forms to the Office of Graduate Education. Registration is not complete until all fees have been paid at the Business Office.

Advanced Registration

Matriculated graduate students may register for courses during an advance registration period. Advance registration for the spring semester is conducted near the middle of the fall semester and registration for the fall semester is conducted near the middle of the spring semester. Matriculated students are encouraged to register during the advance periods to increase the probability that they will obtain desired courses. No payment of tuition fees is due during advance registration. For information regarding payment of bills, see the Financial Information section.

Student Advisement

Each degree student will be assigned a faculty advisor upon admission to a program. Students are encouraged to maintain regular contact with their faculty advisor throughout their program of study. Counseling and information are available from the Office of Graduate Affairs.

Extramural Course Credit

Courses taken at other institutions may be accepted as part of the graduate program provided they are taken after the student has matriculated and that prior approval is granted by the student's advisor and program director. Extramural credit is not approved for: 1) courses which would not have received graduate credit if taken at the University of Southern Maine; 2) correspondence courses; 3) courses which are inappropriate for inclusion in the student's program of study; 4) programs in which a grade lower than B was received. For courses taken within the University of Maine System, no more than 6 extramural credits will be approved.

Assessment of Prior Experience

A degree student may petition to have prior learning assessed with the possibility of graduate credit given. A petition should be sent to the appropriate graduate program where it will be reviewed in accordance with Faculty Senate approved guidelines.

Substitutions and Waivers

In certain circumstances a degree student may request a substitution or waiver of graduate education and/or program requirements. The program director should be contacted if a substitution or waiver of a graduate education requirement is requested.

Degree Progress

Full-time registration is for 9 or more degree credits; part-time registration is for 8 degree credits or less. The definition of satisfactory progress towards completion of a degree is determined by the particular graduate program. However, in any semester in which the cumulative GPA falls below 3.0 (B average) the student will be placed on probation and must bring the cumulative GPA to 3.0 level within 9 credit hours or will be withdrawn from the program and must apply for readmission.

Withdrawal

Withdrawal from the University of Southern Maine may be for personal reasons on the part of the student, academic reasons as determined by the program requirements, or by administrative decision.

A. Student Withdrawal. To withdraw from the University the student must submit an official Withdrawal Form to the Registrar's Office and complete an exit interview with his/her advisor.

B. Academic Withdrawal. If a student has not made satisfactory progress towards fulfilling degree requirements (see above) he or she may be withdrawn from the University by the program director.

C. Administrative Withdrawal. A student may be withdrawn from a particular graduate program for reasons of a professional nature as determined by the program director. Such withdrawals must have approval of the Associate Provost.

If a student withdraws or is withdrawn from the University during the first two weeks of the semester, there will be no courses or grades recorded. A student withdrawing or being withdrawn after the second week through the sixth week will receive a W grade for each course in which the student was enrolled. A student withdrawing or being withdrawn after the sixth week will receive regular grade designations as determined by the instructor(s). Under unusual circumstances grades of W can be assigned after the sixth week if approved by the instructor and the director of the program, and with final approval of the Office of Graduate Affairs.

Program Transfer

A matriculated graduate student admitted to a particular program of study at the University of Southern Maine may request a program transfer within the University of Southern Maine. Formal application to the transfer program must be submitted in the usual fashion described under Admission. Transfer requests will be reviewed by the appropriate program faculty according to the admissions calendar. Transfer of credit will depend upon the requirements of the individual program.

Graduation

Graduation Requirements.

To be eligible for graduation from a graduate degree program a student must:

A. Complete satisfactorily the number of graduate credit hours required in the program with a 3.0 grade average. All courses completed for graduate programs must be passed with a minimum grade of C. However, no student will be allowed to apply more than 6 credit hours of C toward graduation.

B. Complete satisfactorily all program degree requirements as defined in the particular graduate program (e.g., thesis, comprehensive examination).

C. Submit a completed application for graduation and a Commencement Fee to the Registrar.

Certification for Graduation Each graduate program is responsible for certifying fulfillment of graduation requirements by a student to the Office of Graduate Affairs.

Commencement Ceremony A graduate may participate in a commencement ceremony only if he or she has completed all degree program requirements and has been certified for graduation by the program.

Students may request exception to graduate study policies or appeal a decision based on these policies. Consult the Office of Graduate Affairs for procedures.

College of Arts and Sciences

Master of Science in Computer Science

Dean: Robert J. Hatala

Associate Professors: Heath, Schroff, Welty

The master of science in computer science program is designed to provide the student with a thorough knowledge of the concepts, theory, and practice of computer science as well as develop the student's ability to analyze critically solutions to problems and to make sound professional decisions. Students will be prepared for positions of responsibility and expertise. Graduates may assume positions involving such diverse activities as the design, implementation, and testing of software products; the development of new hardware technology; and the analysis, construction, and management of large-scale computer systems. Graduates will possess a good foundation for further study in computer science.

Admissions

Each student applying for full admission must meet the following requirements (conditional admission status may be granted to students who do not fully meet these requirements):

1. A baccalaureate degree from an accredited institution with grade point average of at least 3.0 on a 4.0 scale (B average).

2. The following USM courses or their equivalent with an average grade of 3.0:

COS 160 Introduction to Programming: PASCAL

COS 161 Algorithms in Programming

COS 250 Introduction to Computer Systems

COS 280 Discrete Structures

COS 360 Concepts of Higher Level Programming Languages

COS 285 Data Structures

MAT 152 Calculus A

MAT 153 Calculus B

3. The Graduate Record Examination (GRE) Advanced Computer Science Test.

Admission to the master's program is competitive and based on an evaluation of the application materials by the Computer Science Graduate Admissions Committee. Required application materials are those specified program admission requirements (above) along with three letters of recommendation attesting to the candidate's academic and/or professional accomplishments.

An application will not be acted upon until all these materials have been received. Applicants are encouraged to submit applications as early as possible.

Applicants meeting the entrance requirements for a master's in computer science will be granted regular admission status. Applicants not meeting the entrance requirements of the program may be granted conditional admission status during which time the student must compensate for any specific academic deficiency. The Computer Science Graduate Admissions Committee will designate specific undergraduate computer science and mathematics courses to remedy admissions deficiencies. These courses will carry no credit toward the master's degree and must be successfully completed and must precede the completion of 12 hours of graduate credit. Upon successful completion of the designated preparatory coursework the student may be granted regular admission status.

Program Requirements

The master's program requires a minimum of 30 credits. Of these, 24 must be in coursework; the remaining 6 credits must be from either Option I or Option II described below. Of the required 24 credits, an approved sequence of at least 8 courses with graduate credit must be completed. Four of the 8 courses must be graduate (500-level) computer science courses and at least 6 courses must be computer science offerings.

Business oriented students may take up to two upper-level courses offered by the School of Business, Economics and Management for graduate credit, subject to approval by the computer science faculty. To ensure breadth in the field, each student is required to take MAT 362 Probability and Statistics I, COS 450 Operating Systems, COS 469 Introduction to Compiler Construction, and COS 380 Automata, Computability, and Formal Languages or their equivalent. Any other 300- or 400-level courses must be approved in advance by the computer science faculty if they are to be taken to fulfill degree requirements. One or more of these course requirements will be fulfilled if it is determined that the student has successfully completed equivalent coursework at the undergraduate level. However, graduate credit will not be given for courses taken to fulfill undergraduate requirements.

Upon completion of the required coursework the student may select one of two options in completing the requirements for the master's degree in computer science.

Option I: Master's project

The student is required to undertake and complete a master's project. The project may take two different forms. If the student is affiliated with industry, and involved in computer science-related activities, a well-defined practicum, approved by the computer science faculty, is one form. The student may also engage in an academic project under the direct supervision of a computer science faculty member. This option involves the solution of a research problem, the construction of a non-trivial software tool, or some other comparable summarizing activity.

The student is required to produce a final document describing the completed project. This document will adhere to a specified format and must be approved by a committee of Computer Science faculty members.

Option II: Extended coursework

The student is required to a.) complete successfully two additional graduate (500-level) courses, and b.) pass a written comprehensive examination designed to test the student's ability to integrate material from several courses.

For further information and application, telephone 780-4386, or write: Office of Graduate Affairs; University of Southern Maine; 96 Falmouth Street; Portland, Me. 04103.

Selected Undergraduate Courses

COS 355 Computer Architecture

Fundamentals of the design and organization of digital computers. Topics include applications of Boolean algebra to logical design; machine algorithms used in addition, subtraction, multiplication, etc.; types of memory; synchronous and asynchronous operation; minimization of logic circuits. Also, concepts from microprocessors and large parallel computers. Prerequisites: COS 280 or MAT 290 and COS 250. Normally only offered in the spring semester. Cr 3.

COS 374 Numerical Analysis I

A study of the theory and application of computational algorithms for interpolation, equation solving, matrix methods, integration; error analysis. Prerequisites: MAT 252, COS 160, and permission of instructor. Cr 3.

COS 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: COS 280 or MAT 290. Cr 3.

COS 450 Operating Systems

Computer resource management. Topics include an in-depth study of concurrent cooperating processes; virtual systems; segmentation and paging; I/O device handling; protection and security; deadlock; race conditions. Prerequisites: COS 285, COS 355. Cr 3.

COS 458 Advanced Data Structures
(continuation of COS 285)

Internal tables, external sorting, file organization, data base management systems and designs. Prerequisite: COS 285. Cr 3.

COS 469 Introduction to Compiler Construction

Definition of a language, context-free grammars, rigorous definition of a typical small language in BNF, design and implementation of a compiler for programs within this language. Prerequisite: COS 285. Cr 3.

COS 472 Artificial Intelligence

An introduction to the underlying concepts

and applications of intelligent systems. Topics include computer representations of knowledge; heuristic search techniques and computer problem solving; learning; game playing; automatic theorem proving; pattern recognition; natural language question-answering. Prerequisites: COS 280, COS 285. Cr 3.

COS 482 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: COS 280 or MAT 290. Cr 3.

Graduate Courses

COS 550 Advanced Operating Systems

Topics include cooperating processes, privacy and protection of system and user processes, hardware aids, basic concepts of networks and distributed processing. System performance analysis may also be covered. Prerequisite: COS 450. Cr 3.

COS 552 Computer Networks and Distributed Processing

Topics include structure of present networks and proposed networks, network protocols, packet switching, workload sharing. Satellite and local networks, network architecture. May include examples such as ARPANET, DECNET, X.25, SNA. Prerequisite: COS 285. Cr 3.

COS 555 Advanced Computer Architecture

This course presents topics from research areas in computer architecture as well as advanced and emerging technologies. Possible topics are parallel machines, content addressable memories, VLSI systems. Prerequisite: COS 355. Cr 3.

COS 558 Database Management

Data structures and access methods most commonly used in database systems. Major topics include: data models with an emphasis on the relational model. Overview of some database management systems. Prerequisite: COS 285. Cr 3.

COS 565 Software Design and Development

A study of techniques and approaches related to the design and development of large scale software products. Consideration of formal methods for specification, analysis, design, implementation, and testing. A "large" group programming project will be the vehicle for much of the learning in this course. Prerequisite: COS 285. Cr 3.

COS 562 Modeling and Analysis of Computer Systems

Development and analysis of deterministic models of modern computer systems. Queue-

ing models will be used to analyze computer operating systems and computer communication networks. An operational analysis approach to performance evaluation and bottleneck analysis will be emphasized. Applications to actual systems will be considered. Other topics include: model validation, system measurement, mean value analysis, and computational algorithms. Prerequisite: COS 450 and MAT 362, or instructor's permission. Cr 3.

COS 566 Simulation and Analytical Modeling

The theoretical limitations of analytical modelling will be contrasted with the practical limitations of simulation. The BCMP family of analytical models will be presented along with the computational solutions of these models. The use of simulation will be discussed with regard to a high level language (such as SIMSCRIPT) and will consider such topics as model verification and evaluation of experimental results. Prerequisite: Full graduate standing or permission of instructor. Cr 3.

COS 570 Seminar: Advanced Topics in Computer Science

Topics vary from year to year. Will include current research, emerging technologies, case studies. Prerequisite: Graduate Standing.

COS 580 Theory of Computation

The study of computability theory, automata theory, and formal languages. Topics are similar to those discussed in COS 380 but will be covered in greater depth, with the emphasis on developing the ability to apply these abstract notions to practical situations. Prerequisites: COS 380. Cr 3.

COS 582 Design and Analysis of Algorithms

This course deals with the analysis of algorithms, and the relevance of such analysis to the design of efficient computer algorithms. Examination of such topics as sorting, tree

and graph algorithms, pattern matching, algebraic simplification and transformations, NP-hard problems, and approximation algorithms. A balance is struck between the derivation of results of theoretical significance and the practical endeavor of designing efficient algorithms. Prerequisite: COS 285.

Cr 3.

COS697 Independent Study

An opportunity for graduate students to pur-

sue areas not currently offered in the graduate curriculum. Prerequisite: Full graduate standing or permission of instructor. Cr 3.

COS698 Master's Project

A six-credit project is a required part of Option I. The project must be approved by the computer science faculty in advance. Prerequisite: Full graduate standing or permission of instructor.

Cr 3 or 6.

School of Business, Economics and Management

Dean: Duane R. Wood

Director of Graduate Programs: Raymond P. Neveu

Professors: Durgin, Findlay, Miaoulis, Neveu, Sturmer, Wood; *Associate Professors:* Andrews, Bay, Chandler, Clarey, Hodson, Houlihan, Jagolinzer, McMahon, Phillips; *Assistant Professors:* Boyle, Medley, G. Parsons, H. Parsons

The master of business administration program at the University of Southern Maine is designed to prepare students for executive positions in business, industry, and nonprofit organizations in both the private and public sectors. It emphasizes development of a broad perspective, interpersonal skills, and analytical tools of general management. Students are encouraged to apply regardless of their undergraduate academic specialization. Those applicants whose previous educational background does not include the appropriate coursework or their equivalents will be required to complete the designated prerequisites in order to gain the academic background required for the MBA core course.

The School of Business, Economics and Management has an enrollment of approximately 1,900 students in its undergraduate and graduate programs. Nearly half of the undergraduate students work part-time, and over 90 percent of the MBA students are employed in full-time business, managerial, and professional positions, completing their MBA courses on a part-time basis.

The MBA program has been offered since 1964. The School of Business, Economics, and Management, in cooperation with the University of Maine at Augusta, extends its MBA offerings to Augusta and Lewiston/Auburn. At all sites, the MBA program is tailored for working students and all courses are offered in the late afternoon or evenings. Courses are occasionally offered on weekends.

Application

Information and application materials can be obtained by contacting the Dean's office at the University of Southern Maine (207-780-4020), the Office of Graduate Affairs, 96 Falmouth St., Portland, Maine 04103 (207-780-4386), or the Admissions Office at the University of Maine at Augusta (800-452-1947). Application for admission to the MBA program should be sent to the University of Southern Maine, Office of Graduate Affairs, 96 Falmouth Street, Portland, Maine 04103. Completed applications are evaluated by the MBA Graduate Admissions Committee. Completed applications must include Graduate Management Admission Test (GMAT) results, official transcripts from colleges and universities attended, and letters of recommendation. An application will not be acted upon until it is complete. Applicants are encouraged to apply as early as possible, but completed applications must be received by the following dates to assure action for the specified term: August 1 for the fall semester; November 15 for the spring semester; and May 1 for the summer sessions.

Admission

At the University of Southern Maine, several factors are evaluated in determining a candidate's admissibility to the MBA program. Included in the assessment of a candidate's potential to perform satisfactorily in the MBA program are the undergraduate grade point average (GPA), the rigor of the undergraduate field of study, the reputation of the institution awarding the baccalaureate degree, academic performance in any previous graduate coursework taken, the Graduate Management Admission Test (GMAT) score, letters of recommendation, and a candidate's record

of successful business or professional experience. During the 1983-1984 academic year the average GMAT score among students given admission into the MBA program was 555. Students whose native language is not English must submit a Test of English as a Foreign Language (TOEFL) score of at least 550.

Admitted students whose educational background is lacking the prerequisites listed below will have to complete satisfactorily each of the prerequisite courses or their equivalents as stipulated in their letter of acceptance.

MBA Program Requirements

Prerequisites	Credit Hours
	0-21

These 500-level MBA courses are not applicable toward the 36 graduate credits needed for graduation. These courses are required for students whose previous undergraduate education has not included the equivalent content. Grades earned in these courses are not included in the student's grade point average. However, any of these 500-level courses in which a student earns less than a C grade (2.0 points) must be repeated.

MBA 501 Economic Analysis	
A. An intensive survey of microeconomic theory	1.5
B. An intensive survey of macroeconomic theory	1.5
MBA 502 Fundamentals of Accounting	
A. An intensive survey of financial accounting	1.5
B. An intensive survey of management accounting	1.5
MBA 503 Linear Algebra and Calculus for Business	
An introduction to linear algebra and calculus	3.0
MBA 504 Probability and Statistics for Business Decision Making	
Probability and statistics as decision-making tools	3.0
MBA 505 Introduction to Computers in Management	
Utilization of computers in organizations	3.0
MBA 506 Intensive Survey of Business Functions	
A. Management	1.5
B. Marketing	1.5
C. Finance	1.5
D. Production	1.5

MBA Core	27
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These courses are required of all MBA students regardless of their previous undergraduate education.

I. Courses to be taken early in program:	
MBA 600 Social Responsibility	3.0
MBA 610 Managerial Economics	3.0
MBA 630 Managerial Accounting	3.0
MBA 640 Management Theory	3.0
MBA 642 Managerial Behavior	3.0
II. Courses to be taken later in program:	
MBA 620 Financial Management	3.0
MBA 660 Marketing Management	3.0
MBA 670 Operations Research	3.0
MBA 680 Organizational Strategy and Planning	3.0

MBA Electives

Students select graduate courses in business, economics, or administration from the following list, although courses outside the School of Business, Economics and Management may be taken with approval of the Graduate Program Director.

MBA 613 Macroeconomics Analysis and Forecasting	3.0
MBA 627 Investment Management	3.0
MBA 643 Organizational Development	3.0
MBA 651 Industrial Relations and Personnel Management	3.0
MBA 653 Collective Bargaining	3.0

MBA 667 Market Research and Analysis	3.0
MBA 669 Business Logistics	3.0
MBA 675 Production/Operations Management	3.0
MBA 685 Entrepreneurship and Business Formation	3.0
MBA 691 Independent Study	1-3
MBA 699 Special Topics	1-3

The minimum number of credits required for the MBA degree (core and electives) is 36.

Related Policies and Procedures

1. In order to be counted toward the MBA core and elective requirements, graduate coursework must have been completed within six years of the date a student enrolls in his or her first 600-level course, otherwise coursework must be repeated.

2. Students matriculated in other graduate programs at the University of Southern Maine may enroll in MBA-level courses on a space-available basis, providing that appropriate course prerequisites or other equivalents, as approved by the Director of Graduate Programs, have been satisfied.

