

1997

University of Southern Maine Graduate Catalog 1997-1998

University of Southern Maine

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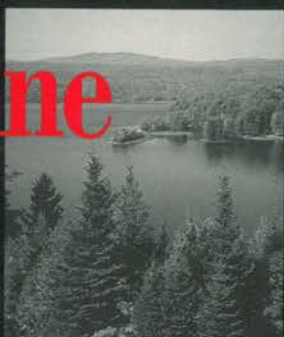
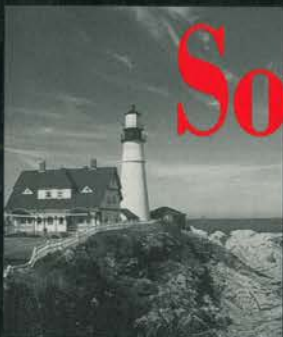
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UNIVERSITY OF Southern Maine

1997-1998 GRADUATE CATALOG



University of Southern Maine

Graduate Catalog
1997-1998

University of Southern Maine

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

The University of Southern Maine shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, national origin or citizenship status, age, disability, or veterans status and shall comply with Section 504, Title IX, and the ADA in employment, education, and all other areas of the University. Inquiries about discrimination in any area of the University should be directed to EEO Director, Sue Ellen Bordwell, 7 College Avenue, Gorham, Maine 04038, (207) 780-5094, TTY (207) 780-5646 or to the Office of Civil Rights, U.S. Department of Education, Region I, John W. McCormack Post Office and Courthouse Building, Boston, Massachusetts 02109, (617) 223-9692.

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

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

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Academic Calendar 1997-1998

Fall Semester

Classes Begin	Tuesday, September 2
Columbus Day—No Classes	Monday, October 13
Veterans Day—No Classes	Tuesday, November 11
Thanksgiving Vacation Begins	After all classes, Tuesday, November 25
Classes Resume	Monday, December 1
Last Day of Classes	Friday, December 19

Spring Semester

Classes Begin	Tuesday, January 20
Winter Vacation Begins	After all classes, Saturday, February 14
Classes Resume	Monday, February 23
Spring Vacation Begins	After all classes, Saturday, March 28
Classes Resume	Monday, April 6
Last Day of Classes	Friday, May 15
Commencement	Saturday, May 16

University of Maine School of Law

Fall Semester

Orientation and Registration (entering class only)	Monday, August 25
First Day of Classes	Tuesday, August 26
Labor Day—No Classes	Monday, September 1
Columbus Day—No Classes	Monday, October 13
Thanksgiving Vacation Begins	5:00 p.m. on Wednesday, November 26
Classes Resume	Monday, December 1
Last Day of Classes	Friday, December 5
Examination Period Begins 9 a.m. (for all classes)	Monday, December 15
Examination Period Ends	Tuesday, December 23

Spring Semester

First Day of Classes	Monday, January 12
Spring Vacation Begins	Friday, March 6
Classes Resume	Monday, March 16
All Classes End	Friday, April 24
Examination Period Begins 9 a.m. (for all classes)	Monday, May 4
Examination Period Ends	Tuesday, May 12
Law School Convocation	Saturday, May 16

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 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 enrolls over 9,000 students who pursue degree programs in the College of Arts and Sciences, School of Business, Lewiston-Auburn College, College of Education and Human Development, School of Law, College of Nursing, Muskie School of Public Service, and School of Applied Science. Forty-one baccalaureate degree programs as well as graduate and professional studies are available. The University is served by over 320 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 System, 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. 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 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 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 is primarily professional in nature and is directed to individuals pursuing careers in industry. The master of arts in American and New England Studies is an interdisciplinary program exploring New England's distinctiveness and its contributions to American culture.

The graduate program in public policy and management offers an interdisciplinary, problem-focused master's degree that prepares students for professional careers in local and state government and the nonprofit sector. Through a cooperative arrangement with the University of Maine, two master of science degree options are possible: the master of science in electrical engineering and the master of engineering in electrical engineering. The master of science in applied immunology, offered in cooperation with Maine Medical Center and the Foundation for Blood Research, prepares its graduates for either continuing study or careers in the rapidly developing field of biotechnology.

The University of Southern Maine has recently introduced four new graduate programs: manufacturing management offered by the School of Applied Science, occupational therapy offered by Lewiston-Auburn College, and health policy and management and community planning and development offered through the Muskie School.

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, basic and applied, 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. The University Libraries contain over

350,000 volumes and more than 950,000 microforms to support graduate and undergraduate programs. Over 2,400 subscriptions to periodicals, yearbooks, and annuals as well as access to more than 500 online databases provide current information. The holdings of all the libraries in the University of Maine System may be searched and requested through URSUS, the UMS online catalog. URSUS also provides bibliographic access to the Maine State Library, the Law and Legislative Library, the Bangor Public Library, the libraries of Bates, Bowdoin and Colby, and a variety of journal indexes. The resources of other libraries around the region, the nation and the world may be identified through the OCLC network and requested electronically through the Interlibrary Loan Office.

The computing facilities at the University of Southern Maine include access to an IBM 3090 processor and an IBM 4381 processor. The primary operating system for academic use on these systems is VM/CMS which supports interactive program development and production runs. In addition to these mainframe facilities, there are over 225 fully networked, IBM compatible and Apple Macintosh microcomputers available to students in many locations throughout the campus. A DEC Ultrix network of workstations exists in the Department of Computer Science and a small DEC VMS-based cluster exists in the School of Applied Science. A few other UNIX based systems exist in some departments on campus.

In addition to the regular academic semesters, the Summer Session offers a wide range of coursework on the graduate level. For a schedule of summer graduate courses, please consult the Summer Session catalog.

Graduate Studies and Research

The Office of Graduate Studies and Research, in association with the Graduate Council and the academic deans, coordinates graduate activities at the University of Southern Maine. The Graduate Council is made up of elected faculty representing all graduate programs. The Council 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 Studies and Research. All graduate students are invited to visit this Office, located at 39 Exeter Street, on the Portland campus. Graduate students are also advised to maintain close contact with the appropriate director or graduate coordinator in that school, college, or program.

Admissions

The following policies and procedures apply generally; consult the particular degree program for specific information.

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 Examination, Miller Analog Test). Scores must be for tests taken within five years of application deadlines.
- E. Official TOEFL scores of 550 or higher, if the applicant is a foreign student.
- F. A nonrefundable \$25 application fee with the application.
- G. Such other materials as may be defined by the school or college.

For additional policies and procedures governing application to a particular school or college at USM, please refer to the program description in this catalog under each of the respective schools or colleges.

Submission of Application

Except for graduate programs in the College of Education and Human Development, all documents relating to an application for admission to graduate study are to be sent to the Office of Graduate Studies and Research, which is located on the Portland campus. All materials relating to graduate study in the College of Education and Human Development should be sent directly to the College's Admissions and Advising Office, which is located on the Gorham campus. 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 Studies and Research or the College of Education and Human Development's Admissions and Advising Office. All papers relating to an application become the property of the University of Southern Maine. Applicants are responsible for seeing that all application materials are received by the appropriate office prior to the application deadline.

Application Deadlines

Applications for admission and supporting material must be received by the Office of Graduate Studies and Research or the College of Education and Human Development's Admissions and Advising Office by deadlines set by the individual graduate programs. Please refer to the appropriate program description for specific information.

Deadline for Enrollment

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

Immunization Law

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

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

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

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.

In some instances, conditional admission may be 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. Prospective students should consult the specific graduate program for further information. A program that admits a student conditionally determines the conditions that the student must meet. If a program determines that a student has not met these conditions, the student may be administratively withdrawn.

International 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. *Only applicants with TOEFL scores of 550 or higher will be considered for admission to a graduate program.* Transcripts from foreign universities should provide the student's rank in class, be translated to English, and be notarized.

Admissions Credit

Admissions credit is credit earned for graduate coursework completed at the University of Southern Maine after the student has made formal application to a graduate program but prior to matriculation into a graduate 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. For the maximum number of admissions credits allowed, please consult the appropriate section of this catalog for the specific graduate program. Not all graduate programs may grant graduate admissions credit.

Transfer Credit

Transfer credit is credit earned for coursework prior to matriculation in a graduate program at the University of Southern Maine. Such credit is normally approved only at the time of admission and request for approval must be included as part of the admissions application. The amount of transfer credit is determined by each graduate program. Transfer credit will not be approved for: 1) courses that would not have received graduate credit at the University of Southern Maine; 2) correspondence courses; 3) courses that exceed time limits prescribed for a particular degree program; 4) courses in which a grade lower than a B was received; 5) courses that are inappropriate for inclusion in the student's program of study. For specific policies regarding transfer credit, please consult the appropriate section of this catalog.

Admission of the Disabled

The University does not discriminate against qualified applicants on the basis of a physical or mental disability. 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 Academic Support Services for Students with Disabilities.

Academic Support for Students with Disabilities

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

Any USM student with a physical, hearing, medical, emotional, or learning

disability who is taking a credit bearing course is eligible for services. Students may be asked to provide documentation.

Academic services may include: tutors; notetakers; taped readings; test proctoring; extra time on tests; interpreters (when appropriate). Students are advised to contact the office before each semester to plan their programs so that appropriate accommodations can be made. A lift-operated van is available upon request to provide transportation between campuses for students with wheelchairs. The Academic Support for Students with Disabilities Office is located in 237 Luther Bonney Hall on the Portland campus. Call 789-4706 (voice) or 780-4395 (TTY) to schedule an appointment.

Appeal of Admissions Decisions

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 dean, director, or 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 or he believes should be taken into account in reviewing the decision. Still further appeal of the admissions decision may be made to the provost and vice president for Academic Affairs.

Financial Information

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

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

Tuition

Charges in effect as of July 1, 1997

	Graduate	Law
Maine Resident	\$173.00	\$284.00
Non-Maine Resident	\$477.00	\$556.00
New England Regional Program	\$259.50	\$426.00

Fees

Activity Fee This is a mandatory \$20.00 fee charged students enrolled in law courses.

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

Commencement Fee A mandatory \$25.00 fee charged to a student who completes degree requirements. This fee must be paid at least six weeks prior to Commencement. Law students are not charged this fee.

Course Fees A mandatory fee is assessed for some courses. These fees cover costs associated with specialized instruction. Additional information is provided in University course listings.

Installment Payment Fee A \$20.00 fee is charged students participating in the University's three- and four-payment plans. There is a \$50.00 fee assessed those enrolling in the 10-payment plan.

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

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

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

Parking Fee A sticker, allowing a student to park on campus, costs \$25.00, for one academic year; \$15.00 for one semester. A \$5.00 decal for Marginal Way parking is available for one academic year.

Recreation Fee A mandatory \$8.00 per credit hour charge assessed all students.

Health Fee A mandatory \$25.00 health fee is charged students registered for six or more credits of instructional activities emanating from the Portland and/or Gorham campus for fall and spring semesters. Such activities include independent study, internships, field experiences, etc. Credits for regular classes taken at off-campus locations are omitted when determining this fee. Optional coverage is available to students who register for fewer than six credits and/or during the summer.

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

A moderate cost 12-month basic insurance plan is available to students registered for 6 or more credit hours. Students who have enrolled in the prior academic year must re-enroll each year and cannot re-enroll in the basic plan if not

a USM student.

An extended health care insurance plan is also available to students registered for 3 or more credit hours who want financial coverage for potential severe or catastrophic health problems. The extended care plan reimburses only after the first \$10,000 of health care is already paid by the student or any basic insurance plan. Further information about either policy and coverage is available through Student Health Services.

Technology Fee A mandatory \$3.00 per credit charge assessed all students.

Transcript Fee Students are charged \$3.00 for an official copy of an academic transcript.

Law School Study Abroad Fee A \$50.00 fee is charged to a student participating in the Law School cooperative foreign study program who wants credit for that experience.

Room and Board

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

USM Meal Plans The University offers seven different resident student meal plans. The cost is \$2,240 per year.

Portland Exchange The 10- or 19-exchange plans allow students to purchase meals in the Portland Campus Center without using points.

Commuter Only Plan Commuter students can purchase discount meal tickets. Information about the plans is available from the Department of Student Life and Dining Services.

Room University residence halls are located on the Gorham campus and at 645 Congress Street in Portland. Information about housing is available from Resident Student Services, Room 100, Upton Hall, Gorham (telephone 780-5240).

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

Gorham, Double	\$2,406.00/year
Gorham, Regular Single	\$2,864.00/year
Gorham, Large Single	\$3,208.00/year
Portland, Yankee Clipper Wing Double	\$2,790.00/year
Portland, A-Wing Double	\$2,596.00/year
Portland, B-Wing Single	\$3,086.00/year
Portland, 2nd Main Single	\$3,238.00/year
Portland, 1-Person Suite	\$3,228.00/year
Portland, 2-Person Suite	\$3,166.00/year
Portland, 3- and 4-Person Suites	\$2,770.00/year

All rates are based on full occupancy, and residents are charged for the type of housing in which they reside. There is an additional charge for living in a room which is under-capacity. That charge is approximately one-third of the base rate.

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

Residence Hall Computer Fee An optional fee of \$75.00 per semester. Students living in the University residence halls who pay this fee are provided with access to e-mail, the Internet, World Wide Web, and software on University networks. Students must provide their own computer hardware.

Other Expenses

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

Deposits

Students admitted to the School of Law must pay a nonrefundable \$200.00 tuition deposit by April 15 or within two weeks of acceptance if admitted after April 1. An additional \$200.00 deposit is due by June 15. Checks should be

mailed directly to the School of Law. This deposit will be applied to tuition charges if the student registers and remains enrolled; otherwise it is forfeited. With permission of the Law School, payment may be postponed in cases of extreme hardship. Other graduate programs do not require a deposit.

Newly admitted students who are approved for on-campus housing must also pay a \$75.00 room deposit. After a student registers, these deposits are applied to his or her account. These deposits are forfeited if an applicant for September admission withdraws after May 1, or if an applicant for January admission withdraws after January 1. Applicants who provide the Admissions Office with written notification of withdrawal before the previously mentioned dates will have the deposit refunded.

The Department of Resident Student Services establishes and publicizes dates for room selection each spring. Students who are registered for spring semester and request on-campus housing for fall are required to pay a \$75.00 room deposit. Usually, this deposit is applied to the fall bill. If a student notifies Resident Student Services that housing is not desired before May 1, this deposit will be refunded. If notification is received after May 1, the deposit is forfeited.

Payment Policies and Procedures

Billing Each semester, the University establishes specific dates for charging students and mailing bills. It is the student's responsibility to maintain accurate home and local addresses at the Registrar's Office. Students registering during some Orientation Sessions, the open registration period, and after classes start are billed at the time of registration. The University is not obligated to mail a bill.