3. A person enrolled in a graduate program in business or administration at another university, who is in good standing at that university, may enroll in graduate courses within the School of Business, Economics, and Management as a transient student on a space-available basis, providing that the required prerequisites for those courses have been fulfilled.

4. Individuals who are in the process of submitting their credentials for possible admission into the MBA program may be allowed to register for 500-level MBA prerequisite courses for one semester. These courses will apply toward fulfilling MBA prerequisite requirements. Enrollment is on a space-available basis and requires approval from the Director of Graduate Programs.

5. Students wanting to register in graduate courses in the School of Business, Economics and Management, but who are not admitted to the MBA program or are not degree candidates, may be enrolled as Special Students. Special Students may be permitted to enroll in 600-level MBA core or elective courses, but credits earned by Special Students in such 600-level courses may not be applied toward fulfillment of the 36 graduate credit requirement for MBA core or elective courses if they are admitted to the MBA program after completing this coursework. Applications for Special Student admission are available from the Director of Graduate Programs in the School of Business, Economics and Management. The application form, including evidence of ability to perform graduate work and satisfactory fulfillment of specific course prerequisites, must be submitted prior to the start of the course. If Special Student admission is gained, enrollment is on a space-available basis.

6. Either a minimum grade of C (2.00) from a regionally accredited institution of higher education or successful completion of an equivalent CLEP exam or departmental exam (if available) is needed to meet a prerequisite requirement. Coursework from non-accredited institutions will be evaluated on an individual basis.

7. In order to receive graduate credit toward the MBA degree, a student must be registered in a graduate course as a graduate student. If a student has earned another graduate degree prior to admission to the MBA program, only six credits used to fulfill requirements for that degree may be applied toward completion of the MBA degree.

8. A student admitted to the MBA program may apply to have graduate credits transferred from other regionally accredited institutions of higher education. In order to apply, a student must have earned nine hours of graduate credits from the University of Southern Maine and received a B (3.00) grade or better in the course requested for transfer credit. To be accepted, the course also must be judged applicable to a student's program of study. In any case, a maximum of six semester hours of transfer credits may be counted. When possible, students should ascertain whether or not transfer credit will be granted by the School of

Business, Economics, and Management before enrolling in a course at another institution.

MBA Grade Policy

All 500-level graduate courses must be completed with a minimum grade of C (2.00 points) in order to carry graduate degree credit. All 600-level graduate courses must be completed with a minimum grade of C- (1.67 points) in order to carry graduate degree credit. If a student receives a grade of D+ (1.33 points) or D (1.0 points) in a required 600-level course, the student must repeat the course. When a student repeats a 600-level course, all grades received in that course are included in the student's grade point average. A student who receives two grades of D (1.0 points) or D+ (1.67 points) or one grade of F (0.0 points) in 600-level courses will be withdrawn from the program by the Program Director.

A student whose grade point average falls below 3.00 will be placed on probation. The student will have 12 semester hours in which to bring the grade point average back to at least a 3.00. Students who fail to do this will be withdrawn by the Program Director.

A student who has completed the program of study must have a cumulative grade point average of 3.00 in the 36 requisite credits to receive the MBA degree. If a student has completed all requisite courses with a cumulative grade point average below a 3.00, a maximum of six additional credits may be attempted in order to raise the cumulative grade point average to at least a 3.00.

MBA 501 Economic Analysis

Two independent modules which provide an intensive survey of (A) microeconomic theory and (B) macroeconomic theory. Economic problems such as price and output decisions, resource allocations, inflation, and unemployment are analyzed. Cr 1.5 per module.

MBA 502 Fundamentals of Accounting

Two individual modules which provide an intensive survey of the fundamentals of financial and management accounting. Includes an appreciation and understanding of (A) generally accepted accounting principles and their application in the preparation and analysis of financial statements; and (B) the theory and tools used to evaluate, situations in various business and not-for-profit environments. Cr 1.5 per module.

MBA 503 Linear Algebra and Calculus for Business

An introduction to the use and concepts of linear algebra and calculus as mathematical tools in business and management problem-solving. Cr 3.

MBA 504 Probability and Statistics for Business Decision-Making

An introduction to the concepts and use of probability and statistics as tools for business decision-making. Cr 3.

MBA 505 Introduction to Computers in Management

Utilization of computers, micro-processors, data processing, and information systems in organizations. Cr 3.

MBA 506 Intensive Survey of Business Functions

Four independent Modules presenting basic

concepts involved in (A) management, (B) marketing, (C) financing, and (D) production of goods and services. Students will enroll in only those modules not covered in previous course work. Prerequisites: Management module: none; Marketing module: MBA 501; Finance module: MBA 501, MBA 502; Production module: MBA 501, MBA 502, MBA 503, MBA 504, MBA 505. Cr 3. 1.5 per module.

MBA 600 Social Responsibility

Legal problems, including antitrust law, rights and responsibilities of officers and directors, and legal problems confronting managers of non-profit organizations. This course also covers business ethics and attempts to develop practical solutions to the ethical issues that confront today's managers. Prerequisite: MBA 501. Cr 3.

MBA 610 Managerial Economics

The application of economic analysis to the management of business enterprises. Designed to develop the student's ability to understand some of the important economic concepts and tools relevant to making decisions within a business firm. Particular attention is given to the use of interest and cost gradient tables, annual cost and present worth analysis, rate of return analysis, economic life, replacement economy cost minimization, and the impact of taxes upon a decision. Prerequisites: MBA 501, MBA 502, MBA 503, MBA 504, MBA 505. Cr 3.

MBA 613 Macroeconomic Analysis and Forecasting

The first part of the course examines forecasting techniques that are important to man-

agers. The second part of the course develops the analytic framework of macroeconomic analysis. This framework is applied in examining the major economic problems of inflation, unemployment, cyclical fluctuations, and economic growth. Alternative stabilization policies and instruments will be explored. The recent performance of the U.S. economy is examined. Prerequisites: MBA 501, MBA 504. Cr 3.

MBA 620 Financial Management

An intensive presentation of the traditional and modern approaches to the theory and practice of managerial finance. The management of capital sources and uses within the context of shareholder wealth maximization is presented using lectures, problems, cases, and supplementary readings. Prerequisites: MBA 501, MBA 502, MBA 503, MBA 504, MBA 506-C. Cr 3.

MBA 627 Investment Management

A systematic and in-depth treatment of security analysis and portfolio management. The security analysis segment develops E-I-C methodology augmented by deterministic valuation models. A major empirical analysis is carried out in conjunction with the theoretical developments. The portfolio management segment develops Markowitz efficient sets and the subsequent developments as contained in Sharpe-Lintner-Mossin theory. Related readings in Fama-Roberts market efficiency tests are assigned as needed. The empirical analysis component of this segment revolves around generating Markowitz efficient portfolios and measuring beta coefficients. Prerequisite: MBA 620. Cr 3.

MBA 630 Managerial Accounting

Development, analysis, and interpretation of accounting data and financial statements for managerial control, coordination, and decision-making; emphasis upon accounting as a tool of management. Topics are developed by utilization of case studies, problems, and reference material. Prerequisite: MBA 501, MBA 502. Cr 3.

MBA 640 Management Theory

This course analyzes the tasks and responsibilities confronting administrators in complex organizations. It focuses on the issues involved and the problems encountered in designing the organizational structure, in establishing the decision-making processes, and in integrating the diverse sub-system in order to achieve the organizational goals. Within a systemic framework a contingency approach is utilized to present theoretical concepts, practical applications, and managerial experiences. Prerequisites: MBA 506-A. Cr 3.

MBA 642 Managerial Behavior

Emphasis on the importance of the influence process, motivational settings, and the structural backgrounds of organizational status and social relations. Analysis through case discussion, readings, and experiential exercises will develop a conceptual framework for improving individual decision-making ability with respect to individual, group, and intergroup problems. Prerequisites: MBA 506-A. Cr 3.

MBA 643 Organizational Development

The design and application of change strategies to improve organizational effectiveness. The planned, systematic and long-range efforts to change "how an organization operates," focus on various aspects of an organization's culture and its human and social processes. Diagnosis of such processes as cultural norms and values; power, competition, and collaboration; expectations and both formal and informal reward systems; social interaction and feedback patterns; conflict resolution; the structure and process of work; people development; and goal setting, planning and evaluation systems. Simulations, case studies, experiential exercises, and applied strategies for changing and improving organizations, using an array of behavioral science approaches. Prerequisite: MBA 642. Cr 3.

MBA 651 Industrial Relations and Personnel Management

A comprehensive investigation of the changing pattern of industrial relations in the United States. Major emphasis is on the human, social, and economic aspects of employer-employee relationships in both union and non-union settings. Provides an understanding of and appreciation for the crucial importance of the development of sound and flexible personnel policies by top management. Among the areas considered are: the changing nature of the labor force; wages, salaries, and fringe benefits; hours of work; and the impact of technological change on the work force. Prerequisites: MBA 501-A and MBA 506-A or permission of instructor. Cr 3.

MBA 653 Collective Bargaining

Discusses the major issues and problems in the collective-bargaining process. Provides the business manager with the knowledge of sound collective bargaining attitudes and techniques necessary to achieve a responsible and mature attitude in his relationship with employee representatives. To this end, major focus is on the changing nature of public policy toward collective bargaining, including strikes, lockouts, grievance procedures, arbitration, mediation, and bargaining strategies and techniques. Prerequisite: MBA 651. Cr 3.

MBA 660 Marketing Management

This course is organized to give the graduate student an opportunity to develop and test, through the case method, a number of marketing policies and strategies. Furthermore, the student will read and discuss the current literature in the field of marketing, reviewing current marketing practices and predictions for the balance of the century. Prerequisites: MBA 501, MBA 506-B. Cr 3.

MBA 667 Market Research and Analysis

A study of the procedure and applications of market research. Such areas as the organization and operation of a research department, survey methods, experimentation, measurement of potential demand, and the analysis of distribution costs are considered. Emphasis on developing the student's ability to apply these and other techniques toward the solution of marketing problems. Prerequisites: MBA 504, MBA 660. Cr 3.

MBA 669 Business Logistics

Explores in-depth the need for and means of centralization of decision-making to accomplish effective senior executive control of the chain of logistic activities from point of completion of manufacturing or other form of utility-creating process to delivery at the point of use or consumption. Interdisciplinary relationships with cybernetics, econometrics, operations research, computer-facilitated information analysis, purchasing (materials management) and the consumer relations aspect of marketing (physical distribution) reviewed in their role as logistics sub-systems or building blocks. Prerequisites: MBA 660, MBA 670. Cr 3.

MBA 670 Operations Research

A survey of commonly used models and analytical techniques in sophisticated quantitative-management-decision-making. Mathematical models are developed and applied, with the computer's aid, in a wide range of real-world business situations. Topics include: queuing theory, decision analysis, inventory theory, simulation, Markov analysis, classical optimization, mathematical programming, and network analysis. Prerequisites: MBA 610. Cr 3.

MBA 675 Production/Operations Management

An in-depth examination of the topics and problems associated with the management of

production operations and the delivery of services. Emphasis is placed upon the design of model-based planning and control systems. Computer-based quantitative tools and techniques are heavily utilized. Prerequisites: MBA 506-D, MBA 670. Cr 3.

MBA 680 Organization Strategy and Planning

Administrative practice at the higher levels of business management, with major emphasis on long-range executive planning of profit, sales, production, social goals, and objectives, and of strategies and policies to achieve these objectives. Coordinates all executive activities viewed as tools for use in developing administrative competence in the formulation of business policies at the decision-making level. Prerequisites: 21 credits of 600-level MBA courses. Cr 3.

MBA 685 Entrepreneurship and Business Formation

The entrepreneur's role in a technological society, with emphasis on the techniques and problems implicit in the launching of new enterprises or in their evaluation by investors. This course is designed for aspiring entrepreneurs and for the professionals or institutions with whom they interface when starting a business. Students are expected to have basic communication skills, a background (educational or experiential) in accounting and marketing, and a grasp of economics and the principles of management. Attention will be paid to emerging opportunities in Maine. Materials are discussed by the instructor or invited experts in a seminar format that requires student participation and assignments calling for research, report writing, and presentation. Cr 3.

MBA 691 Independent Study

Selected topics in the areas of Business and/or Administration may be studied and researched on an independent basis. Prerequisites: permission of the instructor and the director of Graduate Programs. Cr 1-3.

MBA 699 Special Topics

Enables students to take a variety of topics under the same course number. The specific title of each offering and the credit earned will be listed on the student's transcript. Prerequisites: Graduate status and permission of the instructor. Cr 3.

College of Education

Dean: Dorothy D. Moore; Acting Assistant Dean: Bruce A. Allen
Acting Director of Graduate Education: Miriam Clasby; Graduate
Education Specialist: Virginia M. Lewis; Director of Professional
Development Center: George C. Lyons

Office of Graduate Education, Bailey Hall 408, Gorham, Maine 04038,
Telephone: (207) 780-5306;

Professional Development Center, Bailey Hall 305, Gorham, Maine
04038, Telephone: (207) 780-5326.

Education today takes place in a dynamic and demanding arena with many external pressures—financial constraints, public concern about the quality of life and learning in schools, changes in family life-styles, demands for services to meet the needs of various populations. For professionals in schools and human service agencies, this context calls for a unique combination of initiative and responsiveness as well as careful reflection on purposes and strategies. Such a setting highlights the importance of the professional as a lifelong learner.

Since the introduction of graduate courses in 1964, the College of Education has been engaged in developing programs of study that respond to the needs of educators and other human service professionals. Benefiting from the expertise and advice of professionals across the state, these ongoing efforts to present state-of-the-art knowledge skills have produced programs for a broad range of practitioners. Most recent developments include: 1) a revised program for elementary and secondary school teachers; 2) expanded programs of study in adult education and counselor education; and 3) a new program in the field of exceptionality which will be offered jointly with the University of Maine at Farmington.

The College of Education offers the following programs:

Department of Human Resource Development

Adult Education Program: concentrations in training and development; educational gerontology; community education; adult public school education and counseling

Counselor Education Program: concentrations in elementary and secondary school counseling; community agency and rehabilitation counseling

Department of Professional Education

Educational Administration Program: with an option for a concentration in special education administration.

Exceptionality Program: concentrations in emotional disturbance, learning disabilities, mental retardation, hearing impairment

Instructional Leadership Program: concentrations in elementary or secondary school training

Reading Program: concentrations in elementary or secondary adult reading

The Adult Education Program offers a master of science in adult education; all other programs lead to a master of science in education.

Continuing efforts to strengthen graduate offerings are guided by five priorities which reflect commitments of the College of Education to:

Principles of Adult Learning: building on prior learning and experience to enable professionals to shape a program of study that contributes to their long-range career plans.

Community Building: encouraging teamwork and collaboration in problem solving.

Skill Development: integrating selected conceptual, technical, and interpersonal skills.

A Process of Inquiry: emphasizing the importance of asking the right questions and drawing on a variety of disciplines and perspectives to

Admission to Graduate Education

strengthen skills in analysis and decision making.

Linkage with the Field: using case studies, field projects, and practicum experiences to illustrate the interplay between theory and practice, action and reflection; providing outreach to local systems through the Professional Development Center which offers courses, workshops, and conferences, as well as technical assistance for program planning. These priorities provide the grounding for planning and development activities in the College of Education. They help to create a rich and dynamic environment for professionals committed to lifelong learning and quality service in schools, agencies, and other educational settings.

The approval of candidates seeking admission to graduate education is on a selective basis. Graduate programs seek candidates whose baccalaureate degree program, scholastic achievement, interest, motivation, and personal recommendations are indicative of success in graduate education studies.

Requirements for Admission

To be eligible for admission to a graduate education program, an applicant must meet the following requirements:

1. Hold a baccalaureate degree from an accredited institution.
2. Have earned a cumulative grade point average of 2.5 (on a 4.0 scale) in a baccalaureate degree program.
3. Have earned a score of 40 points or above on the Miller Analogies Test, or 900 or above on the Graduate Record Examination.
4. Have filed a complete application with the Office of Graduate Education.

Applicants who fail to meet eligibility requirements for #2 or #3 are urged to enclose an additional document entitled "Special Considerations;" in which they give evidence of ability to complete graduate studies successfully. Without such a document, applications which fail to meet eligibility requirements are automatically rejected.

Application Procedure

Candidates for admission must file a complete application with the Office of Graduate Education.

A complete application contains the following items:

1. Two completed copies of the application form.
2. Official transcripts of all previous college or university work.
3. Three letters of recommendation. These should be from persons in a position to judge the applicant's academic preparation and ability to pursue graduate work. The writers should return their recommendations directly to the Office of Graduate Education.
4. Official scores on the Miller Analogies Test or the Graduate Record Examination.
5. An application fee of \$15.00 (nonrefundable).
6. The Department of Human Resource Development and the Reading and Exceptionality programs have special admission requirements. Please consult the following pages for details.

Application Deadlines

A complete application must be filed before the following deadlines: for January matriculation: October 1, 1984; for May or September matriculation: March 1, 1985.

Candidates are urged to contact the Office of Graduate Education to determine if all materials have been received. This should be done by early September for January 1 admission and by early February for May 1 or September 1 admission.

With the exception of candidates applying to the Counselor Education Program, or the Adult Education Program, interviews are optional. The Office of Graduate Education strongly encourages candidates to visit the campus and discuss their interest in graduate study.

Admissions Decisions

All eligible applications are reviewed by a graduate education program

committee which holds final responsibility for admission decisions. Applicants are notified by mail of admission decisions by the Office of Graduate Education.

Appeal of Admissions Decisions

Applicants may appeal an admissions decision by submitting a written appeal to the Office of Graduate Education.

The appeal will be reviewed by the appropriate program faculty and the Director will notify the student of action taken on the appeal.

Information which will be considered in an admission appeal may include, but will not be limited to, the following:

1. Grades earned in graduate coursework from an accredited institution.
2. Evidence of professional achievements that substantiate potential for success with graduate education studies.
3. Extenuating circumstances (e.g., non-native English speaking individuals).

The quality of the organization of information will also be considered in the review of appeals.

Should the applicant wish to pursue the appeal process further, a written appeal should be submitted to the Associate Provost. Still further appeal of the admissions decision may be made to the Provost.

Master's Thesis

A degree student may earn up to six credit hours for completing a master's thesis. Students are encouraged to consult with their faculty advisor regarding thesis requirements.

Comprehensive Examination

All program degree students must take a comprehensive examination which will assess the student's breadth and depth of knowledge of the program field. The examination cannot be taken prior to the semester in which the student completes a program of study.

Degree students will have an opportunity to receive an examination briefing at least two weeks prior to the examination date, and the criteria to be used in evaluating the examination will be available in written form. In addition, students have the right to receive an explanation of the examination results.

Comprehensive examinations will be graded as pass with honors, pass, or fail. A student may take the examination no more than twice; two failures will result in the student being withdrawn from the program. The examination will be given once each semester during the academic year. Degree students must register for the examination at least six weeks prior to an examination date.