- **How to Make Payment** The University offers a variety of payment options.
- **Cash** Cash payment may be made at the Student Billing Office or at an off-campus center. Cash should not be mailed.
- **Checks** Checks should be made payable to the University of Southern Maine. The student's name and Social Security number should be shown on the check.
- **Credit Cards** The University accepts MasterCard, Visa, and Discover.
- **Financial Aid From USM** The University offers eligible students grants, scholarships, loans, and employment opportunities. Grants, scholarships, and loans are credited for payment of University charges. Additional information can be obtained from Student Financial Aid.
- **Installment Payment** The University offers a variety of payment plans. Additional information about these plans and enrollment deadlines are available from Student Billing.
- **Outside Scholarships** Students must notify Student Billing of any non-University scholarships, to be used to pay University charges, prior to the date payment is due. Upon receipt of proper documentation, the University may extend the payment due date.
- **Third Party Payments** A student must give Student Billing written authorization from the agency/employer prior to the payment due date. No conditional payment offers will be accepted. *Please note:* If, for any reason, the third party does not pay, the student is liable for all charges.
- **Adding Courses** Costs associated with credit hours added after the semester begins must be paid at the time of registration.
- **Other Charges** After the semester starts, additional charges must be paid as they occur.

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

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

Add/Drop

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

A student who remains registered is not charged for any course dropped during the first two weeks of the semester. Drops do not require an instructor's signature. They may be processed at the Registrar's Office, Enrollment Services Center, Lewiston-Auburn College, or a University of Maine System Center. The date the drop form is received at one of these offices is used to determine if charges should be reduced.

Withdrawal Policy

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

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

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

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

1. Schedules For All Returning Students

a. ACADEMIC YEAR (Fall and Spring Terms)		Refund Percentage
Cancellation Prior To First Day Of Class		100%
Withdrawal Prior To End Of First Week		100%
Withdrawal Prior To End Of Second Week		90%
Withdrawal Prior To End Of Fifth Week		50%
Withdrawal Prior To End Of Eighth Week		25%
Withdrawal After The Eighth Week		0%
b. OTHER SESSIONS		Refund Percentage
(1) Sessions which are more than three weeks:		
Cancellation Prior To First Day Of Class		100%
Withdrawal Prior To End Of First Week		50%
Withdrawal Prior To End Of Third Week		25%
Withdrawal After The Third Week		0%
(2) Sessions which are three weeks or less:		
Cancellation Prior To First Day Of Class		100%
Withdrawal Prior To End Of First Week		50%
Withdrawal Prior To End Of Second Week		25%
Withdrawal After The Second Week		0%

2. Schedule For First-Time Students

First-time students will receive a refund on all institutional charges up to the point where 60% of the enrollment period has elapsed. No refunds will be made after this point in time. The percentage used to calculate the refund will be based on:

$$\text{Weeks Remaining/Total Weeks in Semester} = \text{Percentage of Refund}$$

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

Room Refunds Students who vacate University housing, will be charged in

accordance with the terms and conditions of the Residence Hall contract.

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

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

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

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

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

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

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

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

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

- A. A "Request of Change in Tuition Status" must be filed with the executive director for Financial Resources or designee *on or before* the campus's first day of classes for the summer session, fall or spring semester for which residency is requested. All applications shall be prospective.
- B. If the executive director for Financial Resources' written decision, to be issued within thirty days of the first day of classes, is considered incorrect by the student, the student may appeal that decision in writing, within 30 days, in the following order:
 1. The vice president for Administration of the campus. After receiving a written decision from this level within 30 days, the student has 30 days to submit a written appeal to:
 2. The treasurer of the University System whose decision shall be final.

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

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

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 50 percent. Because the listing of available programs varies from year to year, candidates should consult the *New England Regional Student Program Graduate Catalog*. This catalog is available for review in the Office of Graduate Studies and Research and College of Education's Admissions and Advising Office. Copies may be obtained from the New England Board of Higher Education, 45 Temple Place, Boston, Massachusetts, 02111.

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 eligible students low interest student loans. Some employers offer assistance in the form of tuition reimbursement, flexible scheduling, or paid educational sabbaticals. Scholarship assistance may also be available from organizations, clubs, or religious groups of which the student or his or her family is a member. The University is also approved by the Veterans Administration for payment of veteran's benefits.

Eligibility for Aid

To receive financial assistance, a student must be admitted into a degree program at the University and must be enrolled for at least six credit hours for a semester. Aid can be granted only to U.S. citizens and certain non-citizens. Non-citizens who think they might qualify are encouraged to contact the Student Financial Aid Office for more information. You must also be registered with Selective Service if you are a male, at least 18 years old, and born after December 31, 1959. If you believe you are not required to be registered, please call the Selective Service Office for information regarding exemption.

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

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

Aid applicants must also meet standards of Satisfactory Academic Progress in their chosen course of study. These standards are set by the University in accordance with federal financial aid regulations and are in addition to the requirements established by the dean or director of an academic program. A full explanation of these standards may be found in a separate publication entitled "Financial Aid Satisfactory Academic Progress Policy" available in the Student Financial Aid Office.

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

No student should fail to apply for admission because she or he cannot pay the full cost of an education. The Student Financial Aid Office administers a significant 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 Student Financial Aid Office helps students explore other potential sources of aid.

Application Procedures

To apply for financial assistance from the University of Southern Maine, new and continuing graduate students must complete a Free Application for Federal Student Aid (FAFSA) or a Renewal Free Application for Federal Student Aid and submit it directly to the Federal Student Aid Programs for processing.

Students are encouraged to apply for assistance as early as possible. To ensure a fair distribution of funds, a priority filing date is established. To meet USM's deadline, applicants must ensure that their FAFSA data is received at the institution by March 1. Students should mail the FAFSA to the federal student aid programs by February 15 to meet the USM March 1 deadline.

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

who file after the priority filing date will probably receive delayed notification and may not have funds available in time to pay semester bills.

Entering graduate students who have attended colleges or universities other than the University of Southern Maine cannot receive any federal financial aid until the Student Financial Aid Office has received and evaluated a Financial Aid Transcript certified by the student's prior institution. The Financial Aid Transcript(s) are required even if the student received no financial aid from the previous institution(s). To avoid delay, the student should arrange to have a certified Financial Aid Transcript sent by the prior institution's financial aid office at the time of original application.

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 Student Financial Aid Office. 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 must promptly report any of the following to the Student Financial Aid Office: a change in residence; a change in the number of credit hours attempted; or the receipt of financial aid from sources other than USM.

Types of Aid Available

Graduate Assistantships are available in most programs. Generally, the assistant is required to pursue graduate studies (at least 6 hours of credit per semester or 9 hours of credit for foreign students) and to assist in supervising undergraduate instruction or conducting research. In compensation, the assistants are generally paid a yearly stipend plus up to 9 hours of tuition assistance each semester. Assistantships are awarded by the Office of Graduate Studies and Research on the recommendation of the individual graduate programs. Interested students should first contact the Office of Graduate Studies and Research or their graduate program director.

Federal Work Study is a program funded by the University of Southern Maine and the federal government. A student's financial need governs the amount that can be earned.

Federal Perkins Loans are funded by the federal government, the University, and former borrowers repaying loans. No repayment is required until after the student ceases his or 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 \$40 must be repaid each month.

Federal Stafford Student Loans (subsidized) is a program sponsored by the federal and state governments that allows students to secure low-cost loans. Eligibility for subsidized Federal Stafford Loans is based on demonstrated financial need. Contact your local bank, credit union, or savings and loan institution for more information.

Federal Stafford Student Loans (unsubsidized) is a new program under the Federal Family Education Loan Program that allows any student to secure low cost loans. This program is available to all students. Contact your local lending institution for more information.

Alternative Loans such as MELA and TERI are credit-based loan programs which provide long term financing options for qualified students. Additional information about these programs may be obtained from the Student Financial Aid Office. Some lenders may also have their own private educational loan programs. Check with the lender for more information.

Native American Scholarship Program Tuition, mandatory fees, and on-campus room and/or board will be waived for qualified and eligible North American

can Indians residing in Maine. Eligibility is extended to 1) the person whose name is included on the current census of either the Passamaquoddy or Penobscot Tribes; and 2) the person who has resided in Maine for at least one year and whose name, or the name of at least one of their grandparents, was included on the census of a North American Tribe OR held a band number of the Maliseet or Micmac Tribes with direct blood lineage.

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 Enrollment Services Center.

Trustee Tuition Waivers A limited number of tuition waivers are available. The awards are based on academic achievement and promise, special talents, potential to make unique contributions to the University community, and USM's commitment to expanding the pluralistic character of its student body. Further information may be obtained from the dean's office of the student's school or college.

For additional information, contact the Student Financial Aid Office, University of Southern Maine, Corthell Hall, College Avenue, Gorham, Maine 04038 or telephone (207) 780-5800.

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

Student Development

The Division of Student Development provides programs and services to support students in the out-of-classroom aspects of the educational experience. These activities complement the academic process and expand the university experience for all students. Some programs and services are described in this section.

Police and Safety

Police and Safety is responsible for keeping the peace, preventing crime, and delivering a variety of services including security and crowd control, crime investigation, 24-hour police coverage, management of parking and transportation, escort services and educational programs. The offices are located in Upton Hall on the Gorham campus, Portland Hall, and in the former Steego Building at the corner of Bedford and Winslow Streets on the Portland campus (780-5211 or emergency number, 780-5000). At Lewiston-Auburn College, call 753-6500.

University Housing

Portland Hall offers a nontraditional housing alternative. Located on Congress Street in downtown Portland, it provides easy access to the Portland campus as well as to the entertainment and cultural opportunities of Maine's largest city. Options include single and double rooms and a variety of suites with kitchens. All accommodations have individual baths and are fully draped and carpeted. An on-site dining facility, computer lab, and fitness center make this a truly pleasant option for the student with a full schedule who wants to experience urban campus life. For more information, call 874-3383. Housing of a more traditional nature is offered on the Gorham campus. Call 780-5240.

Brooks Student Center

The Brooks Student Center offers a variety of services on the Gorham campus including: an information desk, the Bookstore, dining services, an ATM and a postal service machine. Questions may be directed to 780-5470.

University Dining Services

Dining facilities exist at a variety of locations on both campuses. The main dining facility on the Gorham campus, as well as a cash-basis snack bar, are located in the Brooks Student Center. A snack bar is also located in the lobby of Bailey Hall. In Portland, facilities are located in the Campus Center, the Law Building, and the lobby of Luther Bonney Hall. A full service cafeteria is located in Portland Hall on Congress Street. Dining service questions may be addressed by contacting 780-5420.

Commuter Life

The Office of Commuter Life offers programs, services, and general support to all commuter students. This office provides a voice for commuter issues that arise. The Office is also responsible for the management and coordination of services within the Portland Campus Center.

Portland Campus Center

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

The Commuter Student Lounge, located in the Dining Center, provides a place for students to eat, watch TV, use the local phone, leave messages on the message board, play pool, or form a study group. For more information call 780-4090.

The Sullivan Gym

The Sullivan Gym is a multi-purpose facility with three regulation basketball courts, squash, wallyball, and racquetball courts, and all-purpose room. The weight training facilities include Nautilus and Universal machines, barbells, dumbbells, Stairmasters, and stationary bikes. An exercise area in the women's locker room includes a stationary bike, rower, and an Atlas-10 weight training machine. Saunas are also available. The main floor is lined for basketball, in-

door tennis, badminton, and volleyball. It also offers indoor jogging.

If you participate in squash or racquetball you are expected to supply your own equipment. You can reserve courts a day in advance by calling the Equipment Room (780-4169). For more information, please call 780-4173.

University Health Services

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

Student Health Services

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

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

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

Counseling Center

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

The centers are located in Payson Smith Hall on the Portland campus and Upton Hall on the Gorham campus. Hours are Monday through Friday, 8:00 a.m. - 4:30 p.m., with some evening hours. For more information, call 780-4050.

Intramural and Recreation Programs

USM offers a variety of recreational activities and intramural athletic opportunities. With gymnasiums on both campuses, students can take part in organized programs or work out on their own. Both gyms have weight training facilities and offer aerobic programs. Racquetball and squash courts are available at the Portland gym.

The Portland Recreation Program (780-4630) offers a wide range of programs which include aerobics, yoga, martial arts, family fun days, racquetball clinics, theater trips, and relaxation workshops. Outdoor recreation clinics and trips include camping, canoeing, cross country skiing, and sea kayaking.

The Gorham Recreational Sports Program offers many recreational activities, regardless of skill level or previous experience. Team sports include flag football, volleyball, basketball, ultimate Frisbee, 6-on-6 soccer, softball, beach volleyball, floor hockey, arena football, and bowling. Individual activities such as tennis, table tennis, darts, badminton, 3-point shoot-out, free-throw competi-

tion, and nine-ball are offered. Come work-out in our new state of the art fitness facility where numerous pieces of equipment are available including Universal machines, free weights and cardiovascular machines. Aerobics are also offered daily for students of all skill levels. For more information call 780-5433 or stop by the office located in 102 Hill Gym.

Off-Campus Housing

The University maintains lists of available rooms and apartments to assist students who wish to live off-campus. The lists are available at Resident Student Services, 100 Upton Hall, on the Gorham campus and the Portland Student Life office, Campus Center, on the Portland Campus. Call 780-4090.

Child Care Services

University Child Care Services, though part of the Division of Human Resources, complements the mission of Student Development by serving over 400 children of students, faculty, staff, and alumni. Programs are provided for children from infancy to teens, in two facilities on the Portland campus and in Gorham and include: full-day child care (7:30 a.m. - 5:30 p.m.), after and before school and kindergarten care in Gorham, flex-care (child care services on a block basis), infant, toddler, and pre-school care, summer and school vacation camps. Student scholarships, provided by the Student Senate and the University, are available for eligible students. For more information, call 780-4125.

Career Services and Cooperative Education

The Career Services and Cooperative Education centers provide comprehensive career assistance for all matriculated students. Students are encouraged to visit the centers early in their academic career to begin preparing for the future. Assistance with career decision making, interest testing, a part-time job service, a computerized career exploration service, and workshops to help students design résumés and learn how to interview with employers are offered. The centers also maintain a Career Technology Center to help students engage in on-line job searches.

The Cooperative Education Program helps place students in short-term positions with career-related businesses. In most cases, students who are eligible to apply for Cooperative Education placements receive academic credit for the learning experience involved, as well as a salary from the employer. The office also maintains a list of available unpaid internship opportunities.

The centers are located on the Gorham campus in Upton Hall and on the Portland campus in Payson Smith Hall.

Student Judicial Affairs

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

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

The USM Women's Center provides programming and resources for personal, academic, and career development for women. On the Portland campus, the Women's Center maintains a comfortable space for relaxing, networking, holding various gatherings and support group meetings, and provides programs of support, advocacy, and co-curricular interest. The Women's Center is liaison to organizations and agencies in greater Portland which provide direct service or advocacy for women. The Center also provides gallery space for exhibits of art in keeping with its goals.

On the Gorham campus, the Office of Women's Resources works with the Office of Gorham Student Life to develop appropriate programming for tradi-

tional age students, and advising to the Greek women's organizations.