Information on examination dates and comprehensive examination registration forms are available from the Office of Graduate Education.

Department of Professional Education

Professor: O'Donnell; *Associate Professors:* Amoroso, Clasby, Cohen, Deady, Gorman, Millbury; *Silvernail, Smith;* *Assistant Professor:* Foster

Educational Administration Program

The Program in Educational Administration focuses on the preparation of leaders for educational contexts—elementary and secondary principals, assistant principals, program coordinators, department chairpersons, and team or unit leaders. The program of study is designed to develop specific leadership competencies that are evaluated in performance situations. Faculty members in the program believe that the degree preparation of administrative personnel should ensure the development of leadership competencies in the following areas:

Conceptual Skills

- a. view their organization as a complex social system in continuing interaction with other social systems;

- b. identify, grasp, and utilize theories, models, and conceptual constructs basic to organizational leadership;
- c. be knowledgeable about basic constitutional and statutory laws pertaining to education and the human services and how they have been interpreted by the courts;
- d. work for the provisions of equal opportunity of all clients.

Interpersonal Skills

- a. link activities and communication across system boundaries;
- b. influence people as individuals, role holders, and members of groups and organizations;
- c. be proficient in skills of communication.

Technical Skills

- a. assess the needs of interdependent systems and the needs of people living and working within the system's boundaries;
- b. understand and utilize research findings, relevant research techniques and procedures;
- c. diagnose the need for system change and be able to employ appropriate strategies to implement and maintain improvements;
- d. understand the rights, responsibilities, and ethics inherent in collective negotiations;
- e. understand and use management systems and procedures.

Every student admitted to graduate study in the program in educational administration progresses through a cycle of 1) individual needs assessment and perspective setting; 2) study of conceptual foundations of organizational leadership; 3) study of leadership functions; and 4) application of knowledge and skills related to functions.

Required Core Courses (18 credits)

- EDU 600 Research Methods and Techniques
- EDU 670 Introduction to Administration
- EDU 671 Organizational Behavior
- EDU 672 Political Bases for Decision Making
- EDU 635 Seminar in Administration
- EDU 626 Group Process and Procedures

Elective Courses (18 Credits)

Elective courses must be approved by the student's advisor. A partial list of courses include:

- EDU 604 Curriculum Development
- EDU 674 Organizational Change and Innovation
- EDU 675 School-Community: Inter-system Communication
- EDU 676 Systems Approach to Educational Planning
- EDU 677 Community Analysis & Inter-Agency Collaboration
- EDU 678 School Law
- EDU 679 Evaluation & Supervision of School Personnel
- EDU 680 Staff Development
- EDU 681 Principal-Student Relationships
- EDU 682 Collective Negotiations

Two Electives may be chosen from outside the program or an individual may elect to write a thesis and/or complete an independent study.

Exceptionality Program

The master of science in education program in exceptionality provides training for individuals who are teachers or who wish to be teachers of students who are exceptional. The program is offered jointly by the University of Southern Maine and the University of Maine at Farmington.

Two areas of specialization are offered: 1) emotional disturbance, learning disabilities, and mental retardation; and 2) hearing impairment. A third area, gifted/talented education, is currently under development by program faculty. In addition, a course sequence in special education administration is offered for those individuals matriculated in the educational administration program. The master of science in education program in exceptionality requires 36 credits of coursework.

Graduates of the program will develop a range of intermediate and advanced skills relating to exceptional children and youth. Specifically,

Program Requirements

graduates will be able to demonstrate and/or describe:

1. Educational and behavioral characteristics, needs, and services available for exceptional children and youth, including appropriate state and federal laws, regulations, and guidelines.
2. Techniques for assessing academic, behavioral, social, and pre-vocational strengths and weaknesses of exceptional students.
3. Methods, materials, and procedures for organizing, conducting, and evaluating individualized educational programs based on assessed strengths and weaknesses.
4. Techniques and approaches for managing disruptive and inappropriate student behavior and fostering pro-social behavior.
5. Processes of consultation and program planning with parents, teachers, and other professionals, including interpersonal skills and techniques associated with effective consultation.
6. Principles and techniques for the organization and administration of special education programs as well as the supervision of teachers, aides, and other professionals who deliver services to exceptional individuals.

Program Requirements

A. Learning Disabilities, Emotional Disturbance, Mental Retardation Professional Core

- EXE 601 Educational Programming for Exceptional Children
- EXE 653 Assessment in Special Education
- EXE 685 Intradisciplinary Seminar
- EDU 620 Foundations of Reading
- EDU 600 Research Methods and Techniques

Specialization

Characteristics and Issues (select 2)

- EXE 620 Learning Disabilities — Theory and Practice
- EXE 630 Mental Retardation — Theory and Practice
- EXE 610 Emotional Disturbance — Theory and Practice

Skills (select 3)

- EXE 605 Practicum in Exceptionality
- EXE 622 Advanced Methods — Learning Disabilities
- EXE 632 Advanced Methods — Mental Retardation
- EXE 612 Advanced Methods — Emotional Disturbances
- EXE 680 Methods and Materials for Teaching Young Children with Moderate/Severe Handicaps
- EXE 681 Curriculum and Methods for the Secondary Special Education Learner
- EXE 624 Advanced Assessment and Practicum
- EXE 683 Topical Seminar

Related Electives (select 2)

- HRD 620 Fundamentals of Counseling
- EDU 621 Reading Remediation
- EXE 682 School Law; Conflict Resolution
- Others upon recommendation of advisor

B. Hearing Impairment

Professional Core

- EXE 601 Educational Programming for Exceptional Children
- EXE 653 Assessment in Special Education
- EXE 685 Intradisciplinary Seminar
- EDU 620 Foundations of Reading
- EDU 600 Research Methods and Techniques

Specialization

- EXE 644 Language Development and Language Intervention
- EXE 642 Oral/Aural Development and Instruction
- EXE 640 Total Communication (Manual)

- EXE 646 Audiology/Aural Rehabilitation
- EXE 648 Curriculum for the Hearing Impaired — Preschool
- EXE 650 Curriculum for the Hearing Impaired — Elementary
- EXE 652 Curriculum for the Hearing Impaired — Secondary
- EXE 654 Practicum — Hearing Impaired
- EXE 656 Summer Institute — Hearing Impaired

C. Special Education Administration (open only to students matriculated in the Educational Administration Program)

Professional Core

Required courses as specified for the Educational Administration Program

Specialization

- EXE 682 School Law; Conflict Resolution
- EXE 685 Intradisciplinary Seminar
- EXE 601 Educational Programming for Exceptional Children
- EXE 684 Practicum — Administration
- EDU 604 Curriculum Development

Electives (2)

Graduate students in the exceptionality program may select electives in the fields of concentration of rehabilitation, elementary or secondary guidance, and exceptionality. A changing selection of electives is offered each semester. Course topics include: marriage and family counseling, behavioral intervention, human sexuality, consultation, the elderly, and group practicum.

Special Program Requirements

Each student entering the program must have had previous experience or at least 16 credits in exceptionality. The student is responsible for bringing the appropriate information (transcripts, course descriptions, documentation of experience, etc.) to the attention of the admissions committee. The admissions committee is responsible for evaluating this information and determining equivalency where justified. This determination must be made at the time of the acceptance.

Admission requirements include:

1. Three letters of recommendation, one of which must be a recommendation by a school principal or special education director
2. At least a 2.5 undergraduate grade point average
3. A written essay
4. Graduate Record Examination or Miller Analogies Test Score

Instructional Leadership Program

The Program for classroom teachers, formerly entitled the Professional Teacher Program, has recently been revised to meet the current needs of elementary and secondary school teachers. The rationale for the program affirms teaching as a dynamic activity, rich in opportunities for adults to test prior learning, to collect and assess new information, to frame key questions about teaching and learning, to explore old values and new insights, and, by this reflection on action, to forge new solutions to continuing and emerging problems of instruction. The revised program is designed specifically for those who see themselves as lifelong learners. It seeks to build on the diverse resources of participants to form a community of learners informed about critical issues in education and skilled in strategies for improving instruction in schools.

The 36-hour program is organized in two phases:

Phase One: Structured Sequence (15 credits)

- EDU 610 Seminar 1: Critical Issues in Teaching and Learning
- EDU 600 Research Methods and Techniques in Professional Education
- EDU 603 Analysis of Teaching
- EDU 630 Foundations of Reading Instruction or
- EDU 514 Developing the Composition Process
- EDU 611 Seminar 2: Contexts for Teaching and Learning

**Program
Requirements**

Phase Two: Self-designed Sequence (21 credits)

Five elective courses selected with approval of advisor

EDU 612 Practicum/Seminar: 6-credit field project

The seminar series must be scheduled at the beginning, mid-point, and conclusion of the program. During Seminar 1 students will begin a process of career and program planning which will lead to a self-designed sequence reflecting both individual and group priorities. The final practicum/seminar provides an opportunity to demonstrate leadership skills in a teaching/learning context.

Note: The Teachers for Secondary Schools Program is a special one-year, full-time sequence of coursework and internship for graduates of liberal arts programs seeking certification as secondary school teachers. For further information, contact the Office of Graduate Education.

Reading Program

The Reading Program provides a concentrated theoretical and empirical framework on the language-communication process. Courses and clinical experiences emphasize knowledge and technical proficiencies that can be applied to virtually any level, including adult basic literacy programs. Students may major in either elementary or secondary and adult reading or a combination of both.

Program Requirements

Required Core Courses (24 Credit Hours)

EDU 600 Research Methods and Techniques in Professional Education

EDU 620 Foundations of Reading Instruction

EDU 621 Reading Remediation

EDU 510 Developing the Composition Process

EDU 514 Teaching Reading in Content Areas

EDU 529 Clinical Experiences

HRD 665 Psychological Measurement and Evaluation

Concentration Courses

A. Elementary Reading Education

EDU 511 Children's Literature

EDU 630 Organizing for Elementary Reading Instruction

B. Secondary and Adult Reading Education

EDU 512 The Folktale

EDU 513 Adolescent Literature

EDU 631 Organizing Secondary Reading Programs

Electives

A partial list of recommended electives includes:

EDU 634 Issues in Reading

EDU 624 Teaching Reading to Children with Special Needs

EDU 524 Supervised Practicum in Reading Disabilities

EDU 630 Organizing for Elementary Reading Instructions

EDU 633 Special Applications of Reading Materials

EDU 622 Language and Reading for Your Children

Special Program Requirements

Course experiences are hierarchical and cumulative in nature, culminating with EDU 529 Clinical Experiences in Reading, and the comprehensive examination. For this reason, it is recommended that the program core courses be taken at the University of Southern Maine. EDU 529 Clinical Experiences in Reading must be taken during the summer session.

EDU 501 Introduction to Computer Application

This course is designed to orient the pre-service and in-service teacher to terminology, operation, evaluation, and applications of microcomputers, hardware and software, as related to our educational system. Additionally, the course will deal with other more traditional electronic media related to modern learning processes. Cr 3.

EDU 510 Developing the Composition Process

A course in language arts emphasizing the development of writing proficiencies. Writing growth and its relationship to reading and oral language development is examined. A thorough study of current research and theory relating to the composition process leads to the development of instructional programs that will foster students' growth as writers. Appropriate for elementary, secondary, and adult basic education teachers. Cr 3.

EDU 511 Children's Literature

Designed for teachers who wish to develop a deeper understanding of the literature written for children ages 4 - 12, and who want to become competent and creative catalysts in bringing children to books. Attention is given to standards of selection, curriculum implications, and methods for using books to individualize reading instruction. Students are expected to read widely in juvenile collections in order to establish a basis for selecting appropriate literary fare. Cr 3.

EDU 512 The Folktale

Designed for the teacher who feels a need to develop an understanding of, appreciation for, and pride in our cultural heritage. Students will examine folktales of many cultures and read one selected group of tales in depth. Uses of the folktale for multi-level reading, interdisciplinary work, and creative learning are emphasized and demonstrated. The course is highly recommended for working with middle and secondary students. Cr 3.

EDU 513 Adolescent Literature

This course is designed for the middle or secondary teacher who wishes to develop a deeper understanding of literature for adolescents and who needs to learn how to help young people read widely. Attention will be given to the dynamics of adolescence, individualizing reading, standards of selection, and creative methods of introducing books. Students are expected to read approximately 30 books from primary sources as well as textbook material. Cr 3.

EDU 514 Teaching Reading in Content Areas

This course explores techniques and processes that can be applied by content teachers to im-

prove reading ability. Emphasis is on skills that must be applied by students in the content areas and strategies for teaching them how to apply them—a process of integrating the teaching of reading/study skills while teaching a subject matter. The course has practical application for all classroom teachers in grades 4 through 12. Cr 3.

EDU 600 Research Methods and Techniques in Professional Education

A study of concepts, principles, and techniques of educational research with emphasis on scientific inquiry and problem solving, designed for both the producer and consumer of educational research. Individual research proposals and reports are completed. Prerequisite: open to matriculated students only. Cr 3.

EDU 602 Philosophy and the Teacher

During this course, several educational philosophies will be examined and the individual will analyze the function of the teacher within those frameworks. There will be an investigation of problems in education and schooling from the perspective of the philosophies studied so as to promote understanding of educational thought and practice. Cr 3.

EDU 603 Analysis of Teaching

This course provides opportunity to view teaching from the perspective of selected conceptual frameworks and research findings in the theory and practice of teaching. Analysis of individual teaching behavior is an important aspect of this course. Cr 3.

EDU 604 Curriculum Development

This is a basic course in curriculum development for classroom teachers and school administrators. Course content will include analysis of curriculum development processes, educational objectives, curriculum and organizational designs, techniques of instruction, and evaluation methodology. Cr 3.

EDU 610 Seminar I: Critical Issues in Teaching and Learning

As the initial course of the Instructional Leadership Program, this seminar provides grounding and direction for a spiral of learning to continue throughout the program. It draws on direct and observed experience of participants, as well as on the literature of theory, research, and practice, to explore critical issues in teaching and learning. It aims to provide students with a process of inquiry useful for identifying, classifying, and analyzing instructional problems and, thus, contributing the skill in making decisions about curriculum and pedagogy. Cr 3.

EDU 620 Foundations of Reading Instruction

The characteristics of the developmental

reading program are examined. Topics are evolved from the major stages of reading progress and include: early reading correlates, reading readiness, initial reading, opportunities for independent reading, wide reading including: vocabulary development, comprehension, study skills, and reading in the content areas. Methods for diagnosing and prescribing for reading are related through case studies of students residing at different stages of reading progress. Cr 3.

EDU 621 Reading Remediation

Diagnostic and prescriptive techniques are related to learners of all ages. Case studies are used to explicate and match the stages of reading progress to developmental, corrective, and remedial situations. A functional knowledge of working with disabled reading students is demonstrated. Issues and research, clinical observations, and methods which can be used to cope with individual problems are stressed. Prerequisite: EDU 620 or EDU 631. Cr 3.

EDU 622 Language and Reading for Young Children

Emphasis is on the process of language acquisition, the characteristics of the English language, concept attainment, and approaches for enhancing language development in young children. The role of language and concept attainment are highlighted along with implications for beginning reading and language arts. Theories and research are related to early childhood education. Cr 3.

EDU 624 Teaching Reading to Children with Special Needs

A foundation course in reading designed especially for teachers who work with students who have special needs. The course examines the five stages of reading progress with emphasis on the first three levels: prerequisites for learning to read, initial reading, and rapid development of reading progress. In addition, contemporary approaches for teaching reading, informal and standardized measures for assessing reading, and methods and materials are explored. In lieu of EDU 620 or EDU 631 for non-reading majors only. Cr 3.

EDU 630 Organizing for Elementary Reading Instruction

Designed for classroom teachers, a workshop/seminar course led by a successful practitioner in methods for organizing and implementing a classroom reading program. Emphasis is on the translation of professional literature and research to classroom practice. Participants are involved in the process of organizing interest centers, developing record-keeping techniques, and other aspects of suc-

cessfully managing a reading program in a self-contained classroom. Emphasis is on the wide exposure to methods and techniques for teaching reading. Prerequisite: EDU 620. Cr 3.

EDU 631 Organizing Secondary Reading Instruction

Designed to meet the needs of practitioners responsible for planning and implementing reading programs for secondary students and adults. Course experiences have been designed to demonstrate how reading instruction can be organized in secondary school settings. Topics include methods and techniques for group and individual assessment, content and materials for developmental reading programs, organizing and planning instructional schedules, and working with content areas teachers. Prerequisites: EDU 620 and EDU 514. Cr 3.

EDU 524 Supervised Practicum in Reading Disabilities

Clinical experiences given in conjunction with the Reading Clinic or the University Reading Academy. Working under supervision, students use selected assessment instruments with adults/children who have learning and reading difficulties. Testing sessions will be unique and geared to specific diagnostic needs perceived by instructors. Cr 1-15.

EDU 633 Special Applications of Reading Methods

Independent study, opportunities to apply course experiences in field-based situations are encouraged. Considerable latitude is possible in pursuing options of professional interest with approval of advisor. Examples of activities include: writing projects (meeting standards of professional journals), intensive clinical experiences, educational consultation and research. Independent options must be approved in writing by the Program Coordinator. Cr 3.

EDU 634 Issues in Reading

A course designed to acquaint students with innovative and contemporary trends in reading. Emphasis is on current research and exemplary instructional techniques in the field of reading. Theories relating to the acquisition of reading will be explored and used to define appropriate instructional goals. Prerequisite: EDU 620 or equivalent. Cr 3.

EDU 529 Clinical Experiences

Clinical experiences requiring the utilization of diagnostic and prescriptive methods for planning and implementing reading programs for students at different stages of reading progress. Tutoring experiences are augmented and related to the professional literature and research through frequent opportunities to explain and defend observa-

tions in seminars. Extensive reading from basic texts, current references, and periodicals are stressed. Emphasis is on the appropriate application of research-validated teaching and diagnostic techniques in supervised settings. Prerequisites: EDU 620 and EDU 621 or equivalents. Cr 6.

EDU 699 Assessment of Reading

The course addresses the issues of evaluation from the perspective of the reading-oriented educator and practitioner, including the basic concepts of measurement that must be mastered in understanding the language and science of evaluation. An additional goal is to explore issues and problems of particular concern to reading specialists, including evaluation of the reading curriculum, appropriate and inappropriate use of testing instruments, test validity, program validity, test reporting, competency testing, and other issues of concern to the field of reading. Cr 3.

EDU 658 Introduction to Gifted Education

This is an off-campus televised course to be broadcast throughout Maine on Channels 26 (Biddeford), 12 (Orono), 10 (Presque Isle), 13 (Calais), and on Cable Television which televises these channels. The course will feature lectures by leaders in the field of gifted education on the following topics: Introduction to Gifted Education, Program Needs, Teaching Strategies using the Williams Model, Creative Thinking and Self-Directed Learning, Curriculum Planning and Sample Units, and Creative Problem Solving. Course requirements include readings, a project, a final examination and two Saturday seminars. Cr 3.

EDU 659 Education of the Gifted and Talented

An introduction to the nature and characteristics of gifted and talented children. The course will include rationale for differentiated, educational program objectives, identification, and development of creativity, community awareness, in-service training, historical perspectives, and future trends in gifted education. Cr 3.

EDU 660 Methods and Materials in Gifted Education

This course will focus on curricular and instructional strategies for providing qualitatively differentiated education for gifted and talented children. The course will emphasize differentiated curricular materials, individualized student objectives, teaching strategies, individualized and group programming models, models of cognitive and affective development and models of learning and instruction. Prerequisites: EDU 658. Cr 3.

EDU 670 Introduction to Administration

Required first course for all master's degree

candidates in educational administration. The course introduces theories of administration and provides each student with diagnostic data to conduct a needs assessment as the basis for planning a personalized program of study. Prerequisite: admission to educational administration graduate program. Cr 3.

EDU 671 Organizational Behavior

A systems approach to understanding and predicting human behavior within organizations. The course emphasizes analytical means to 1) reveal forces which affect decision-making and leadership behavior, and 2) identify implications for managerial functions. Basic concepts such as authority, influence, motivation, communication, conflict, pattern maintenance and tension management are discussed and applied. Cr 3.

EDU 672 Political Bases of Decision Making

Educational leaders must be influential beyond the school system as well as within it. Distribution of power and influence across interrelated social systems is seldom equal leading to competition for bases of influence. This course examines the ramifications of this social circumstance for education with emphasis on administrative decision making. Cr 3.

EDU 674 Organizational Change

Principles and practices derived from behavioral science theory and research findings studied in "specific" situations. Consideration of problems and strategies associated with identifying need for change, stimulating, coordinating, implementing, and evaluating innovations in organizations. Cr 3.

EDU 675 School-Community: Inter-System Communication

Conceptual understanding of theory and practice related to the technology of communication applied within and without the context of educational organizations. Analysis of basic elements involved in the communicator's role in the administrative process is the focus. Emphasis will be placed on the nature and role of the organizational communicator, audiences, message treatment, and evaluation of audience response. Cr 3.

EDU 676 Systems Approach to Educational Planning

Students participate in simulated and real experiences involving programming, planning, evaluating, managing, budgeting forecasting, and decision making. Topics for discussion and skill development will include flow charting, PERTing, needs assessment, curriculum analysis and evaluation, expenditure analysis and accounting, the Delphi Technique, Kepner-Tregoe method, Cost Benefit Analysis and Discrepancy Evaluation. Cr 3.

EDU 678 School Law

The purpose of this course is to acquaint students with general principles of school law as found in the interpretation of constitutional and statutory provisions by the higher courts. Laws governing pupils, teaching personnel, and boards of education will be stressed with particular emphasis on Maine school law.

Cr 3.

EDU 679 Evaluation and Supervision of School Personnel

The course considers the underlying concepts and principles of evaluating school personnel. Readings, lectures, discussions and simulated activities focus on a variety of evaluation models and strategies which facilitate the appraisal of administrators, teachers and supporting staff. Attention is directed to how personnel evaluation affects program evaluation. Prerequisite: admission to educational administration graduate program and/or hold a master's degree.

Cr 3.

EDU 680 Staff Development

Designed for students nearing completion of the educational administration program. Concepts from previous courses are integrated into a model for planning and action at the school building level. Organizational development functions of diagnosing, designing, developing, implementing, evaluating, organizing, and managing are integrated into an operational staff development program.

Cr 3.

EDU 681 Principal-Student Relationships

New legislation and court interpretations are forcing reexamination of the role of the student. This course examines implications for the principal including student rights, discipline, school organizations, procedures and records, curriculum needs, program development, student reporting, school climate, and staff development.

Cr 3.

EDU 682 Collective Negotiations

Topics in this course include: history and current status of negotiations in Maine public schools; an in-depth study of the negotiating process; existing current contracts; contract grievance procedures; impasse resolution; contract administration, and implications for school administrators.

Cr 3.

EDU 685 Seminar in Administration

A culminating course in the administration sequence for students nearing the completion of their program. The seminar will include, but not be limited to, the following components: an evaluation phase including student-faculty examination of both oral and written presentations by the participants; a field assignment in which participants will have a practical encounter with administrative practices, strategies, and policies currently in

use in the public schools; and a placement phase in which participants will develop up-to-date vitae and letters of application.

EXE 510 Psychology of the Hearing Impaired

This course is designed to examine the impact of hearing impairment upon the development process. The course will cover the psycho-dynamic view of adjustment and distinctions among adjustment, adaptation, and coping. Some of the practical issues dealing with the understanding of adaptive and maladaptive patterns of adjustment will be covered along with the identifying effects of hearing impairment upon family, social, educational, and vocational adjustment process.

Cr 1.

EXE 512 Assessment of the Hearing Impaired Child

This special study area will cover use of common standardized instruments with hearing impaired populations, as well as assessment instruments designed especially for use with hearing-impaired populations. Non-standardized methods of assessment will also be introduced.

Cr 1.

EXE 514 Models of Education for Hearing Impaired

This special study area introduces models for the education of the hearing impaired that are utilized in a wide variety of educational settings. Included are philosophies of deaf education (e.g. total communication, oral/aural), approaches to teaching (e.g. natural language approach), methods of classroom communication (e.g. cued speech, simultaneous method) and specific teaching systems (e.g. sentence patterning, pragmatic model, etc.).

Cr 1.

EXE 601 Educational Programming for Exceptional Children

An in-depth examination of learning, behavior patterns of exceptional students, and service delivery models. The course will include study of the learner's role in school, home, and community.

Cr 3.

EXE 653 Assessment in Special Education

Numerous tests in the areas of intelligence, achievement, perceptual motor skills, adaptive behavior, and behavior will be examined. Students will work with children in their area of specialization. The course emphasizes assessment, teaching, and development of educational programs and strategies.

Cr 3.

EXE 605 Practicum in Exceptionality

A field-based course designed to offer experience in teaching exceptional children. Students will work with children in their area of specialization. This course emphasizes assess-

ment, teaching, and development of educational programs and strategies. Cr 3.

EXE 610 Emotional Disturbances—Theory and Practice

Historical background, treatment alternatives, and provisions for educational service are discussed, along with an exploration of etiological considerations, and legislative mandates. Theoretical approaches and conceptual issues for working with such children are reviewed, and psycho-educational procedures explored. Cr 3.

EXE 612 Advanced Methods—Emotional Disturbance

An ecological approach to understanding and working with the emotionally disturbed child. Exposure to a variety of interventions from developmental theory to behaviorism through a case study approach aimed at assisting both the classroom teacher and special education teacher in developing educational and behavioral strategies. Cr 3.

EXE 620 Learning Disabilities—Theory and Practice

An examination of the nature and characteristics of children with learning disabilities. The course will include the study of specific learning disabilities encountered in children, historical perspectives and future trends; and the roles of educators, parents, and auxiliary personnel in diagnosis, prevention, and remediation. Cr 3.

EXE 622 Advanced Methods—Learning Disabilities

This course will focus on diagnostic techniques and remedial strategies in working with children with learning disabilities. Assessment techniques, curricular strategies, and prescriptive approaches will be studied with a focus on prevention and remediation of learning disabilities. Cr 3.

EXE 624 Advanced Assessment and Practicum

An intensive study of assessment practices and techniques, and the interrelationship to teaching exceptional students. Students in the program will focus on specific special education students and undertake an in-depth analysis of strengths, weaknesses, and remedial strategies. Cr 3.

EXE 630 Mental Retardation—Theory and Practice

An advanced study of mental retardation. This course will focus on the psychological and sociological aspects of mental retardation as they impact on the educational and community services needed by these individuals. Cr 4.

EXE 632 Advanced Methods—Mental Retardation

This course will examine techniques, methods, and materials used in teaching students who are mentally retarded. An examination of the research literature concerning appropriate methodologies will be made. Cr 3.

EXE 640 Total Communication (Manual)

This course is intended for teachers of the hearing impaired who will be in a communication environment with hearing-impaired students who communicate through a visual-manual mode. The course will cover basic visual-manual communication skills, conversational and educational signs, manual English for educational purposes, and an introduction to receptive American Sign Language (ASL). Included will be readings and discussion concerning total communication approaches, linguistic structures of ASL and forms of manual English, and the role of signs in language teaching. Cr 3.

EXE 642 Oral/Aural Development and Instruction

This course will cover the basic methods of and models for developing speech and auditory skills in hearing impaired students. Information concerning the sequence of phonological development in hearing as well as hearing impaired individuals will be covered. Interpretation of assessment data including both articulation-based and process phonology models will be presented especially as related to development of individualized speech and auditory goals. Integration of speech training in classroom contexts will be emphasized. Cr 3.

EXE 644 Language Development and Language Intervention

This course is designed to cover the theoretical basis of language teaching as well as a survey of language teaching techniques. Basic information concerning the sequence of language development in hearing and hearing impaired individuals will be covered, as well as methods of describing and analyzing language samples. This information will relate to language-delayed and language-disordered populations as well. Philosophies and methods of teaching language to the hearing impaired (e.g. natural method, pattern practice, Rhode Island approach, oral/aural methods, etc.) will be reviewed and their application studied and practiced. Cr 3.

EXE 646 Audiology/Aural Rehabilitation

This course is designed for graduate students majoring in education of the hearing impaired. Course content will cover theoretical and practical competencies in audiometric testing and in the interpretation and applica-

tion of audiological information. In addition, the course will provide students with an understanding of amplification needs of preschool and school-age children including selection and use of hearing aids and classroom auditory training systems, management and maintenance. The course will also cover the history and methodology for teaching speech reading. Cr 3.

EXE 648, 650, 652 Curriculum for the Hearing Impaired

(Elect 1: Preschool, Elementary, Secondary) This course is designed to prepare teachers of the hearing impaired to develop, design, adapt, and implement developmental curriculum approaches and materials in classrooms for the hearing impaired. The course will cover the relationship of cognitive and conceptual development to curriculum procedures and choice of materials. Selection and adaptation of materials (especially in content areas) will be covered as well as adaptation for mainstreamed students. Techniques for integrating language and speech instruction in curriculum areas will also be covered. Cr 3.

EXE 654 Practicum—Hearing Impaired

The practicum is designed to provide a minimum of six weeks at the Governor Baxter School for the Deaf for the practical application of coursework under supervision. Field experience includes student observation and practice teaching in selected areas of specialization, e.g., preschool, elementary, and secondary, while incorporating mainstreaming policy, programming, and placement. Ongoing in-service training is provided in the following areas: classroom management, curriculum development, parent counseling, Pupil Evaluation Team (PET) process and development of the Individual Education Plan (IEP), programs for the multiple handicapped deaf, and continuing instruction in manual communication. In addition, the practicum includes visitations to programs within the Greater Portland area. Cr 3.

EXE 656 Summer Institute

These institutes are designed to provide in-depth coverage of specialized areas in the education of the hearing impaired. Topics to be covered include: Parents of Hearing Impaired Children; Language and Curriculum Development; Speech, Speech Reading and Auditory Training; Mainstreaming Hearing Impaired Children in Regular Educational Settings; Multiple Handicapped Hearing Impaired; Classroom Organization and Behavior Management Techniques for Teachers of the Hearing Impaired; and Reading Instructions for the Hearing Impaired. Cr 3.

EXE 681 Curriculum and Methods for the Secondary Level Learners

This course will include curriculum and instructional planning for secondary level learners who are handicapped. Service delivery models and specific instructional techniques suitable for secondary learners will be included. Cr 3.

EXE 682 School Law; Conflict Resolution

Laws relating to the education of exceptional students and recent judicial decisions will be discussed. Methods of conflict resolution, including mediation, will be presented. Cr 3.

EXE 683 Topical Seminar

An advanced course that covers selected topics in exceptionality. Several current issues will be examined in-depth each semester. Individual and group presentations will be required. Cr 3.

EXE 684 Practicum—Administration

A field-based course designed to offer experience in administering special education programs. The course emphasizes the organization and administration of special education programs. Cr 3.

EXE 685 Intradisciplinary Seminar

An advanced course that will integrate and synthesize research and practices across disciplines in exceptionality. Individual and group presentations will be required as well as a major paper. Cr 3.

Selected Arts and Sciences Courses

CSE 528 Computer Programming I

Programming techniques employing BASIC and FORTRAN languages. Applications will be primarily from elementary school mathematics topics and statistics. Cr 3.

CSE 529 Computer Programming II

A continuation of CSE 528. Topics will include sorts, searches, and high resolution graphics. Applications will be primarily from elementary school mathematics. Cr 3.

HTY 534 Maine History and Travel

This course provides an opportunity to pur-

sue independent study in Maine history (especially southern Maine) since 1820. Given largely on Fridays and Saturdays in the summer. There will be discussions, oral reports and field trips to a variety of sites located in easy range of USM. Cr 3.

MAT 502 Number Systems

An intuitive approach to the number systems with the aid of manipulative materials. Topics included: sets and relations; systems of whole numbers; integers; rationals and reals; numeration systems; elementary number theory; and related topics. Cr 3.

MAT 504 Informal Geometry

An investigation of geometric concepts with the aid of manipulative materials. Topics included: congruence; measurement; parallelism and similarity. Concepts to be presented at first intuitively, then as part of an automatic system. Prerequisite: MAT 502. Cr 3.

MAT 509 Topics in the History of Mathematics

The history of certain topics in arithmetic, geometry, number theory and algebra. Cr 3.

MAT 514 Analysis I

The first of a two-semester sequence designed to give a thorough background in elementary analysis. Topics included: field properties, analytical geometry, continuity and intuitive differentiation. Prerequisite: MAT 508, MAT 505, MAT 515, Analysis II a continuation of MAT 514. Cr 3.

MAT 549 Selected Topics in Mathematics

A course designed to provide enrichment topics for the elementary teacher. The course includes such topics as Awareness Geometry, Transformation Geometry, Analysis of Shapes, Number Theory and Measurement. The course is activity based and involves activities which may be implemented into the classroom. Cr 3.

MED 512 Newer Practices in Elementary Mathematics

Provides specific aid in teaching modern mathematics throughout the elementary grades. Includes study and use of new devices, materials and textbooks, as well as classroom procedures. Cr 3.

MED 513 Laboratory and Field Experiences in Mathematics Education

Supervised practicum where students will be designing and developing sequences of mathematics concepts and learning activity packages. Prerequisite: MED 512. Cr 3.

MED 539 Metric Education

An introductory course designed to acquaint elementary and middle school teachers with the functional techniques and strategies for teaching the rudiments of the metric system. The primary focus will be on the metric mea-

surements for length, area, volume (capacity), mass (weight) and temperature. Cr 3.

MUH 520 Topics in Music History, 530 Topics in Music Theory

These courses investigate some specific area from the broad academic disciplines of music history and music theory (the topic for a given semester's course is determined by the needs and background of students expected to enroll). Such work not only assists students in acquiring in-depth knowledge and understanding of the specific subject involved, but also provides a model for procedure in such a study for future self-instruction by the serious advanced student. Topic courses may be taken more than once, assuming that each time a student enrolls a different topic is under investigation. Cr 3.

MUE 520 Problems in Administration and Supervision

A study of the origin and history of music supervision and of the forces affecting present public school music education. Course includes practical and philosophic concepts to provide a basis for evaluation of the supervisory process. Cr 3.

MUE 521 Current Trends in Music Education

The workshop will include extensive experiences in the Kodaly approach to music education. Class members will participate as both students and teachers. Prior experience in the Kodaly approach is not necessary. Cr 3.

MUE 522 Vocal Workshop

Rehearsal procedures, score study, and analyses of conducting styles. The course will be augmented through the use of video taping of students conducting. Cr 3.

MUE 523 Instrumental Conducting Workshop

The course will focus on stylistic study of scores from contrasting periods, advanced baton and left-hand techniques, and non-verbal communication procedures. Literature, rehearsal procedure, and tone and intonation development for all levels of band organizations will be covered. Cr 3.

Department of Human Resource Development

Professors: Callender, Southworth; *Associate Professors:* Moore, Sutton; *Assistant Professors:* Davis, Williams

The Department of Human Resource Development was created in 1981 as a result of the reorganization of the College of Education. The Department consists of graduate programs in counselor education and adult education and the Maine Children's Resource Center. The Department also has the responsibility for teaching all courses related to human development and the family for the College of Education.

The purpose of the Department of Human Resource Development is to improve the individual practices of human services professionals, and enhance community, organizational, and agency practices through education, research, and public service.

Two graduate programs are offered by the Department: adult education with concentrations in training and development, educational gerontology, community education, adult public school education and counseling; and counselor education with concentrations in elementary guidance, secondary guidance, and community agency/rehabilitation counseling.

Coursework is offered at several off-campus sites as well as on the Gorham campus. Summer institutes and other professional development activities are offered on a regular basis. The Department has been active in coordinating with other graduate programs within the University of Southern Maine, as well as with other graduate programs within the University system. Faculty are actively involved with organizations and individuals in the local and regional community. The Department also offers undergraduate courses in human development and family studies, and an undergraduate early childhood intern program.

Admissions

Consideration for admission to the Department of Human Resource Development graduate program will be given to applicants who hold a baccalaureate degree and who present evidence of probable success in graduate work.

Evidence in support of admission shall include:

1. A completed application form with \$15.00 fee.
2. Transcripts of all previous work.
3. Results of the Miller Analogies Test or the Graduate Record Examination (must be taken within five years of the application deadline date).
4. Three letters of recommendation addressing your potential for success in the program and as a counselor or adult educator.
5. A personal narrative: The narrative, preferably typed, will be evaluated in terms of clarity of expression, grammatical construction, and other facets of English composition, as well as the quality of responses. The narrative should address the following subjects:
 - A. Relevant educational and experiential background.
 - B. Reasons for desiring to be in the helping professions.
 - C. Intention of pursuing a career in counseling or adult education.
 - D. Reasons for seeking admission to the program.
 - E. A statement of personal philosophy.
 - F. Information about special status, e.g., veteran, handicapped, minority, etc.

The admissions process requires a formal interview. Candidates to be interviewed will be selected on the basis of the information above. During the interview, issues related to the following topics will be covered: self-awareness; awareness of others; awareness of social issues; awareness of others as persons; communication skills; and commitment to the field.

A spontaneous writing sample is required and will be administered as part of the interview process.

In the final phase of the process, the Department faculty will discuss the results and select the final candidates. All data collected during the admission process will be used to make a final decision regarding acceptance into either the counselor education or adult education programs. A procedure is available for those wishing to appeal a decision of the Department faculty. Further information may be obtained by contacting the Department chairperson.

Applications are considered twice each year. Application deadlines are March 1 and October 1 and an application must be complete as of that date to be considered. Students must take the responsibility to ensure that all admissions materials are submitted prior to the deadline. All materials sent in support of an application become the property of the Graduate Education Office and will not be returned to the student.