Multicultural Affairs

The Office of Multicultural Affairs supports and assists University efforts in fostering a diverse educational community. Primary activities include coordinating institutional program support; collaborating on multicultural initiatives; and identifying and advancing issues central to the personal and academic needs of students. The Office also assists with student retention efforts; consults with academic offices regarding such matters as curriculum development, diversity plans, faculty recruitment, and instructional support; advises students, staff, and faculty; and sponsors diversity awareness opportunities. For more information, please call 780-4487.

Important Campus Policies

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

AIDS Policy

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

Alcohol and Substance Abuse Policy

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

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

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

Crime Prevention and Safety

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

For emergencies, property loss, lost and found, or to report suspicious persons or maintenance/safety problems, call Police and Safety at 780-5211, or in case of emergency, 780-5000.

For property loss and safety concerns in the residence halls, you can also contact your Resident Assistant or Area Director or Resident Student Services at

780-5240 (Gorham) or 874-3383 (Portland Hall).

For sexual assault or physical or domestic violence, you may call Police and Safety (24 hours a day) at 780-5211 or in an emergency at 780-5000. You can call your Resident Assistant or Area Director, 780-5240 (if you live in the Gorham residence halls), University Health Services, 780-4050, or the Rape Crisis Center, 774-3613.

Sexual Harassment Policy

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

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

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

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

Sexual Assault Policy

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

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

It is important to tell someone when you have been sexually assaulted, and to tell someone you can trust. Campus resources include Student Development staff and other University faculty and staff, academic advisers, Resident Assistants (RAs), Resident Directors (RDs), Area Directors (ADs), Greek Advisers, and athletic coaches. Off-campus community resources include your local hospital emergency rooms, rape crisis centers, and local police departments.

Available Resources

USM University Health Services

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

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

USM Police and Safety

Services: 24-hour security and policing function. In Portland (former Steego Bldg., Bedford and Winslow Streets): 780-5211, and at Lewiston-Auburn: 753-6500, or in Gorham (Basement, Upton Hall): 780-5211, **Emergency: 780-5000.**

Office of Student Judicial Affairs

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

24-hour Community Crisis Centers: May include medical accompaniment to hospital emergency rooms for rape kit/forensic exams, anonymous hot-line counseling and referral services, legal advice and courtroom accompaniment if charges are pressed.

Rape Crisis Center (Cumberland and York County)	774-3613
Bath-Brunswick Rape Crisis Hotline	1-800-822-5999
Lewiston-Auburn Sexual Assault Crisis Center	795-2211
Augusta Area Rape Crisis Center	626-0660

Academic 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 restricted to graduate-level students.

Grading System

Grades at the University are given in terms of letters, with the option of a plus or minus designation, representing levels of achievement. The basis for determining a grade is the relative extent to which the student has achieved the objectives of the course. The student's work in each course is graded as follows: A; 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 the subsequent semester; the Registrar shall notify faculty members involved, and their department chair, of students who have carried unresolved incompletes on their transcript for one semester. If the incomplete is not resolved by the instructor, an I grade will be automatically counted as an F (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 eighth week of a semester. If a student has not officially withdrawn by the end of the eighth week of the course, one of the above regular grades, normally F, will be assigned. The W notation may be obtained after the eighth week under unusual circumstances if so determined by the instructor and the dean. A threat of failure is not considered to be an unusual circumstance.
- Y Satisfactory progress after one semester of a two-semester course. Grade and credits to be given upon completion of second semester.
- AU Student attended courses on a noncredit, 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.

Permanent Academic Record

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

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

D+, D, or F grades are not acceptable 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 or drop courses and select or reverse the pass-fail option. Adds require the signature of the instructor, but drops should be completed with the Registrar without signature. Drops processed during the first two weeks do not have financial penalty. 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 eighth week of classes will receive the grade notation of W. If a student has not officially withdrawn by the end of the eighth week of the course, she or he will be assigned a regular grade, normally F. The W notation may be assigned after the eighth week under unusual circumstances if so determined by the instructor and the dean. *All students who register for a course and neither complete the course objectives nor officially withdraw according to any one of the procedures described above will be graded F in that course and must assume all financial obligations associated with the course.*

Enrolling 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.

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

Credit for Undergraduate Work

A graduate student may be able to apply six credit hours of undergraduate work to his or 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.

Requirements of Graduate Study

Thesis Requirements

The requirement of a thesis is determined by each particular graduate program.

Oral and Written Comprehensive Examination

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

Directed Study

A degree student may earn up to nine hours of independent study or directed study. All independent study or directed study must be approved by the appropriate graduate program. Students are encouraged to consult with their faculty advisor regarding regulations governing independent study for particular programs.

Continuous Enrollment and Residency

Continuous enrollment requires that every graduate student must earn at least six credits towards his or her degree program every calendar year from the time of first registration until completion of all requirements for the graduate degree. Students enrolled for thesis advisement, however, may take fewer than six credits per calendar year. Continuous enrollment fulfills the residency requirement.

Leave of Absence

In extenuating circumstances a student may petition for exception to the continuous enrollment policy; the petition must bear approval of the student's advisor and director of the graduate program. Notification must be sent to the Office of Graduate Studies and Research or the College of Education's Office of Admissions and Advising.

Time Limit

The time limit for completion of a graduate degree is dated from the date of first matriculation and is either five or six years, depending on the requirements of the particular graduate program. In extenuating circumstances a student may petition the director of the graduate program for an extension of the time limit.

Academic Grade Appeal Policy

The purpose of the academic grade appeal policy is to provide a fair and speedy review of all student appeals of academic grades in graduate/professional programs at the University of Southern Maine that will permit such appeals to be determined in a manner that reflects the interests of both the student

and the instructor. The only matters reviewable under this policy are claims of prejudice on the part of an instructor in an academic exercise or activity for which a grade leading to academic credit is awarded, and/or evident and prejudicial error in the administration or grading method used for any paper, examination, performance, or other exercise or activity for which a grade leading to academic credit is awarded; provided that the academic judgment used in determining the merits of the grade to be awarded to such exercise or activity shall not be reviewable.

An appeal under this policy shall be carried out according to the following procedures:

1. The student should present his or her complaint, in writing, to the instructor involved and shall seek to have the matter resolved by the instructor. In no event shall there be a right of appeal hereunder for a complaint presented to the instructor more than 30 days after a final grade is mailed to the student or made available to the student through a registrar or official performing a similar function.
2. If the student remains aggrieved by the decision of the instructor under step (1), he or she may, within 15 days after the instructor's final decision, appeal, in writing, to the chairperson of the department, or program director, or dean of the college in which the course or other exercise or activity is offered.
3. The chairperson, program director, or dean, after discussion with the student and instructor, may resolve the grievance by agreement or render a decision within 60 days of receipt of the written appeal. The decision may be (a) that the appeal be dismissed or (b) that a grade be changed or the student be allowed an opportunity to retake an examination or other exercise or (c) that another appropriate remedy be administered.

The student or the instructor may, within 30 days of the receipt of the decision of the chairperson, program director, or dean, appeal to the provost in writing, stating the reason for the appeal and delivering a copy of the writing to the opposing party and the chairperson, program director, or dean. The opposing party may, within 10 days of receipt of the reasons for appeal, reply in writing to the provost. The provost shall review the original complaint, the written decision of the chairperson, program director, or dean, and the written reasons for the appeal and reply. The provost shall, within 60 days of receipt of the appeal and after reviewing the matter, prepare a written decision which shall uphold the decision of the chairperson, program director, or dean, or prescribe any other appropriate remedy. The provost's decision shall be final and not subject to further review. Copies of the decision of the provost shall be delivered to the student, the instructor, and the chairperson, program director, or dean.