Candidates approved for admission during the fall will matriculate on January 1 and candidates approved for admission during the spring may choose to matriculate on May 1 or September 1. Candidates approved for admission must register for at least one course in the semester in which he/she has been matriculated. Exceptions to this policy must be approved by the Department chairperson.

The Department of Human Resource Development will not admit applicants on a conditional basis.

Special Note: Each student entering the programs in adult education and counselor education will have to demonstrate a background in life-span development. For those not having this background, HDR 604/HRD 605 LifeSpan Development I and II, (6 credits) will be required. In evaluating requests for substitution for Life Span Development I and II, command of the following topic areas will be used as criteria: birth and infancy; toddlerhood, pre-school; middle childhood; adolescence; early adulthood; middle age; old age.

Typical courses which may be used in partial fulfillment of this requirement are: Child Psychology, Adolescent Psychology, Adult Psychology, Aging, Social Psychology, Human Development, Family and Marriage, Child Development. Equivalency will be granted on topic coverage and not merely according to course title.

The student is responsible for bringing the appropriate information (transcripts, course descriptions, documentation of experience, etc.) to the attention of the admissions committee. The Human Development committee is responsible for evaluating this information and determining equivalency where justified. This determination must be made at the time of acceptance.

Adult Education Program

The master of science in adult education, started in 1972, is the only graduate program in adult education in northern New England. Originally established to meet the region's need for trained public school administrators of adult education, the program today prepares educators for a variety of human resource development roles in all types of organizational and community settings. Today's students are also educators in non-school settings—hospitals, recreation agencies, business, human service organizations. Most seek professional competence and recognition for a position currently held. Usually, the student already is a professional with credentials in a specified field such as nursing, social work, counseling, criminal justice, or education and now practices that profession through an adult educator role. These vary as a trainer, teacher, staff development specialist, program designer, or organizational change agent. Others are contemplating career change or entry and see adult education as a versatile field with strong growth potential.

The Department, in recognition of the changed audience and of the changing roles of adult education across society, has revised graduate-level training in the field.

Candidates admitted beginning in the Fall 1984 semester follow this revised program.

**Program
Requirements**

Required Courses	Credits
HDR 600 Adult Education and Human Resources Development	3
EDU 600 Research Methods and Techniques	3
HRD 649 Seminar in Adult Education and Human Resource Development	3
Middle Core (minimum of 4 courses required)	
HRD 620 Fundamentals of Counseling Skills	3
HRD 631 The Adult Learner	3
HRD 632 Program Development in Adult Education and Human Resource Development	3
HRD 633 Managing Adult Education and Human Resource Development	3
HRD 667 Action Research and Evaluation Methodologies in Human Resource Development	3
	<u>3</u>
	12
Self-Designed Courses	
HRD 687 Internship in Adult Education and Human Resource Development	
HRD 698 Directed Study in Adult Education and Human Resource Development	
HRD 699 Independent Study in Adult Education and Human Resource Development	
[Six credits of HRD 687 or HRD 698 are required. A maximum of nine credits in self-designed coursework may be counted toward this degree.]	<u>6</u>
	27
Electives or Concentrations	<u>9</u>
Total Program Credit Hours	36

Concentrations (3 courses, 9 credit-hour certificate)

1. Training and Development

- HRD 635 Training and Staff Development
- HRD 640 Human Resource Development in Organizational Settings
- EDU 671 Organizational Behavior
- EDU 674 Organizational Change and Innovation

2. Educational Gerontology

- HRD 650 Social and Public Policy in Aging
- HRD 651 Older Person as Learner
- HRD 652 Coordinating Educational Programs for the Older Adult in the Community
- HRD 653 Human Resource Development and the Older Worker
- HRD 654 Gerontology and the Helping Professions

3. Community Education

- HRD 637 Community Education
- HRD 641 Human Resource Development in Community Settings (with HRD 631 and HRD 632)

4. Adult Public School Education

- EDU 631 Foundations of Adult and Secondary Reading (with HRD 632 and HRD 633)
- HRD 634 Methods and Materials in Adult Education

5. Counseling

- HRD 620 Fundamentals of Counseling Skills
- HRD 621 Fundamentals of Counseling Theories
- HRD 626 Group Process and Procedures
- HRD 628 Introduction to Marriage and Family Counseling
- HRD 690 Individual Counseling Practicum

If a concentration is not desired, students may select a number of elective courses from the Department offerings or from other graduate offerings at the University of Southern Maine. Advisor approval is required.

Minimum number of credit hours required for the degree: 36 hours

Special Note: Students in the Adult Education Program are required to complete six credits of HRD 687 (Internship in Adult Education and Human Resource Development) or HRD 698 (Directed Study in Adult Education and Human Resource Development). HRD 687 is designed to provide professional experience in the student's selected area of concern. HRD 698 is designed to provide the opportunity to pursue a field-based project independently, planning and exploring an area of interest within the field of adult education. Students also have the option of pursuing an independent study project as a program elective. HRD 699 (Independent Study in Adult Education and Human Resource Development) provides students with the opportunity to pursue a library-based project independently, planning and exploring a topic of interest within the field of adult education.

Counselor Education Program

Over the past 17 years, the program has provided the state of Maine with several hundred qualified counselors in both school and rehabilitation settings. In addition, the program has provided courses and other services to several thousand professionals throughout the state. Through its faculty, alumni, and students, this program continues to provide leadership in the counseling profession throughout the Northeast.

Purpose

The master's program in counselor education provides its graduates with the counseling knowledge and skills used in elementary and secondary school as well as agency and rehabilitation settings. Students study human development and behavior, individual counseling theory, group theory and dynamics, research methodology, and psychological measurement and evaluation, in addition to courses in individual specialty areas—elementary school counseling, secondary school counseling, or community agency and rehabilitation counseling.

A basic belief of the counselor education program is that every human being changes and grows, a process which continues throughout one's life development. From time to time, individuals need help in this struggle for positive growth. Counseling and guidance services provide highly professional helpers who can facilitate growth and development effectively. In addition to teaching counseling skills, the counselor education program promotes personal growth in students by encouraging them to develop attitudes, values, and beliefs which will enhance and facilitate the helping process. Recognizing emotional biases is the first step in realizing change. The program facilitates the conceptualization of a professional role flexible enough to grow as new developments in the field occur.

Objectives

- The Counselor Education Program is designed to foster the following:
- A. An understanding of theories and techniques related to individual and group counseling.
 - B. Knowledge of psychological measurement and evaluation and its applications.
 - C. An understanding of the means used for obtaining and applying information from appropriate research sources.
 - D. An understanding of the history, philosophy, and practice of the specialty area.
 - E. An awareness of individual strengths, weaknesses, and biases especially in relation to clients, colleagues, and family.
 - F. Knowledge of human development and behavior.

G. An integration of the academic and applied knowledge through a combination of practicum and internship experiences.

**Program
Requirements**

	<i>Credit Hours</i>
Required Core Courses for All Specialties	
HRD 620 Fundamentals of Counseling Skills	3
HRD 621 Fundamentals of Counseling Theories	3
HRD 626 Group Process and Procedures	3
HRD 665 Psychological Measurement and Evaluation	3
HRD 690 Individual Counseling Practicum	3
HRD 600 Research Methods and Techniques	3
	<u>18</u>

<i>Elementary School Counseling Specialty</i>	
Required Core Courses	18
Required within the Specialty	
HRD 607 Introduction to School Guidance Services	3
HRD 622 Counseling Young Children	3
HRD 603 Consultation	3
HRD 691 Group Counseling Practicum	3
HRD 686 Internship	9
	<u>21</u>
Electives	9
Total Program Credit Hours	<u>48</u>

<i>Secondary School Counseling Specialty</i>	
Required Core Courses	18
Required within the Specialty	
HRD 607 Introduction to School Guidance Services	3
HRD 670 Career Information in the Schools	3
HRD 603 Consultation	3
HRD 691 Group Counseling Practicum	3
HRD 686 Internship	9
	<u>21</u>
Electives	9
Total Program Credit Hours	<u>48</u>

<i>Rehabilitation/Community Agency Counseling Specialty</i>	
Required Core Courses	18
Required within the Specialty	
HRD 601 Human Resource Development in Community Settings	3
HRD 686 Internship	12
HRD 691 Group Counseling Practicum/or	3
HRD 692 Advanced Individual Practicum	9
Required: Rehabilitation or Community Agency Courses	<u>27</u>
Elective	3
Total Program Credit Hours	<u>48</u>

Electives

Graduate students in the Counselor Education Program may select electives in the fields of concentration of rehabilitation/community agency, elementary, or secondary guidance. A changing variety of electives are offered each semester.

HRD 609 Seminar in School Counseling
HRD 610 Introduction to Rehabilitation Services
HRD 611 Medical Aspects of Disability
HRD 612 Psychological Aspects of Disability
HRD 613 Counseling, Client Advocacy and the Law
HRD 619 Seminar in Rehabilitation
HRD 623 Behavioral Intervention: A Psycholinguistic Approach
HRD 624 Counseling the Adult Learner

- HRD 625 Counseling the Elderly
- HRD 628 Introduction to Marriage and Family Counseling
- HRD 666 Individual Assessment: A Holistic Approach
- HRD 667 Action Research and Evaluation Methodologies
- HRD 671 Vocational Aspects of Disability/Placement in Rehabilitation

Special Note: Students in the Counselor Education Program are required to complete six credits of HRD 686 (Internship in Counselor Education). HRD 686 is designed to provide students with opportunity to integrate formal coursework with on-the-job experience in selected helping institutions. Students also have the option of pursuing a directed study or independent study project. HRD 698 (Directed Study in Human Resource Development) provides students the opportunity to pursue a field-based project independently, planning and exploring an area of interest within the field of counselor education. Students also have the option of pursuing an independent study project as a program elective. HRD 699 (Independent Study in Counselor Education and Human Resource Development) provides students with the opportunity to pursue a library-based project independently, planning and exploring a topic of interest within the field of counselor education.

HRD 500 Human Interaction Skills

This introductory course in selected communication skills is appropriate for persons considering careers in the helping professions, individuals in positions with personal responsibility, or for those otherwise concerned with developing effective communication. Literature from the human relations field will be the source of basic interaction skill; these skills will be practiced by students using video vignettes, simulations, and communication decoding activities. Application of the skills to various human interaction settings will be addressed. This course may not be taken in lieu of HRD 620 for students matriculated in the Counselor Education master's program. 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 provides 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.

HRD 600 Adult Education and Human Resource Development

This is the mandatory first course in the mas-

ter's program. The course introduces the student to adult education, continuing education, and human resource development, including its history, philosophy, and trends in the United States and worldwide. The course also introduces the student to the graduate program and to the network of current students and program graduates. Particular attention is given to career and educational planning, including the assessment of prior experience, the beginning of a professional portfolio, the development of a career plan to be sought through the program, and the development of an educational plan for the completion of the program. Cr 3.

HRD 603 Consultation

This course is designed to introduce students to consultation skills that can be utilized for evaluating organizational structure and individual client management. A variety of theoretical approaches to the role of the consultant will be offered, including focus on behavioral observation, organizational development, relating to staff people as a consultant and communicating the results of a consultation. Prerequisite: HRD 686, HRD 590, and permission of the supervising professor. Cr 3.

HRD 604 Life Span Development I

Examines the processes underlying growth, development and behavioral changes of humans from conception through adolescence. The interaction of biological, cognitive, and psychological development during these earlier stages of the life span. Cr 3.

HRD 605 Life Span Development II

Examines the processes underlying growth, development, and behavioral changes of humans from young adulthood through old age

to death. The interaction of biological, cognitive, and psychosocial development in adulthood. Cr 3.

HRD 607 Introduction to School Guidance Services

This is an introductory course for those intending to enter the field of school guidance and counseling. It is designed to consider the theoretical basis for guidance practices in elementary and secondary schools (K-12). This includes working collaboratively with the home, school, and community to meet the personal, educational and career concerns of students. Historical and social contexts along with philosophical issues and emerging directions of guidance will also be discussed. Cr 3.

HRD 609 Seminar in School Counseling

The seminar will afford students and practicing counselors an opportunity for intensive study of current problems and issues in the field of guidance. This course is restricted to those nearing the completion of a master's program in school counseling. Prerequisite: permission of the instructor. Cr 3.

HRD 610 Introduction to Rehabilitation Services

This course includes basic concepts in rehabilitation/habilitation, evolution or rehabilitation, related legislation, exposure to rehabilitation agencies and facilities in Maine, and an overview of the rehabilitation process. Consultants are used to present rehabilitation from the perspective of the client, counselor, and agency. Cr 3.

HRD 611 Medical Aspects of Disability

This course focuses on disabilities common in the rehabilitation field—their causes, diagnostic methodology, prognosis, and treatment, as well as employment and "maximum potential" implications. Prerequisite: permission of the instructor. Cr 3.

HRD 612 Psychological Aspects of Disability

This course provides students with an understanding of the psychological elements related to the disability experience. The course considers adjustment to disability from an individual's perspective, with attention given to the impact of society and culture on this process. Cr 3.

HRD 613 Counseling, Client Advocacy, and the Law

This course provides the framework to understand the rights and resources available to all individuals with emphasis on the handicapped. The course covers the pertinent federal and state legislation detailing the rights, responsibility and enforcement available under the law. Negotiation and mediation skills are also discussed. Cr 3.

HRD 619 Seminar in Rehabilitation

This course is designed for advanced students in rehabilitation and for practicing rehabilitation counselors. The seminar provides an overview of rehabilitation practice, with an emphasis on problematical issues. Topics may include casework management, vocational evaluation, administrative issues, and utilization of community resources. Prerequisite: permission of the instructor. Cr 3.

HRD 620 Fundamentals of Counseling Skills

This course emphasizes the development of fundamental counseling skills such as attending behavior, listening, reflection of feeling, paraphrasing, and questioning. The course examines the process and content of the counseling interview as well as verbal and non-verbal factors which influence the interactions within the counseling relationship. Primary focus will be to help the student develop greater self-knowledge and skills in interpersonal communication within the counseling relationship. Prerequisite: open to matriculated graduate students only. Cr 3.

HRD 621 Fundamentals of Counseling Theories

A seminar for those who are or will be engaged in psychological counseling in an educational or mental health type setting. Selected theories and techniques are closely examined. The research literature which has a bearing on the effectiveness or noneffectiveness of counseling is reviewed. Prerequisite: successful completion of HRD 620 or permission of instructor. Cr 3.

HRD 622 Counseling the Elementary School Child

This course is designed to review theories, techniques, and strategies used in counseling young children. Attention will be given to the examination of the counselor's role, the goals of counseling and developing relationships with children. In addition, students will be given the opportunity to explore the uses and techniques of non-verbal languages of counseling including play, dramatics, movement, art and music, and how they relate to child growth and development. Cr 3.

HRD 623 Behavioral Intervention: A Psycholinguistic Approach

This course uses material from psychology, sociology, anthropology, computer science, and other areas to develop a linguistic model and language or change in the counseling process. Patterns of successful communication in human interaction are investigated. Students from a variety of disciplines are encouraged to apply. Prerequisite: HRD 620 or its equivalent. Cr 3.

HRD 624 Counseling the Adult Learner

This course is designed for counselors,

teachers, administrators, and others in the helping professions who work with adults seeking personal/educational growth. The course will examine the process and content of the counseling interview, explore the problems/needs of adult learners and provide opportunity for application of counseling skills to problem areas. Cr 3.

HRD 625 Counseling the Elderly

This course will cover such topics as: "the aging network," the aging process, needs of the elderly with special emphasis on needs of elderly women, individual counseling with the elderly, group work, consulting with service providers, independent living and support systems, and advocacy, death, dying, and grieving and how those problems might be addressed through counseling. Cr 3.

HRD 626 Group Process and Procedures

The course focuses on the understanding of basic principles of group development and the recognition of the dynamics of group interaction. It also focuses on the improvement of personal interaction processes and their application to other group settings. Open to matriculated graduate students only. Cr 3.

HRD 628 Introduction to Marriage and Family Counseling

This course is an introduction to the structure and dynamics of the family, as well as methods of family intervention and counseling. The relevance of understanding and skill in the area of rehabilitation counselors and school counselors is emphasized. Methods of instruction include lecture, group discussion, role playing, and audio/video programs. Prerequisite: HRD 690 or permission of the instructor. Cr 3.

HRD 631 The Adult Learner

This course examines the social, psychological, economic, and cultural situation of the variety of adults served by adult education programs today. The aim of the course is to develop an andragogy, a theory of learning, which is applicable to adults in diverse circumstances and with diverse goals, needs, and styles of learning. Attention is given to stages of adult growth, the development of learning goals, learning environments, and to a variety of theories on learning. Cr 3.

HRD 632 Curriculum Construction for Adult Learners

A guided experience in the practice of determining educational needs of the individual, or the organization, or of the community and translating these into learning programs of identifying, selecting and organizing resources and activities and evaluating the results. Cr 3.

HRD 633 Managing Adult and Continuing Education Programs

This course examines the administrative and leadership skills necessary for the development and management of units such as adult education centers, continuing education offices, and training and staff development departments in profit and non-profit organizations. Particular attention is given to the development of mission statements, the use of advisory boards, community needs assessment approaches, developing goals and objectives, program development, personnel management, and the development of a management style. Cr 3.

HRD 634 Materials and Methods in Adult Education

This course acquaints the student with current instructional packages available for adult education and human resource development programming. Special attention is given to adult basic education materials, High School Equivalency Diploma programs, and English as a second language programs. However, each student is enabled to identify, access, use, and evaluate the types of materials most useful in the specialty field. Cr 3.

HRD 635 Training and Staff Development

This course acquaints the student with the organization, staffing, functions, methods and techniques of training and staff development units in modern work organizations. Attention is given to the development of in-service training programs for key levels of staff such as supervisors, managers, front-line workers, and support staff. Special emphasis is given to the systematic relationship of the training office to other human resource development functions in contributing toward an effective organization and a supportive climate in which to work. Cr 3.

HRD 636 Continuing Education for the Professions

This course enables the student to develop pertinent, quality continuing education programs for professionals in such fields as education, nursing, medicine, social work, law, psychology, allied health, and other helping professions. After a shared process of studying the social, historical, and political forces which shape professions, students examine in depth and current context, needs, constraints, methodologies, credential-lying systems, and instructional packages pertaining to a particular profession of interest to them. Students gain a broad understanding of professional education in general and a specific competence in at least one professional field. Cr 3.

HRD 637 Community Education

Community Education is concerned with

major issues and trends affecting the lives of citizens of a community. It measures well-being by the extent to which people have the opportunity to learn all they need to survive and flourish. It is a philosophy, a movement, an approach to school organization and mode of community development. Community education is examined in such forms for relevance to improved practice of educators and other community human resource developers. The course begins with societal trends bearing upon the quality of community life as context for analysis of community and community change; then, moves to community education process, program, and skills of delivery as studied in specific community settings. Cr 3.