Registration Policies

Advance Registration

Matriculated graduate students may register for courses during an advance registration period. Advance registration for the spring semester is conducted near the end of the fall semester and registration for the fall semester is conducted near the end 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 or fees is due during advance registration. For information regarding payment of bills, see the Financial Information section. For further information on advance registration, contact program offices.

Open Registration

Students who have not registered during the advance registration period may register during the week prior to the start of classes each semester. For specific information regarding this open registration process, contact the Registrar's Office, (207) 780-5230.

Registration Status

Full-time registration is for 9 or more degree credits; part-time registration is for 8 degree credits or less.

Note: For the purpose of eligibility for graduate assistantships or financial aid, credits required for full-time status may differ. Please consult the Office of Graduate Studies and Research or the Student Financial Aid Office for current requirements.

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.

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) courses in which a grade lower than B was received.

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

Degree Progress

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 the time set by the graduate program or the student will be withdrawn from the program and must apply for readmission.

Plagiarism

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

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

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

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 or 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 or department chair.

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 or department chair. Such withdrawals may be appealed in writing to the associate provost for graduate studies and research.

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 eighth

week will receive a W grade for each course in which the student was enrolled. A student withdrawing or being withdrawn after the eighth week will receive regular grade designations as determined by the instructor(s). Under unusual circumstances, grades of W can be assigned after the eighth week if approved by the instructor and the director of the program, and with final approval of the Office of Graduate Studies and Research.

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. **Quality points do not transfer.**

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.

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 Studies and Research or the College of Education's Office of Admissions and Advising.

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

Students may request exception to graduate study policies or appeal a decision based on these policies. Contact the Office of Graduate Studies and Research for procedures.

School of Applied Science

Dean: Brian C. Hodgkin

Assistant Dean: W. Douglas Thompson

The School of Applied Science offers the master of science degree in computer science and the master of science degree in applied immunology in collaboration with the Maine Medical Center and the Foundation for Blood Research. Graduate courses are also offered in epidemiology. The master of manufacturing management degree is offered collaboratively with the School of Business. Graduate courses in civil and electrical engineering are available by ITV from the University of Maine.

Master of Science in Computer Science

Chair: David Briggs

Professors: Heath, Welty; *Associate Professors:* Briggs, MacLeod; *Assistant*

Professors: Boothe, Fenner; *Adjunct Faculty:* El Taha, Flagge

Program Description

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.

Admission

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 a 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	Structured Problem Solving: C++
COS	161	Algorithms in Programming
COS	250	Computer Organization
COS	280	Discrete Mathematics
COS	285	Data Structures
COS	360	Programming Languages
MAT	152D	Calculus A
MAT	153	Calculus B
3. Official scores for the Graduate Record Examination (GRE) and 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.

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 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.

Application Materials

In addition to the materials described in the Admissions chapter, applicants for this program must submit three letters of recommendation attesting to the candidate's academic and/or professional accomplishments.

Application Deadlines

The application deadline is March 1 for fall semester (September) and October 1 for spring semester (January) admission.

Program Policies

In addition to the general policies described in the Academic Policies chapter, specific policies of this program are as follows.

Transfer Credit A maximum of 9 credit hours of transfer credit may be used toward the degree.

Time Limit All required courses for the M.S. degree must be completed within six years prior to graduation. Otherwise, additional coursework must be taken to fulfill program requirements.

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 master's project credit. The required coursework must include an approved sequence of at least eight courses. Six of these courses must be approved computer science offerings of which at least four must be graduate (500-600 level) courses.

Students may receive graduate credit for taking up to two upper-level courses offered by other programs subject to approval in advance by the computer science faculty. To ensure breadth in the field, each student is required to take COS 450 Operating Systems, COS 480 Introduction to Theory of Computing, and MAT 380 Probability and Statistics (MAT 381 may be substituted for MAT 380), or their equivalent. 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. 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.

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.

(Restricted to students with full graduate standing in the Computer Science Department or permission of the instructor.)

COS 540 Computer Networks

A description of computer networks organized as a layered architecture based on the OSI Reference Model. Protocols and services of each layer are examined in detail. Specific local area networks, metropolitan areas, and wide area networks will be considered.

Cr 3.

COS 542 Distributed Operating Systems

Detailed examination of the elements of distributed operating systems. Topics include an introduction to computer networks, client-server

models, remote procedure call, processes and threads, distributed file systems, name services, and shared data. Specific examples of distributed systems are considered in detail. Prerequisite: COS 405 or familiarity with operating system principles.

Cr 3.

COS 543 Distributed Systems: A Second Course

A continuation of COS 465/542, the course covers advanced topics relating to distributed systems that are not addressed in the first course. Specific topics include shared data, managing file replication, currency control, distributed transactions, fault tolerance and security. Case studies of existing systems and examination of new

developments are also addressed. Prerequisites: COS 465 or COS 542. Cr 3.

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 Advanced Computer Networks

This second course in computer networks explores recent developments with particular emphasis on fiber optic high speed networks. A laboratory component involving performance evaluation of network protocols may be included. Prerequisite: COS 460 or graduate standing. 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. 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. Cr 3.

COS 562 Performance Analysis

The course integrates system measurement, analytic modeling, and simulation modeling to develop computer system performance evaluation techniques. The approach will be problem-oriented with emphasis on benchmarking, simulation modeling and queuing models. Subjects covered will include system measurement, operational analysis, simulation modeling, analysis of simulation results, and mean value analysis. Prerequisites: MAT 380 or equivalent and some experience with an operating system. Cr 3.

COS 565 Software Design and Development

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

COS 566 Simulation and Analytical Modeling

The theoretical limitations of analytical modeling will be contrasted with the practical limitations of simulation. The BCMP family of analytical models will be presented along with the

computational solutions of these models. The use of simulation will be discussed with regard to a high level language (such as SIM-SCRIPT). Such topics as model verification and evaluation of experimental results will be considered. Cr 3.

COS 570 Seminar: Advanced Topics in Computer Science

Topics vary from year to year. Will include current research, emerging technologies, case studies. Cr 3.

COS 572 Advanced Artificial Intelligence

A survey course that explores the key areas of research within the field of artificial intelligence. Topics discussed include knowledge representation, search, computer vision, automated reasoning, planning, learning, and robotics. The nature of the problems underlying each area, relevant theoretical results, and successful systems are discussed. Prerequisite: COS 472 or graduate standing. Cr 3.

COS 574 Advanced Computer Graphics

Advanced computer graphics techniques are described and analyzed. Subjects considered include the projection of 3D objects to 2D, hierarchical object representation, representation of 3D curves and surfaces, illumination and shading, solid modeling, and advanced graphics hardware. Prerequisite: COS 452 or instructor's permission. Cr 3.

COS 580 Advanced Theory of Computation: Computability and Complexity

Explores the nature of computation from a mathematical point of view, and determines why many fundamentally important computational problems apparently have no efficient solution, or even no solution at all. Topics include models of computation, the Church-Turing thesis, computably innumerable sets, undecidable problems, the Halting Problem, resource-bounded complexity classes, NP-complete and NP-hard problems, the Traveling Salesman and other optimization problems, and computational reducibility. Connections may also be drawn to the foundations of mathematics and Gödel's Incompleteness Theorem. Prerequisite: COS 480 or permission from the instructor. 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 design-

ing efficient algorithms.

Cr 3.

parallel algorithms from the context of an abstract machine independent programming language as well as from the viewpoint of existing parallel architectures.

Cr 3.

COS 585 Combinatorial Optimization

Combinatorial optimization problems include the Traveling Salesman problem, bin packing, and facility location in networks. These problems, while easy to describe, are often difficult to solve exactly. This course considers various combinatorial optimization problems and optimal and approximate algorithms.