HRD 640 Human Resource Development in Organizational Settings

Personnel, directors, trainers, personnel counselors, career counselors, job designers, employment forecasters, collective bargaining, performance evaluators, and unit managers are among the many organizational members who "develop" the human resources of a work organization. This course examines the theories of human development explicitly or implicitly held by holders of such positions, how divergent or compatible these views are, and the probable effects on employees. The course particularly centers on approaches and tools managers use to develop the human resources of an organization in a conceptually consistent, effective, and humane way. A companion course is Human Resource Development in Community Settings, which looks at the interface between community organizations and their clients, this course focuses on the intersection between organizations and their employees. Prerequisite: none. Cr 3.

HRD 641 Human Resource Development in Community Settings

Schools, hospitals, employment agencies, welfare offices, home health agencies, rehabilitation centers, and social services agencies are among the various community-based organizations whose work is helping people. The course examines the needs of people in urban and rural communities, the views of human need and development held by helping organizations, and problems organizations pragmatically encounter in helping people, and the consequences of these problems for citizen/client groups. Attention is given to inter-professional, and inter-organizational approaches to improving community programs drawing from literature in similar fields. A companion course to Human Resource Development in Organizational Settings, which looks at the interface between organizations and their employees,

this course focuses on the interface between organizations and clients, the citizens of a community. Prerequisite: none. Cr 3.

HRD 649 Seminar in Adult Education and Human Resource Development

This seminar addresses current issues, problems, and topics in adult education and human resource development. Participants are to select, develop, and present topics of interest to them as well as benefit from presentations prepared by the instructor. Usually taken toward the end of the program, this seminar is an opportunity to apply their knowledge and skill to problems of current interest in the field of adult education. Cr 3.

HRD 650 Social and Public Policy in Aging

This course examines the development of American social and public policy in aging from an historical perspective culminating in an analysis of the consequences of a "greying society." An organizing principle of the course will be to review policies as they affect an older person's ability to achieve access to full rights, benefits, opportunities, and protections of society. The process of social and policy development will be examined with particular attention to policies about age discrimination, health care, income maintenance, employment, education, and housing. Cr 3.

HRD 651 The Older Person as an Adult Learner

This course examines the capabilities, interests, limitations, and needs of older persons as learners. After seeking to establish current fact from fiction, the course attempts to look at the realistic prospects for adult education later in life as the length of life is extended. Particular attention is given to the conditions under which older persons can best benefit from the contributions to adult education opportunities. Program development possibilities are examined in a number of settings and situations. Cr 3.

HRD 652 Coordinating Educational Programs for Older Adults in the Community

Designed for practitioners who already have a knowledge base in the field of adult education, this course will address the competencies needed to design and plan educational programs in a variety of community settings. Students will develop skills in program design and planning, needs assessment and mobilizing, and coordinating the informal and traditional resources and new ones in the community. A variety of educational programs related to older adults will be presented and discussed. Cr 3.

HRD 653 The Aging Worker

This course examines the demographics, assets, and problems of the older worker. The

implications for employer and employee will be studied in such areas as planning for and adjustment to retirement, vocational training, and job modification. Strategies that facilitate adult development and learning will be examined, along with a survey of various resources available to support the needs of the older worker. Cr 3.

HRD 654 Gerontology and the Helping Professions

This course presents three interrelated conceptual frameworks: concepts, research findings, and practices of applied social gerontology; concepts, research findings, and strategies of helping professions; and concepts, research findings, and strategies of the complex organizations which deliver their services to, or on behalf of, older people. The purpose is to enable learners to integrate this knowledge for application in service to society, in general, and older people, in particular. It is intended for graduate learners in the range of helping professions. Cr 3.

HRD 665 Psychological Measurement and Evaluation

This course focuses on group tests and related measurement techniques. The course content will include a review of the history of testing, current issues, fundamental statistics for understanding and evaluating tests, a review of selected aptitude, intelligence, achievement, interest and personality tests. In addition, other standardized and non-standardized evaluation measures will be reviewed. Cr 3.

HRD 666 Individual Assessment: A Holistic Approach

The design of this course is to explore the principles, purposes, and application of individual assessment. The course content includes instrument selection and evaluation, data interpretation, and intervention strategies in the following areas: academic skills, intellectual functioning, psychomotor performance, medical and family history, and social development. A case study format is used. Emphasis is placed on a holistic approach to data collection, interpretation and intervention. This is a basic orientation course for educators and others involved in planning specialized programs for individuals. It is not intended to produce skills in test administration. Prerequisites: HRD 665 and EDU 600 or equivalents. Cr 3.

HRD 667 Action Research and Evaluation Methodologies

This course will provide an overview of the role of research and evaluation within organizations and community settings. Techniques in survey development and evaluation strategies will be emphasized. A number of methodologies will be presented, such as: the

nominal group, the Delphi technique, assessment centers, performance appraisal, interviews, and observation. Cr 3.

HRD 670 Career Information in the Schools

This course examines the role of the school counselor in implementing career education, career guidance counseling programs, K-12. Emphasis is on understanding theories, systems, materials, activities and techniques for fostering career awareness, recognition of factors influencing career choices and ultimately facilitating possible career decisions. Cr 3.

HRD 671 Vocational Aspects of Disability/ Placement in Rehabilitation

This course involves the practical application of job selection, analysis, modification, and development for the counselor of handicapped persons. The role, function and technique of the rehabilitation counselor in job placement of severely disabled persons will be examined. Employer and/or industry site visits may be arranged. Cr 3.

HRD 676 Human Learning

The aim of this course is to study the basic principles of learning as they relate to human behavior. Consideration is given to learning theories, related research and their application to the field of education. Emphasis is on student development of a theoretical position which will include a range of methods and approaches for personal educational practice. Cr 3.

HRD 677 Human Sexuality for Counselors

The aim of this course is to provide information about human sexuality, to heighten an individual's awareness of their own sexuality and of sexual issues, and to integrate this knowledge to improve the overall effectiveness of their counseling skills. The course is designed to explore a wide spectrum of sexual behaviors and to examine the relationship between sexuality, self-esteem, sex roles, and life styles. Emphasis is placed on developing an awareness of personal values associated with human sexuality. Prerequisite: HRD 620 or its equivalent. Cr 3.

HRD 678 Sex Role Issues in Human Services

This course examines the impact of sex roles and sex role stereotypes on the development, understanding, and treatment of psychological problems. Biases in psychological theories and attitudes of professionals have often reflected the sexism of society at large, and these explanations of human motivation and behavior may not sufficiently describe mental health prob services professionals in promoting and understanding these concepts. Cr 3.

HRD 680 Institute on Group Counseling

The course is an extension of basic knowledge and practice in the fundamentals of group dynamics and leadership. Emphasis is on the development of concepts, attitudes, and skills necessary to understand and use counseling groups within a variety of settings. Course time is spent as a group participant, as well as in didactic instruction. Extensive reading and a paper are required and due subsequent to the conclusion of the course. Prerequisite: HRD 626 or equivalent and permission of the instructor. Cr 3.

HRD 686 Internship and Counselor Education

This course provides an opportunity for the student to integrate formal coursework with on-the-job experience in selected helping institutions. The course may be taken for 3 to 12 credit hours and is a post-practicum (HRD 690) experience. Prerequisite: approval of the supervising professor. Cr 3-12.

HRD 687 Internship in Adult Education

Designed to provide professional experience in the student's selected area of concern. A plan for the internship is presented for approval to the student's adviser. On approval, the intern completes his/her planned program under the supervision and evaluation of a responsible person for the internship assignment. Cr 1-12.

HRD 690 Individual Counseling Practicum

This course is an intensive supervised experience in applying professional knowledge and skills to the practice of counseling with individuals. Role playing, video tapes, audio tapes, and demonstrations are used in helping each student develop an integrated counseling style. Prerequisite: approval of the supervising professor. Cr 3.

HRD 691 Group Counseling Practicum

This course is designed to be an intensive supervised experience in applying professional

knowledge and skills to the practice of counseling with groups. Role playing, video tapes, audio tapes, and demonstrations are used in helping each student develop an integrated leadership style in working with groups. Available only to students who have completed a practicum in individual counseling. Prerequisite: approval of the supervisory professor. Cr 3.

HRD 692 Advanced Individual Practicum

This is the advanced course in counseling practicum. In addition to building on the skills developed in HRD 690 (Practicum), emphasis will be placed on the structural analysis of typical client problems and the use of appropriate strategies of intervention. Other emphases will include the staffing of actual cases and a knowledge of community resources available to the counseling clientele. Cr 3.

HRD 698 Directed Study in Human Resource Development

This course provides students the opportunity to pursue a project independently, planning and exploring an area of interest within the field of human resource development. The project must be field based, intellectually sound, and reflect a high caliber of performance. Specific content and methods of evaluation are determined in conjunction with the faculty supervisor. An approved proposal is a necessary prerequisite to registration. Cr 1-6.

HRD 699 Independent Study in Human Resource Development

This course provides students the opportunity to pursue a project independently, planning and exploring a topic of interest within the field of human resource development. The project must be library based, intellectually sound, and reflect a high caliber of performance. Specific content and methods of evaluation will be determined in collaboration with the instructor. An approved proposal is a necessary prerequisite to register. Cr 3.

School of Nursing

Acting Dean: Nancy P. Greenleaf; *Acting Associate Dean:* Sallie C. Ullman

Associate Professor: MacPherson *Assistant Professors:* Connors, Greenleaf, Peake-Godin, Thompson

Director, School of Nursing Learning Resources Laboratory: Sarah Whitney

Master's Program in Nursing

Summary of 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 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 and course 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.

Overview

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: prepare professional nurses for roles of leadership in nursing practice, education and administration; and provide a foundation for doctoral study in nursing.

The program offers students a research component, an advanced practice clinical component focusing upon families in crisis, and a choice of a functional role component in either education, administration, or primary care. The following are integral elements of the master's degree program in nursing: total 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.

Objectives

The master's degree program in nursing prepares professional nurses for roles of leadership in nursing practice, education, and administration by enabling the graduate to:

1. synthesize theories and advanced knowledge from nursing; physical, behavioral, and social sciences; and the humanities to support advanced nursing practice and role development;
2. demonstrate expertise in a selected area of nursing practice;
3. demonstrate competence related to a specific functional role in either education, administration, or primary care;

4. demonstrate initial competence in conducting research in nursing;
5. contribute to the expansion of nursing knowledge and theory through scholarly inquiry;
6. plan and initiate needed changes in the health care system and in the practice and delivery of health care through appropriate leadership and political strategies;
7. engage in collaborative, multidisciplinary relationships with consumers and other health professionals for the purpose of improving health care;
8. assume a role in the development of professional nursing and interpretation of same to others within the profession, to other disciplines, and to the public;
9. assume responsibility for continued professional and self-development.

Admission

Admission to the master of science degree program in nursing is on a competitive basis. The graduate program in nursing seeks candidates whose baccalaureate degree program, scholastic achievement, professional experience, interest, motivation, and references are predictive of successful graduate study.

Requirements for Admission

Recommendation for admission to the master's degree program in nursing will be based on the following:

1. A baccalaureate degree with a major in nursing from a National League for Nursing accredited program.
2. A minimum undergraduate cumulative grade point average of 3.0 on a 4.0 scale, or a B average.
3. A score of 55 points or above on the Miller Analogy Test or combined aptitude scores of 1,000 (V, Q)/1500 (V, Q, A) or above on the Graduate Record Examination. (Scores submitted must be for tests taken within the last five years.)
4. Three letters of reference reflecting professional practice and academic achievement.
5. A course in introductory statistics completed within the last five years.
6. Evidence (photocopy) of current licensure as a registered professional nurse and eligibility for licensure in Maine.
7. Evidence (photocopy) of professional liability insurance.
8. One year of clinical nursing practice preferred.
9. A completed application.

A personal interview with graduate faculty of the School of Nursing may be scheduled following a preliminary faculty review of all required admission materials. Individual consideration will be given to each applicant based upon the total profile presented.

Transfer Credit

Transfer credit may be approved only at the time of admission and must be requested in the admission application. Up to a total of nine (9) hours of graduate credit with a grade of "B" or above may be approved as transfer credit. Credits earned more than three (3) years prior to matriculation will not be approved as transfer credit.

New England Regional Student Program

The University of Southern Maine master's degree program in nursing is a participant in the New England Regional Student Program. For further information contact the Office of Graduate Affairs, University of Southern Maine, 96 Falmouth St., Portland, Maine 04103 (207) 780-4386.

Program and Requirements

The graduate program in nursing is four academic semesters in length. Both full-time and part-time study are available. A total of 54 credit hours, including a thesis, is required for completion of the master's degree program in nursing. Students must complete the program within six years. The four components of the program include an Advanced Practice Clinical Component, a Research Component, a Functional Role Component, and Electives.

Advanced Practice Clinical Component		Credit Hours
**NUR 600	Total Health Assessment	3
NUR 601	Crisis Theory	3
NUR 602	Family Theory	3
NUR 605	Issues and Trends in Health Care	3
NUR 610	Clinical Practicum in Families in Crisis	6
(Prerequisites to the Clinical Practicum:		<u>18</u>
NUR 600, 602, 604; prerequisite or concurrent NUR 601, 603)		
Research Component		
NUR 604	Theory Development in Nursing	3
NUR 603	Research and Data Analysis	3
NUR 615	Problem Development Seminar	2
NUR 616	Thesis Development Seminar	2
NRS 690	Thesis Advisement (credit not counted toward degree)	2
NRS 699	Thesis	<u>2</u>
		12
Functional Role Component		
Students will choose one of the following functional areas. Students must complete NUR 601, 602, 603, 604 before taking courses in the Functional Role Component.		
<i>Nursing Administration</i>		<i>Credit Hours</i>
A course in economics is prerequisite to this functional area.		
*NUR 606	Dynamics of Change: Organizational Theory	3
NUR 623	Analysis of Public Policy Related to Health Care Delivery	3
*MBA or PPM	Organizational Management	3
*MBA or PPM	Industrial Relations and Personnel Management	3
NUR 620	Practicum in Nursing Administration	6
		<u>18</u>
<i>Nursing Education</i>		
*NUR 606	Dynamics of Change: Organizational Theory	3
*HRD or EDU	Curriculum Development for Adult Learners	3
*HRD or EDU	Theories of Adult Learning	3
*NUR 632	Strategies of Teaching in Professional Education	3
NUR 630	Practicum in Nursing Education	6
		<u>18</u>
<i>Primary Care</i>		
*NUR 606	Dynamics of Change: Organizational Theory	3
NUR 642	Advanced Health Assessment	3
NUR 643	Concepts in Primary Care	3
NUR 644	Management and Health Teaching of Groups	3
NUR 640	Practicum in Primary Health Care	6
		<u>18</u>
Elective Component		<u>6</u>
Electives or Support Cognates		6

*Equivalent course may be substituted.

**As of the fall of 1985, this course or equivalent content will be a prerequisite to the program.

Fees

A \$15 materials fee is required when students are enrolled in: NUR 600 Total Health Assessment; NUR 641 Advanced Health Assessment; NUR 610 Clinical Practicum; NUR 620, 630, or 640: the Functional Component Practica.

Health Clearance

Students are required to have the Medical History and Physical Examination forms completed and on file at the University of Southern Maine Student Health Services prior to entry into the clinical practicum. Forms can be obtained from the University of Southern Maine Student Health Services.

Professional Liability Insurance and Licensure

Students are required to maintain current professional liability insurance and registered professional nurse licensure.

NUR 600 Total Health Assessment

The purpose of this course is to develop the knowledge and skill necessary to conduct an in-depth bio-psycho-social-cultural assessment of an individual. Emphasis will be placed on data collection through development of communication, interviewing, history taking and physical examination skills.

Cr 3.

NUR 601 Crisis Theory

This course will trace the historical development and theoretical formulations of crisis theory through its various stages. This theory will then be applied to analyze the impact of crises on the individual, family, and community. Theory-based interventions will be explored and applied with particular emphasis on families in crisis.

Cr 3.

NUR 602 Family Theory

This course will examine the relationship between the family and society. A variety of theoretical approaches will be utilized: functionalist, psychodynamic, psychoanalytic, socialist, feminist, and nursing conceptual models. Dysfunctional family patterns and emerging family forms will also be addressed. An underlying theme of the course is the family as a basis for sex role divisions and the possibilities for change.

Cr 3.

NUR 603 Research and Data Analysis in Nursing

Research problems in nursing, appropriate methodologies and designs, and ethical implications will be explored with an emphasis on the relationship between theory, practice and research. Qualitative and quantitative data analysis will be included. Students will be introduced to the utilization of computers in data processing. Prerequisites: Introductory Statistics, NUR 604, or permission of instructor.

Cr 3.

NUR 604 Theory Development in Nursing

An examination of the characteristics (nature) and use of theories and models and the process of theory development. Emphasis on the analysis of selected nursing models and theories and their relationship to practice and research.

Cr 3.

NUR 605 Issues and Trends in Health Care

Contemporary issues and trends in health care will be explored, taking into account relationships among personal, environmental and policy influences. Health care services will be analyzed using regional, national, and international comparisons. Proposed

models of health care delivery and changing roles of consumers will be examined. Cr 3.

NUR 610 Clinical Practicum in Families in Crisis

Focus on families in crisis with major physical, emotional and social health problems. Emphasis on analysis of data for assessment, planning, implementing, and evaluating nursing care in institutional or community settings. Prerequisites: NUR 600, 602, 604. Prerequisite or concurrent: NUR 601, 603.

Cr 6.

NUR 615 Problem Development Seminar

A research seminar in which the student develops a plan for the thesis. The focus is on assisting the student to define a problem, conduct a review of the literature, and develop a working draft of/or a completed working thesis proposal. The seminar is graded on a P/F basis. Students who do not succeed in identifying a research problem during the semester may take an Incomplete and continue in NUR 615 for a second time when it is offered again. (Spring semester only).

Cr 2.

NUR 616 Thesis Development Seminar

A research seminar in which the student develops a thesis proposal. The focus is on assisting the student to complete an approved Thesis Proposal Hearing. The seminar is graded on a P/F basis. (Fall semester only).

Cr 2.

NRS 690 Thesis Advisement

Candidates for the master's degree who have completed most of the coursework requirements, including NUR 616, who are receiving faculty advisement; and who are utilizing library and research facilities must register for NRS 690 each semester until completion of the thesis.

Cr 2

not counted for degree.

NUR 620 Practicum in Nursing Administration

This course provides for synthesis and application of knowledge gained in the administrative component of the graduate program. Guided experience is arranged in appropriate agencies and concurrent seminars focus on functions unique to administrative roles. Role interpretation and evaluation is an integral part of the practicum.

Cr 6.

NUR 630 Practicum in Nursing Education

This course provides for synthesis and application of knowledge gained in the educational component. Guided experience is arranged in appropriate educational programs

and concurrent seminars focus on functions common to educational roles. Role interpretation and evaluation are an integral part of the practicum. Cr 6.

NUR 623 Analysis of Public Policy Related to Health Care Delivery

Political, economic, and ethical frameworks will be used to analyze public policies related to health care delivery and nursing practice. Special attention will be given to the role of the nurse manager/administrator in influencing and operationalizing policy. Cr 3.

NUR 632 Strategies of Teaching in Professional Education

This course will introduce students to a variety of teaching and evaluation methods which are utilized in professional education programs, in particular nursing education. Additional foci will include emerging instructional technologies, teacher styles, education models and philosophies, trends in professional education and evolving student clienteles. Cr 3.

NUR 640 Primary Care Practicum

Focus on individuals, families, and groups in primary care settings. Clinical opportunity to apply previously gained knowledge regarding health assessment, management, and evaluation of common primary care problems/concerns. Cr 6.

NUR 644 Management and Health Teaching of Groups

Focus on teaching and management of groups. Emphasis on group development and process. Various group models will be discussed and applied to appropriate clientele groups. Cr 3.

NUR 642 Advanced Health Assessment

Management of common primary care health problems of individuals/families/groups will be discussed utilizing a problem-oriented approach. Health problems/concerns will be analyzed and appropriate interventions with evaluation strategies will be developed. Prerequisites: NUR 600, 601, 602. Cr 3.

NUR 643 Concepts in Primary Care

The purpose of this course is to discuss/analyze concepts and issues related to primary care. The focus of the course will be on individual client-provider concerns as well as issues related to modes of health care delivery and legislative impacts. Cr 3.

NUR 503 The Women's Health Movement

This course will address the historical development of the women's health movement as well as its present structure and politics. The objectives of this course are to: familiarize students with the growth and development of a vigorous, contemporary social movement and to stimulate interest in students regarding the movement, both theoretically and experientially. Cr 3.

NUR 505 Topics in Health Care Economics

This course will provide a basic understanding of economic perspectives and concepts as they apply to health care delivery. Students will examine assumptions underlying orthodox, institutional and radical economic theories. Selected health care topics will be analyzed. Prerequisites: For undergraduate students, permission of instructor. Cr 3.

NUR 520 Ethical Issues in Health Care

Analysis of selected contemporary ethical issues confronting health care professionals. Examination of major ethical theories and principles and related decision-making models. Cr 3.

NUR 550 Advanced Applied Pathophysiology

This course will study the mechanisms and manifestations of disease within each of the major organ systems. Primary care diseases will be stressed. Lectures will introduce theoretical concepts of pathophysiology and develop an epidemiological framework. Periodic clinical pathological conferences (CPCs) will enable the student to do applied pathophysiology in a seminar setting. Prerequisites: Anatomy and Physiology, 2 semesters or 8 credits. Basic Pathology or permission of instructor. Cr 3.

Public Policy and Management Program

Director: Mark R. Shedd

Professor: Shedd; *Associate Professors:* Andrews, Conway, Cluchey, Maiman, Silkman, Webster; *Assistant Professor:* Coburn; *Lecturer:* Rieser

In Maine, as elsewhere in the nation, the complexity of economic and social issues puts a premium on the ability to make and implement decisions that will effectively serve the public interest. In this context, and after almost a decade of study and planning, the trustees of the University of Maine approved in 1982 the establishment of a program in public policy and management, with the first class of students to be enrolled for the 1984-85 academic year. The decision to launch this program was based upon documented need for better trained public officials as well as the University's mission to provide research, teaching, and public service to citizens of the region.

The Public Policy and Management Program is designed to offer students the opportunity to prepare for leadership careers in public policy analysis, development, and management. The program seeks:

- to help meet the needs of public and private organizations for professionals with the skills, knowledge, and commitment to deal creatively with the vital issues of public policy and management;
- to emphasize the critical role of elected as well as appointed officials as leaders and entrepreneurs in directing and revitalizing established organizations as well as in designing and implementing new programs;
- to provide opportunities for creative exchanges between policy makers in the public and private sectors at all levels and participants in the program;
- to create a center of teaching, research, and public service activities which can assist institutions in Maine and elsewhere.

The University's program focuses on regional, state, and local policy in the broad context of national, political, and economic change. It emphasizes policy concerns in such areas as economic development, energy, environment, business regulation, intergovernmental relations, and social development. These broad areas encompass major public policy issues today and will continue to do so in the foreseeable future.

The problems confronting us are by nature multi-dimensional; hence the need for broad, interdisciplinary perspectives and skills in addressing them. The resolution of problems is by nature practical, requiring decisions and action; hence the importance of ability to apply theoretical knowledge effectively to policy and management activities. Interdisciplinary studies and practical experiences in the application of knowledge are major features of this new graduate program.

The curriculum and learning environment of the program maintain a healthy and dynamic tension between the realities of clinical work and the rigors of academic pursuits. Both students and faculty seek stimulating and productive balances:

- among the disciplines of economics, sociology, political science, philosophy, and law;
- between the theoretical studies of the classroom and the practical applications of the field project and internship;
- between the generic skills of analysis, research, and management, and the more specialized knowledge of a particular substantive policy field.

Thus, the program seeks to graduate those who understand the social, economic, political, and organizational contexts in which policy is developed and implemented; who comprehend the use and limitations of vari-

ous quantitative tools; who know the principles of human and financial resource management; who can articulate ideas clearly, both orally and in writing; and who are competent to manage effectively in one of the broad substantive areas of concentration provided in the program.

Where will such graduates be employed? A master of arts in public policy and management prepares individuals for careers in government, nonprofit organizations, and the private sector. The program educates future leaders. Over time some graduates will become local and state policy leaders in such fields as planning, social services, court administration, education, business regulation, and legislation. They will work as policy analysts, agency directors, and city planners. Others will work in management and consulting firms, regional planning offices, and institutions of basic and higher education, and some will be elected officials. They will teach, write, administer, and advise.

Job opportunities for graduates are not limited to nonprofit organizations and government. Some students will find work in major corporations in the areas of strategic planning, personnel management, government relations, and corporate philanthropy.

Although the program is based in Maine and will use the region as its laboratory for analyzing public policy problems, the knowledge and skills that students develop will be applicable in localities and settings throughout the nation.

The two-year master of arts in public policy and management requires 54 credit hours including academic coursework, field projects, an internship, and a policy memorandum. Students with prior graduate study or professional experience equivalent to courses or field work may receive credit consistent with the policies for graduate study at the University.

To graduate, students must:

- complete core course requirements
- develop a concentration in a substantive policy area
- engage in integrative and applied public policy and management experiences
- demonstrate written and oral communication skills.

The core courses are organized in three strands: policy development, policy analysis, and public management. The concentration is achieved through elective courses, field experiences, and the policy memorandum. It is through the concentration and associated field work that students learn to apply the disciplinary knowledge and skills attained in the core courses to the substance of a particular policy field.

To be successful the most knowledgeable and decisive leader must have the ability to transmit information effectively. Therefore, the program pays significant attention throughout to honing students' communication skills. It emphasizes skills in writing memoranda, preparing technical analyses, presenting oral advocacy and formal testimony, developing nontechnical communications for the media and public consumption, as well as giving verbal instructions and motivational sessions.

Because the computer is fast becoming an essential tool for instruction, as well as management and policy analysis, students will make extensive use of microcomputers and the University's mainframe.

The core courses define a body of knowledge and skills considered basic preparation for successful performance as a leader in any field of public policy and management. They emphasize three aspects or strands as public policy and management.

A policy analysis strand which includes courses studying public policy from the disciplinary perspectives of economics, political science, law, and philosophy; and research methods including statistical analysis and evaluation methods (18 credits);

A public management strand which includes courses in resource and information management, organization leadership, and strategic planning (12 credits);

A policy development strand which includes courses in policy development, the policy and management field project, and the policy

memorandum. This strand integrates the core courses and enables students to apply theory to practice in the concentration (6 credits exclusive of field work and memorandum).

The Concentration

The concentration offers students opportunities to develop knowledge and experience in a particular field of substantive policy or management expertise, gives students experience in the application of knowledge in policy and management, and assists them in the search for employment and career development. The concentration is structured through the careful planning of:

Electives which allow students to select courses in other graduate programs at the University (6 credits);

Field Project which is a year-long practicum involving a team of faculty and students in the study of an actual policy and management problem (6 credits);

Internship which allows students to work in an organization engaged in public policy or management (3 credits);

Policy Memorandum which is an analytic paper on a real policy issue or problem and is addressed to a policy maker (3 credits).

Among the concentrations that can be arranged within the University are the following areas: health care; human services; education; marine policy; economic development; public finance. Concentrations in other policy fields can be developed in cooperation with policy makers and field agencies under faculty supervision.

Field experiences are provided through the summer internship and the year-long field project. Through these activities students, individually and in groups, gain understanding of the structure and operation of organizations; engage in the process of policy or program analysis, development, and evaluation; and present oral and written reports of findings, proposals, and recommendations.

Lectures and Seminars

A special feature of the program is a public policy forum with regularly scheduled lectures and seminars. Local, state, and national leaders, both elected and appointed, address issues of current importance.

The Doctoral Program

In addition to the master of arts in public policy and management, the University plans to offer a doctoral program commencing in 1987. This highly individualized program will meet specific objectives of the students consonant with faculty expertise.

For students entering with a master of arts in public policy and management, the program will involve coursework, seminars, individual study, and dissertation preparation. For other students requirements will be adjusted according to academic background and experience to assure they meet the same standards as are required of students with the master's degree from the public policy and management program.

Admissions

Leadership ability, an eager interest in public service, an appreciation of its responsibilities and its rewards, a regard for the broad range of public issues, and a sense of how the candidate's own area of interest relates to others—these are the attributes we seek in applicants.

During the admissions process, the faculty review the applicant's entire record to assess evidence of commitment, willingness to work hard, ability to handle difficult analytical material, and ability to think creatively. To this end many factors are considered: prior academic performance, results of standardized tests, community activities, work experience, recommendations, writing samples.

Between 20 and 30 students will be admitted each year to begin in the fall semester. Up to half may be admitted for part-time study to accommodate persons currently employed. However, all students will take a full course load of 12 credits in the fall semester of the first year and complete requirements for the degree within four years.

Applicants should present a completed application to the University of Southern Maine, Office of Graduate Affairs, 209 Deering Avenue, Port-

land, Maine 04103, with a nonrefundable application fee of \$15.00. Make checks payable to the University of Southern Maine. In order to assure full consideration, applicants should file the completed application on or before April 1 and submit the following supporting credentials by April 15:

Official transcripts of all previous college work;

Official scores from the Graduate Record Examination;

Three letters of recommendation from persons able to comment from direct knowledge on the applicant's ability to pursue graduate study and on the applicant's commitment to and promise of success in public service.

Applicants are notified by the Office of Graduate Affairs as soon as decisions are made or as soon after April 15 as possible. Applications received after April 1 may be considered on a space-available basis.

Policy Development Strand

PPM 621 Policy Development I

Introduces students to key stages in the policy process: problem definition; identification and assessment of alternatives; selection of options; implementation; evaluation. Selected readings and case studies from diverse policy areas are used to examine each step, and to assess the contributions of various analytical approaches and disciplines to the field of public policy and management. Cr 3.

PPM 622 Policy Development II

Provides, in workshop format, intensive supervised practice in analyzing problems in public policy and management. Individually and in groups, students develop competence and judgment in selecting and applying analytic approaches and skills to address policy problems. Oral and written exercises support project activities by offering structured practice in problem definition and analysis. Cr 3.

Policy Analysis Strand

PPM 611 Economic Analysis

Introduces students to fundamental economic concepts and illustrates their application in a wide range of public policy problems. The central theme is the usefulness and limitations of economic analysis in the public policy formation and evaluation process. Particular attention is paid to the theory of consumer behavior, markets and market processes, the nature and causes of market failure and strategies, and models for government intervention. Application exercises and case materials are drawn from a variety of substantive policy areas such as the agricultural price support system and government transfer programs. Previous background in economics, especially microeconomic theory, is most helpful. Cr 3.

tween politics and policies through individual studies of state and local decision making. Cr 3.

PPM 613 Law and Public Policy

Introduces legal analysis and emphasizes the role of the law in the policy choices faced by public policy makers. Students develop skills in legal analysis through reading and discussing legal materials ranging from constitutional provisions to statutes, regulations, and case decision. The course examines law as a reflection of values and of public policy. It also considers the ways in which law limits and directs public policy makers in the context of specific cases such as financing public education or regulating sectors of the economy. The course provides an introduction to fundamentals of legal research as well as to the judicial and administrative processes. There is some exposure to substantive law, particularly in the areas of Constitutional and administrative law. Cr 3.

PPM 612 Political Analysis

Examines the ways key political variables influence the formulation and implementation of public policy. The course views politics as a collective process for distributing public and private goods. Attention is given to the impact of forces and constituencies outside as well as inside government, including public opinion, elections, parties, interest groups, and leadership styles. Differences among political institutions, and the effects of these differences on policy outcomes, are also explored. Course materials involve national politics and students analyze the linkages be-

PPM 614 Ethics and Public Policy

Examines the ethical issues involved in the formulation, implementation, and evaluation of public policy. The premise of the course is that nearly all public policy decisions contain an ethical dimension and that critical attention needs to be paid to this component. Competing models of ethical analysis are investigated and applications explored in the context of specific policy case studies. Among

questions to be addressed are: Can one speak in a clear, precise manner about the "ethical obligations" of public officials? If so, how specifically and on what basis? Are there inherent conflicts between the ethical obligations of individuals as private citizens and individuals as public servants? Is there any cogency to the claim that different social roles yield different ethical obligations? Should it be a goal of public policy to define and enforce community ethical standards?

Cr 3.

PPM 601 Quantitative Methods

Introduces students to the use of quantitative methods in the analysis and evaluation of public policy. Emphasis is placed on the application of probability, statistics, and data analysis techniques. Topics include sampling, estimation, hypothesis testing, forecasting, and the analysis of correlation and causality. Particular attention is paid to organizing and reducing large and complex data sets for the purpose of drawing inferences about causal effects. Computer exercises will be used to illustrate the application of these topics in such areas as educational finance, manpower

training programs, and hospital cost containment.

Cr 3.

PPM 602 Evaluation Methods

Familiarizes students with the use of evaluation in developing and implementing public policy. The study of evaluation designs, processes, and techniques is undertaken by analysis of evaluation studies drawn from diverse policy areas, and through selected readings and exercises. Specific attention is given to: problem definition; information gathering (including questionnaires, interviewing, observation, and qualitative techniques); data analysis and interpretation; and formal and informal reporting of results and recommendations.

Cr 3.

PPM 603 Communication Skills

Emphasizes the application of oral and written communication skills in policy and management contexts. Provides intensive experiences for refining writing skills in such areas as preparing reports, memoranda, proposal requests, and press releases. Instruction includes simulated experiences in oral presentation of testimony, reports, advocacy statements, and briefings.

Public Management Strand

PPM 631 Organizational Management

Examines the structure, functions, and behavior of organizations as a basis for analyzing the ways public organizations implement, and respond to policy change. Through case studies and exercises students analyze how public organizations and agencies respond to change and how they become catalysts for policy and program improvement.

Cr 3.

PPM 632 Financial Management

Provides an overview of the processes and uses of budget, financial management, and control systems in public management. Attention is given both to the design of internal systems and to external influences and constraints upon implementing them. Actual budgets, management and control systems are used for analysis and application of tools and concepts.

Cr 3.

PPM 633 Information Management

Course description to be developed.

Cr 2.

PPM 634 Models of Decision Making

Course description to be developed.

Cr 2.

PPM 635 Strategic Planning

Course description to be developed.

Cr 2.

PPM 640 Summer Internship and Related Seminar

Gives the student the opportunity to apply acquired knowledge and skills to a problem in an operating agency, assists the students in career planning, and generates opportunities

for the development of a policy memorandum. The internship provides students who have not had public sector experience the opportunity for direct learning through employment in an organization engaged in public policy and management. Students currently employed may shape internship experiences in the organizations and agencies where they work. Additional opportunities for internships in policy research with the Center for Research and Advanced Study are also available. A seminar meets periodically during the summer. Each student submits a written report at the conclusion of the internship.

Cr 3.

PPM 650 Policy and Management Field Project

Provides the opportunity for interdisciplinary research on contemporary policy and management issues and serves as a vehicle for learning and for public service. Each student participates as a team member in a group project throughout the year as a context for learning to apply knowledge and skills in client-oriented work. Efforts are made to assure that the set of projects includes diverse areas of public policy, that each project is multi-dimensional, calling for integration of a range of disciplines for effective competition, and that the teams represent a diversity of people and competencies. A related policy seminar provides a mechanism for mutual learning, sharing, and support.

Cr 6.

PPM 660 Policy Memorandum

Requires students to develop a policy-oriented analytical paper as one of the requirements for the master's degree. The paper takes the form of a policy memorandum which is addressed to a policy decision-maker and includes policy options, recommendations, and supporting analysis. The topic or issue for analysis is normally drawn from the internship or field project but represents work performed independent of other reports and activities.

Cr 3.

Electives

Provides for a range of courses and individual study options offered by Public Policy and Management faculty and in graduate programs of the University's schools and colleges in such areas as: public management, health care; marine policy; law and public policy; education; economic development; and human services. Courses and individual study options will be developed and described during 1984-85.

Cr 6.

Graduate Program Offered in Cooperation with the University of Maine at Orono

Electrical Engineering

Coordinator Graduate Engineering Program: Brian Hodgkin

Through a cooperative arrangement, the University of Maine at Orono graduate program in electrical engineering has been extended to the University of Southern Maine. Two master's degree options are available: the master of science in electrical engineering (M.S.E.E.) and the master of engineering in electrical engineering (M.E.E.E.). The extended master's in electrical engineering program is designed principally for students on an industrial career path. The program is tailored for working students, and all courses are offered in the late afternoon or evenings. Courses may be taken as a non-degree candidate but a degree is awarded only following formal admission to the program and the completion of a designed course of study.

Application

Application for admission as a degree candidate is made to the Graduate School at the University of Maine at Orono. Application forms may be obtained from the Office of the Dean of the Graduate School, 2 Winslow Hall, University of Maine at Orono, Orono, Maine 04469 (207-581-3218) or from the Office of Graduate Affairs, University of Southern Maine, 96 Falmouth Street, Portland, Maine 04103 (207-780-4386). The completed application should be sent to the Graduate School in Orono with a copy to the graduate office in Portland. Applicants should have an undergraduate degree in engineering or a related science. Applications should be submitted at least six weeks before the beginning of the semester in which the student wishes to register, but as early as possible.

The general and the engineering Graduate Record Examination should be taken and the scores sent to the Orono Graduate School. Matriculation into the program is possible before the examinations are taken, but the examinations must be completed within a year of matriculation. For a complete description of Graduate School policies and regulations, the University of Maine at Orono graduate catalog should be consulted.

Program Requirements and Options

For a master of science in electrical engineering degree, the student must successfully complete at least 24 credit hours of coursework and at least 6 credit hours of thesis work. Whenever possible, the thesis will be employment-related. For the master of engineering in electrical engineering degree, the student must successfully complete at least 30 credit hours of coursework. For either degree, 6 credit hours of upper-level undergraduate courses may be included.