Cr 3.

COS 587 Introduction to Parallel Computation

An introduction to the field of parallel algorithms and techniques for efficient parallelisation. The course considers the designs and analysis of

COS 697 Independent Study

An opportunity for graduate students to pursue areas not currently offered in the graduate curriculum.

Cr 3.

COS 698 Master's Project

A six-credit project is required of all students. The project must be approved by the computer science faculty in advance. Offered only as a pass/fail course. Prerequisites: full graduate standing and faculty approval.

Cr 6.

Master of Science in Applied Immunology

Chair: Ah-Kau Ng

Professors: Ng, Thompson; *Assistant Professor:* Pelsue; *Adjunct Professors:* Ault, J. Haddow, Hillman, Lovett, Nishayama, Rand, Ritchie, Charles Yentsch; *Adjunct Associate Professors:* Chandler, Doherty, Knight, Mahoney, Moody, Smith, Clarice Yentsch; *Adjunct Assistant Professors:* Beauregard, Becket, Craig, Hayes, Himmelfarb, Jones, Sears, Siekman, Vary, Whitaker, Weisberg; *Adjunct Instructors:* Breggia, Carmody, P. Haddow, Inman, Palomaki

Applied Medical Sciences

The Department of Applied Medical Sciences offers the master's degree in applied immunology.

Immunologic and molecular biology techniques have found applications in areas as diverse as cancer research, molecular genetics, marine biology, developmental biology, human reproduction, and organ transplantation. Furthermore, immunodiagnostic assays and molecular biology tests to detect such materials as infectious agents and disease markers have revolutionized the diagnostic industry by providing sophisticated, specific, and sensitive assays.

The M.S. program in applied immunology is designed to prepare students for careers in basic research, clinical diagnosis, industrial research, and teaching. The program is truly interdisciplinary, providing graduates with a sound background in immunology and molecular biology. Laboratory skills are emphasized. These include, but are not limited to, *in vivo* and *in vitro* cellular and humoral immune function assays, production and characterization of heterologous and monoclonal antibodies, immunodiagnostic techniques, and methods in biochemistry and molecular biology. Intensive electives and externships in advanced immunologic or biochemical applications and theory, as well as opportunities for thesis projects, are offered with research, clinical, and industrial laboratories throughout Maine. The student will be provided the opportunity to tailor programs specifically to individual interest. In addition, coursework includes the refinement of such general skills as are required of all scientists, namely: critical evaluation and presentation of current scientific literature, the reading and writing of technical material, problem solving, experimental design, logic, and ethics.

The University of Southern Maine Department of Applied Medical Sciences laboratory facilities and the laboratories of program affiliates provide students with the opportunity to work with all equipment that is commonly found in the modern immunology and molecular biology laboratories.

Epidemiology Courses

In addition to the Applied Immunology program, the Department of Applied Medical Sciences offers courses in epidemiology and applied biostatistics.

Admission

The program is directed to the following individuals: graduates in life sciences; biomedical scientists; researchers; and technologists employed or prepared to be employed in public or private research laboratories, industrial laboratories, and health care and educational institutions.

For maximum consideration for admission to the program, a grade point average of 3.0 in undergraduate science and mathematics courses is highly recommended.

It is highly recommended that the applicant have completed courses in the following subjects or their equivalents: organic chemistry; biochemistry; microbiology; genetics; cellular and molecular biology; physiology.

The Applied Immunology Graduate Committee is responsible for evaluating applicants and recommending candidates for admission. Interviews by members of this committee may be required of applicants. Applicants who have deficiencies in background courses that the committee considers essential for success in the program may be conditionally admitted, with full admission being dependent upon satisfactory completion of those courses.

Application Materials

In addition to the materials described in the Admissions chapter, applicants for this program must submit: 1) official scores for the Graduate Record Examination (GRE) and 2) three letters of recommendation attesting to the candidate's academic and/or professional accomplishments.

Application Deadline

The application deadline is May 1 for maximum consideration for all semester (September), but applications will be accepted until August 1. For spring semester (January) the dates are November 1 and December 1.

Program Policies

In addition to the general policies described in the Academic Policies chapter, specific policies of this program are as follows:

No more than 14 graduate credits completed prior to matriculation can be applied to the degree.

All required courses must be completed within six years prior to graduation. Otherwise, additional coursework must be taken to fulfill program requirements.

Program Requirements

Forty credits are required for the master of science degree in applied immunology: 24 credits of required core courses, at least 6 credits of thesis research, and at least 10 credits of electives and externships.

Each student will be assigned an academic committee, which will be responsible for ensuring that the student fulfills all requirements for the program.

All students must complete the following courses:

AMS 545	Applied Biostatistical Analysis	3 credits
AIM 610	Cellular Immunology	3 credits
AIM 611	Cellular Immunology Laboratory	3 credits
AIM 620	Molecular Immunology	3 credits
AIM 621	Molecular Immunology Laboratory	3 credits
AIM 670	Molecular Biology	3 credits
AIM 671	Molecular Biology Techniques	3 credits
AIM 690	Journal Club/Seminar	3 credits
AIM 698	Thesis Research	6 credits

Electives will be available in the form of advanced seminars or tutorials in many areas including:

AIM 630	Medical Immunology
AIM 631	Medical Immunology Laboratory
AIM 640	Advanced Biostatistics
AIM 641	Biological Markers in High Risk Pregnancies
AIM 642	Computer Analysis of Biomedical Data
AIM 643	Computer Applications in Immunology
AIM 644	Concepts in Biochemical Epidemiology
AIM 645	Immunocytochemistry
AIM 646	Development of Immunoassays
AIM 647	Electrophoresis and Immunoblotting

AIM 648	Electron Microscopy
AIM 649	Flow Cytometry
AIM 650	Fluorescence Microscopy
AIM 651	Scientific Writing
AIM 652	High Performance Liquid Chromatography
AIM 653	HLA and Erythrocyte Typing
AIM 654	Hybridoma Methodology
AIM 655	Immunochemistry in Oceanography
AIM 656	Immunoelectronmicroscopy
AIM 657	Immunohematology
AIM 659	Lymphocyte Subsets
AIM 660	Protein Phenotyping
AIM 661	Purification of Antigens and Antibodies
AIM 662	Reproductive Immunology
AIM 663	T-Cell Cloning
AIM 664	Chromatography
AIM 665	Tissue Culture Techniques
AIM 666	Laboratory Management
AIM 671	Molecular Biology Lab

Externships will be available throughout the state of Maine in many laboratories that use immunological techniques in clinical, basic research, and industrial applications. These affiliates include biomedical, biotechnological, marine biological, and educational institutions.

Laboratory Fees

Laboratory fees are assessed in AIM laboratory courses to cover the cost of supplies and materials.

AIM 530/AIM 670 Molecular Biology

This course covers basic principles of molecular biology. Lecture topics include biomolecules and cellular organization, structure and function of DNA, DNA replication, gene expression, RNA transcription and processing, protein synthesis and ribosome structure, cell cycle and signaling, gene rearrangement, retrovirology, developmental and cancer genetics, and recombinant DNA technology.

Cr 3.

AIM 531/AIM 671 Molecular Biology Lab

The laboratory introduces the student to basic molecular biology techniques. The protocols include DNA and RNA isolation, plasmid preparation, agarose gel electrophoresis, restriction digestion, DNA synthesis, gene transfection, gene cloning, DNA sequencing, Northern and Southern blot analysis, computer searches and data mapping. Instructor's permission required. Cr 3.