Students are expected to complete at least three of the following four core courses: Linear Systems Analysis, Electromagnetic Theory, Solid State Electronics, and Communications Engineering. Course sequences in the options of systems, signal processing, and solid state electronics are being developed. Selected courses are listed below. Courses consistent with the student's goals may be taken in other departments such as mathematics, computer science, and business.

Additional selected courses

- Microprocessor Applications Engineering
- Linear Control Systems
- Nonlinear Control Systems
- Signal Processing
- Microelectronics
- Quantum Mechanics
- Robotics

*Course numbers are those of the University of
Maine at Orono.*

ELE 222 Linear Systems Analysis

Basic concepts of linear systems. Methods for analyzing linear systems using transforms, convolution, and state variables.

ELE 250 Electromagnetic Theory

Review of Maxwell's equations and waves in dielectric and lossy media; image theory, induction theorem and Green's functions; plane cylindrical and spherical wave functions; radiation and antennas; rectangular, cylindrical and spherical waveguides and cavities; perturbational and variational techniques; G. T. D. and moment methods.

ELE 265 Solid State Electronics I

Fundamental theoretical concepts in solid

state electronics. Introduction to quantum mechanics, crystal structure, electron diffraction, reciprocal lattice, Brillouin zones, wave propagation in elastic solids, piezoelectric effect, thermodynamic properties of crystals. Emphasis on the basic theory necessary for electrical engineers to understand solid state devices.

ELE 280 Communications Engineering

Covers probability theory, random processes, optimum receivers, vector channels, matched filters, block orthogonal signaling, time-bandwidth product, product channel capacity, implementation of coded systems, binary convolutional codes, channel modes, and waveform communications.

**Master of Arts
Program in History**

The master of arts program in history, offered in cooperation with the University of Maine at Orono, is being phased out and applications are no longer being accepted. Students interested in graduate work in history should contact the Graduate School at the University of Maine at Orono. The University of Southern Maine is currently planning a master's program in New England studies. For further information, please contact the Office of Graduate Affairs, 96 Falmouth Street, Portland, Maine 04103 (207) 780-4386.

School of Law

Dean: L. Kinvin Wroth; *Associate Dean:* Martin A. Rogoff; *Assistant Dean:* Pandora N. Shaw

Professors: Cluchey, Delogu, Gregory, Loper, Potter, Rogoff, Ward, Wroth, Zarr; *Associate Professors:* Brett, Carson, Freehling, Friedman, Kandoian, Lang, Seibel; *Assistant Professor:* Soifer; *Lecturers:* Beirne, Morris, Priest, Rieser; *Adjunct Professor:* Pertruccelli.

The University of Maine School of Law is a small school that offers high quality legal education to a carefully selected student body. The Law 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, as the only law school in the state, 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 some University administrative offices.

The Law School offers a three-year, full-time program leading to the juris doctor degree. It has no evening division. The weekly class schedule consists of about 14 hours distributed throughout both morning and afternoon, Monday through Friday, and occasionally on Saturday morning. The Law School has recently established a limited part-time program on an experimental basis.

The School's faculty consists of 16 full-time instructors who have received their formal legal training at leading national law schools. Most faculty members also have experience gained in judicial clerkships, private practice, or government service. The faculty is drawn from many specialities and represents a diversity of backgrounds and interests. There is a highly favorable student-faculty ratio of under 15 to 1. Faculty members are engaged in a wide variety of professional activities which assures freshness and relevance in their classroom teaching. Some members of the faculty are active scholars, publishing frequently in legal periodicals. Many serve as advisors to various legislative and professional committees or as members of governmental commissions. Faculty members also participate in public interest litigation and play active roles in policy formation.

The Donald L. Garbrecht Law Library, named for the law librarian who served the school from 1963 to 1979, contains over 190,000 volumes, a sound working collection of legal and collateral materials. The law library supports law school curricular needs, as well as in-depth student and faculty legal research and writing.

The School averages 75-80 students per class, of whom approximately 40 percent are women; the number of students in the School is about 240, making it one of the smallest in the country. The student body is remarkably varied in age, professional and academic experience, and background. Students are drawn from a large number of colleges and universities throughout the nation. The academic quality of entering students has been improving steadily. Classes entering in recent years had a median score on the Law School Admission Test of approximately 38 (or 640) and a median undergraduate average of B plus.

Admission to the Law School is based primarily on criteria that measure the applicant's promise of law school and professional success. The applicant's entire record is reviewed. Many factors are considered: the applicant's overall college and graduate performance; Law School Admission Test (LSAT) and other test scores; extracurricular activities; work

experience; and cultural, physical, or social conditions which the applicant has experienced. The Law School seeks to assure a diverse and representative student body as a part of, and consistent with, its public, educational, and professional responsibilities. Only those applicants who offer the prospect of success in the study and practice of law are admitted. To be considered for admission as a candidate for the J.D. degree, an applicant is required to hold a bachelor's degree from a college or university accredited by one of the regional associations of colleges. Beginning students are admitted to commence their studies only at the opening of the fall semester in September.

For more information on the Law School, contact the Office of the Assistant Dean, University of Maine School of Law, 246 Deering Avenue, Portland, Maine 04102 (207) 780-4345.

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 governance. Since the Center's inception in 1972, projects have been supported by numerous 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 practitioner 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 the Center staff have been trained include economics, sociology, psychology, political science, biomedicine, 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 (HSDI) research program focuses on policy, management, employee, and training issues in order to improve the effectiveness and efficiency of public and private human service systems. Health care; services for children, youth, aging, and families; special needs of the handicapped; and alcoholism are among the areas targeted for research and technical assistance. Interdisciplinary teams are assembled to carry out activities supported typically by state and federal grants and contracts. Special expertise in HSDI has developed in program evaluation, research methodologies, data collection and analysis, financial and cost analysis, literature searches, production and communication technologies.

Marine Law Institute

Director: Alison Rieser

The Marine Law Institute is committed to research and education in the field of coastal and ocean resource law and policy. Its research considers interjurisdictional problems in marine resource management, the use of scientific knowledge in marine law, and issues affecting the resources of the Gulf of Maine. 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 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, business owners, 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 and organized camping.

Division of Public Service

Director: William G. Mortensen

The Division of Public Service is responsible for the development, coordination, and support of all noncredit programming at the University. The Division's mission is to broaden educational access and learning opportunities in southern Maine through programs that respond to practical community needs. The Division offers Continuing Education Units (CEUs) for many courses offered in the various departments. CEUs are a nationally accepted measurement of participation in certain noncredit courses. Two Division departments that particularly serve the needs of area professionals:

Department of Continuing Education for Business and Industry

Director: William G. Mortensen *Program Coordinator:* Dana R. Darling

The Department of Continuing Education for Business and Industry (CEBI) assists southern Maine employers by offering a variety of seminars, courses, and programs to meet identified needs. Through its advisory boards, the Department involves business and industry representatives in the planning, implementation, and evaluation of its offerings. These individuals represent nearly all sectors of the regional economy as well as small, medium, and large firms. CEBI's instructional staff consists of faculty and staff from the University and individuals from business and industry. The expertise represented by this extensive resource covers nearly every potential topic of interest to area organizations. All offerings of the Department are noncredit and carry CEUs when they meet the requirements of certificate programs.

Department of Continuing Education for Nursing and Health Professions

Director: Mary Ann Rost

The Department provides continuing education offerings for health professionals such as nurses, pharmacists, physical therapists, dietitians,

and others at locations throughout Maine. Programs are offered in a variety of formats including workshops, seminars, and evening courses. All programs are awarded Continuing Education Units (CEUs) and are approved by professional associations such as the Maine State Nurses Association, Maine Commission of Pharmacy, and others.

Department of Community Programs

Director: Joanne K. Spear

The Department offers a program for legal assistants and programs for personal enrichment and computer use.

Department of Conferences

Director: Kevin Russell

The Department assists community organizations in planning conferences and in using University facilities.

Lifeline Adult Fitness Programs

Director: Robert Folsom

Lifeline offers classes for sedentary but healthy adults as a comprehensive approach to cardiovascular disease prevention, intervention, and rehabilitation.

Departments offering noncredit programs through the USM schools and colleges for practicing professionals include: *The Professional Development Center*; of the College of Education; the *Continuing Legal Education* unit of the University of Maine School of Law; and the *Center for Real Estate Education* of the School of Business, Economics and Management.

Convocation

In 1984-85 the University of Southern Maine will sponsor its fourth year-long Convocation, a series of lectures, debates, workshops, programs, and cultural events focused on an important contemporary theme. Previous themes have been "The City," the "Changing Roles of Women and Men," and "The Age of the Computer." The 1984-85 theme is "Peace and War in the Nuclear Age."

The University community has chosen this issue as a focus for Convocation because it is of central importance to the life of every citizen. The University provides, as no other setting does, the appropriate resources and environment of open inquiry requisite for thoughtful and comprehensive consideration of this theme.

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

For further information contact Convocation Scholar, Anne P. Young, Emeritus Professor of History, or Alyce O'Brien, Executive Director for University Relations and Administrative Chair of Convocation.

Administration of the University of Southern Maine

Administrative Organization as of June 1, 1984

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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

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Director of the University of Southern Maine Alumni Association: Anne M. Theriault, Alumni House, Portland tel: 780-4110

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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

Acting Dean of School of Nursing: Nancy P. Greenleaf, 59 Exeter Street, Portland tel: 780-4130

Dean of Educational Services: Gordon S. Bigelow, 119 Payson Smith Hall, Portland tel: 780-4035

Assistant Dean of Educational Services and Registrar: John F. Keysor, 113 Corthell Hall, Gorham tel: 780-5236

Director of Center for Research and Advanced Study: Robert J. Goettel, 401 Research Center, Portland tel: 780-4411

Director of Division of Basic Studies: George P. Connick, 68 High Street, Portland tel: 780-4470

Director of Public Service: William G. Mortensen, 100 Payson Smith Hall, Portland tel: 780-4092

University Librarian: Stevens W. Hilyard, 123 Bonney Hall, Portland tel: 780-4276

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5260

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Volunteer Special Assistant: Eleanor Law, 102 Corthell Hall, Gorham
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Director of Development: Joyce Bader, 603 Research Center, Portland
tel: 780-4468

Director of Publications: Julia M. Cameron, 604 Research Center, Port-
land tel: 780-4094

Director of Media Relations: Robert S. Caswell, 601 Research Center,
Portland tel: 780-4200

Academic

***Administrative
Structure of the
Procost's Office***

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Dean: Robert J. Hatala, 117/118 Bailey Hall, Gorham tel: 780-5376

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Hall, Gorham tel: 780-5376

Assistant Dean for Administration: Maurice J. Chabot, 117/118 Bailey
Hall, Gorham tel: 780-5376

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Gorham tel: 780-5465

Chair, Biological Sciences Department: Louis F. Gainey, 306 Science
Building, Portland, tel: 780-4264

Chair, Chemistry Department: John S. Ricci, 370 Science Building, Port-
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Bonney Hall, Portland tel: 780-4292

Chair, Geography-Anthropology Department: Franklin D. Hodges,
300a Bailey Hall, Gorham tel: 780-5320

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- Director, Planetarium: Roy A. Gallant, 116 Science Building, Portland tel: 780-4249

College of Education

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- Director, Professional Development Center: George Lyons, 305 Bailey Hall, Gorham tel: 780-5326
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- Chair, Professional Education Department: John E. Deady, 503 Bailey Hall, Gorham tel: 780-5300
- Chair, Human Resource Development Department: John M. Sutton, 400 Bailey Hall, Gorham tel: 780-5316
- Chair, Industrial Education and Technology Department: Arthur O. Berry, 103 Industrial Education Center, Gorham tel: 780-5441

School of Business, Economics and Management

- Dean: Duane R. Wood, 113 Bonney Hall, Portland tel: 780-4020
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Acting Associate Dean: Sallie C. Ullman, 59 Exeter Street, Portland tel: 780-4130

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Associate Director for Media and Instructional Services: Ronald Levere,
Portland Library, Luther Bonney tel: 780-4280
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Head of Circulation Services: Lanier Lumbert, Portland Library, Luther
Bonney tel: 780-4270
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Head of Media Services: Lou Rutherford, Bailey Hall, Media Center tel:
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Media Production Specialist: Winston Barton, Bailey Hall, Media Center
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Head of Reference Services: Sheila Johnson, Portland Library, Luther
Bonney tel: 780-4272/4274
Reference Librarian: Gerald Banner, Portland Library, Luther Bonney
tel: 780-4272/4274
Reference Librarian: Ronald MacDougall, Portland Library, Luther
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Luther Bonney tel: 780-4279
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- Amoroso, Henry C., Jr.** (1982) Associate Professor of Education; St. Michael's College, B.A., 1966; Goucher College, M.Ed., 1967; University of Wisconsin, Ph.D., 1978
- 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
- Bay, John W.** (1965) Associate Professor of Economics; Saint Ambrose College, B.A., 1961; Boston College, M.A., 1964; Ph.D., 1966
- Beirne, Piers** (1982) Lecturer, School of Law; Essex University (England), B.A., 1971; Durham University (England), Ph.D., 1975
- Bibber, Joyce K.** (1967) Associate Professor of History; Barnard College, B.A., 1958; Stanford University, M.A., 1962; Ph.D., 1969
- 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
- Brett, Tybe A.** (1983) Associate Professor of Law, School of Law; Barnard College, B.A., 1977; Columbia University, J.D., 1979
- Callender, Willard D.** (1962;1972) Professor, Department of Human Resource Development, College of Education; Bates College, A.B., 1958; University of Connecticut, M.A., 1960; Ph.D. 1967
- 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
- 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
- Clarey, Richard J.** (1979) Associate Professor of Management; Bowdoin College, B.A., 1961; Dartmouth College, M.B.A., 1963; Cornell University, Ph.D., 1968
- Clasby, Miriam** (1982) Director, Graduate Education and Associate Professor, College of Education; Emanuel College, B.A., 1950; Boston University, M.A., 1957; Harvard University, Ed.D., 1971
- Cluchey, David P.** (1979) Professor of Law and Public Policy; Yale University, B.A., 1968; State University of New York, M.A., 1970; Harvard Law School, J.D., 1973
- Coburn, Andrew F.** (1981) Assistant Professor of Public Policy and Management; Brown University, A.B., 1972; Harvard University, Ed.M., 1975; Brandeis University, Ph.D., 1981
- Cohen, Libby G.** (1980) Associate Professor of Special Education; University of Connecticut, B.A., 1967; Russell Sage College, M.S., 1971; Boston University, D.Ed., 1977
- Connors, Denise** (1984) Assistant Professor of Nursing; Boston College, B.S., 1975; Boston College, M.S., 1977; Brandeis University, M.A., 1982
- Conway, Jeremiah P.** (1978) Associate Professor of Philosophy; Fordham University, B.A., 1970; Yale University, M. Phil., 1974; Ph.D., 1978
- Deady, John E.** (1981) Associate Professor of Education and Chairperson, Dept. of Professional 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, School of Law; University of Utah, B.S., 1960; University of Wisconsin, M.S., 1963; J.D., 1966
- Downey, Loren W.** (1974) Director, University College of Education, and Professor of Education; Drake University, B.A., 1949; University of Oregon, M.S., 1950; University of Arizona, Ed.D., 1966
- Durgin, Frank A., Jr.** (1964) Professor of Business and Economics; Tufts University, B.A., 1949; University of Toulouse, France, License en Droit, 1954; Docteur en Droit, 1956
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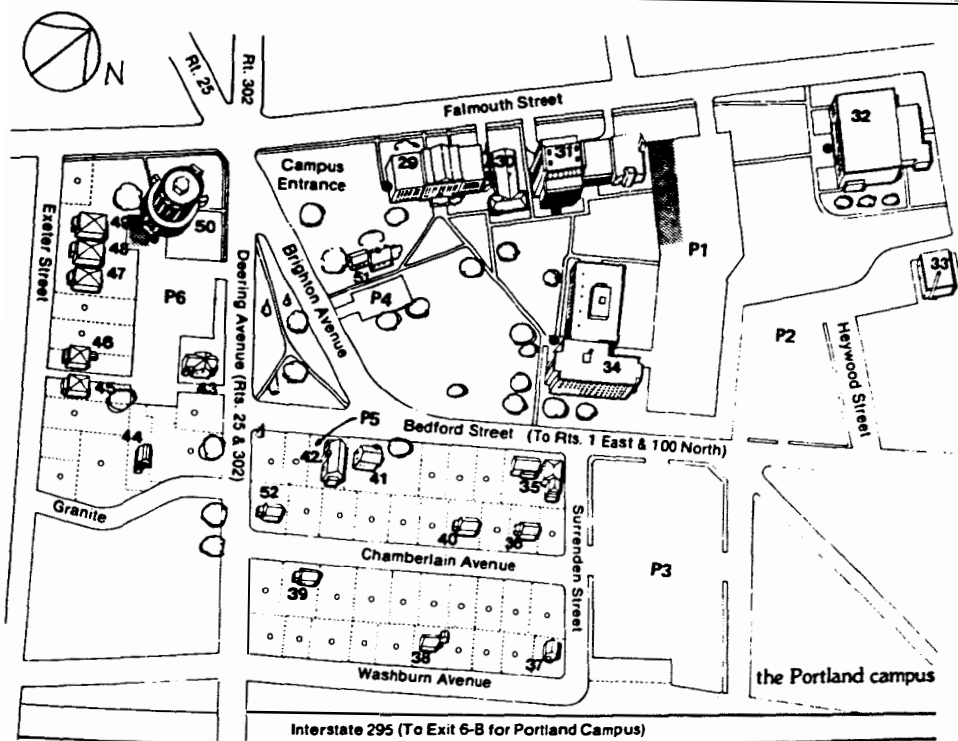
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Portland Campus



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

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| 29. Payson Smith Hall | 44. Faculty Offices
11 Granite Street |
| 30. Bookstore | 45. Faculty Offices.
39 Exeter Street |
| 31. Science Building | 46. Maine Public Broadcasting
Network. 45 Exeter Street |
| 32. Portland Gymnasium | 47. Faculty Offices,
55 Exeter Street |
| 33. Central Heating Plant | 48. Faculty Offices,
59 Exeter Street |
| 34. Luther Bonney Hall and Library | 49. Faculty Offices,
65 Exeter Street |
| 35. Student Union Buildings,
92 & 94 Bedford Street | 50. Law School/Center for
Research and Advanced Study |
| 36. Faculty Offices,
7 Chamberlain Avenue | 51. Alumni House |
| 37. Faculty Offices,
3 Washburn Avenue | 52. Administrative Offices |
| 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
225 Deering Avenue | |

Parking

- P1. Faculty/Staff/Student Commuter
- P2. Student Commuter
- P3. Student Commuter/Resident
- P4. Faculty/Staff/Visitor
- P5. Faculty/Staff
- P6. Faculty/Staff/Visitor

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