AIM 599/BIO 499 Immunology

This is an introductory course dealing with general principles of immunology. Topics to be surveyed include the basic principles of natural and acquired immunities (both tumoral and cell-mediated), molecular and cellular components of the immune system, immuno-assays, and clinical aspects of immunology.

Cr 3.

AIM 610 Cellular Immunology

This course stresses the cellular components of the immune system. Specific topics include characterization of the cells of the immune system, cellular interactions during immune responses, distinguishing subpopulations of lymphocytes and their functions, the role of phagocytic cells, tolerance, and the problems of immunization such as antigen dose, route of administration, and characterization of the immune response over time.

Cr 3.

AIM 611 Cellular Immunology Laboratory

This course consists of a series of comprehensive laboratories in which students learn basic techniques for the isolation, identification and functional analysis of cells in the immune system. The role of T cells, B cells, NK cells, macrophages and neutrophils in the cellular immune response is examined through assays such as mixed lymphocyte culture, ^{51}Cr -Release, NBT dye reduction, ^3H thymidine uptake, flow cytometry and microcytotoxicity. Emphasis will be on experimental design, and the clinical and research applications of the procedures used. Permission of the instructor is required. Cr 3.

AIM 620 Molecular Immunology

This course stresses the molecular components of the immune system. Specific topics include the genetics, synthesis, and structures of antibody

molecules and T-cell receptors, the molecular basis for the generation of diversity, genetic regulation of the immune response, structure and function of the major histocompatibility complex, and the kinetics of antibody-antigen interactions. This course will also consider the practical problems of antibody purification, determination of antibody affinity and avidity, preparation of antibody fragments, determination of antibody classes and subclasses, and the design of assays using enzyme-conjugated and radioactively labeled reagents. Cr 3.

AIM 621 Molecular Immunology Laboratory

In this laboratory course the student will purify, quantitate, and characterize human immunoglobulins utilizing a variety of biochemical techniques. Emphasis is on protein chemistry, with the student becoming familiar with precipitation techniques, methods of protein quantitation, chromatography (both high and low pressure), ELISA, radial immunodiffusion, several types of electrophoresis, Western blot and immunoassay. Introductory molecular biology lab pertinent to immunology is also included. Prerequisite: AIM 611 or permission of instructor. Cr 3.

AIM 630 Medical Immunology

This course stresses the medical relevance and application of immunology, both in the laboratory and in the clinic. Specific topics covered include assay formats and design, assay interpretation, new technology and instrumentation, the role of the immune system in protection, the interactions of the immune system with inflammation, as well as the diagnosis, pathologic mechanisms, and treatments of immunodeficiency, autoimmune, and lymphoproliferative diseases. Cr 3.

AIM 631 Medical Immunology Laboratory

Cr 3.

AIM 654 Hybridoma Methodology

This laboratory course covers basic concepts and techniques in hybridoma production, including: immunogen preparation; immunization; cell hybridization; hybrid screening by immunoassay, cell cloning, scale-up production; and antibody purification. Instructor's permission required. Cr 2.

AIM 665 Tissue Culture Techniques

This laboratory course covers basic concepts and techniques in mammalian cell culture, including: sterilization; cultivation of both suspension and monolayer; cryopreservation; and quality control procedures. Instructor's permission required. Cr 2.

AIM 690 Journal Club/Seminar

The Journal Club is intended to keep the par-

ticipants current in immunology and to instruct them in the techniques of evaluating scientific literature critically and clearly presenting scientific information. The seminar, directed by faculty members responsible for the corresponding core course material and including outside lectures from among the affiliates as well as other academic institutions, will provide the student with an opportunity to discuss practical applications of the core lecture material. Cr 1 per semester.

AIM 695 Externship

Cr var.

AIM 698 Thesis

Min.

Cr 6.

Courses in Epidemiology and Applied Biostatistics

AMS 535 Introduction to Epidemiologic Research

This course is intended to give students a basic foundation in principles for the conduction and interpretation of population-based studies of the distribution, etiology, and control of disease. Topics will include randomized experiments, non-randomized cohort studies, case-control studies, cross-sectional and ecological studies, causal inference, source of bias, and measures of effect. Recent publications from the epidemiologic and general medical literature will be used to illustrate the application of the concepts to specific epidemiologic issues. Cr 3.

AMS 545 Applied Biostatistical Analysis

This course is intended to give students a working understanding of the major types of biostatistical analysis used in laboratory sciences, clinical research, and public health. Topics will include hypothesis testing, estimation, descriptive statistics, crosstabulations and stratified analysis, life tables, multiple regression, and logistic regression. The course is designed primarily for students with little formal training in biostatistics, but may also prove valuable to other students who desire a course providing an integrated approach to diverse biostatistical techniques within an applied framework. Students will learn to manipulate datasets, analyze them, and interpret the results using the SAS software package. Cr 3.

AMS 578 Epidemiology of Infectious Disease

This course will provide an introduction to the epidemiologic basis for the prevention and control of communicable diseases through the study of specific infections including HIV/AIDS, tuberculosis, viral hepatitis, rabies, influenza, and

Lyme disease. The course will also include exercises on the investigation of acute disease outbreaks and discussions of immunization, institutional infection control, foodborne illnesses, and emerging infectious diseases. The course is open to advanced undergraduate and graduate students.

Cr 3.

AMS 580 AIDS: Scientific, Social, and Political Foundations

This course will approach HIV/AIDS from a multidisciplinary perspective. It is intended to provide a solid introduction to HIV/AIDS for persons who are likely to be confronting AIDS issues in their professional work. Scientific topics to be addressed include HIV virology, immunology, natural history, and transmission. Guest lecturers will also address psychological and sociological aspects of the epidemic as well as issues in law, ethics, education, and prevention strategies. The course is open to advanced undergraduate and graduate students.

Cr 3.

AMS 605 Principles of Clinical Epidemiology and Biostatistics

This course is intended for physicians and provides intensive discussion of important principles in designing, conducting, and analyzing clinical studies. Topics will include randomization, ethical issues, control of bias, analysis of cohort data, regression models, contingency tables, matched studies, and misuses of statistics. Students will present and discuss ongoing research projects.

Cr 3.

AMS 638 Practicum in Epidemiologic Research

This course is designed to provide students with

direct experience in the formulation of epidemiologic hypotheses and the analysis and interpretation of data. Each student will frame a research question that can be addressed using a dataset available on campus or elsewhere in Maine. With guidance from faculty, each student will conduct data analyses and will write a report in the format of a journal article. Prerequisites: AMS 535 and 545 or equivalent.

Cr 4.

AMS 673 Epidemiology and Prevention of Cancer

This course provides a comprehensive review and synthesis of epidemiologic studies of the causes of several of the most common forms of cancer in humans. The role of genetics, diet, smoking, hormones, occupation, and other factors will be considered. The public health implications of interventions to alter behavior and to remove environmental risk factors will also be discussed, as will epidemiologic issues in the reduction of mortality through screening for cancer. Prerequisite: AMS 535 or permission of instructor.

Cr 3.

AMS 677 Regression Models in the Health Sciences

This course will familiarize students with the use of regression models for the analysis of epidemiologic and other biomedical data. Topics will include multiple linear regression, logistic regression, log-linear models, proportional hazard models, Poisson regression, generalized linear models, goodness of fit, and analysis of residuals and other diagnostics. Students will work on individual projects and will learn to use the SAS software package for conducting the analyses. Prerequisite: AMS 545 or equivalent.

Cr 3.

Master of Manufacturing Management

Director: James W. Smith

Faculty are drawn from the School of Applied Science and the School of Business and include adjunct faculty as well

Program Description

The goal of the master's degree in manufacturing management program is to prepare individuals for leadership roles in manufacturing-focused operations. Manufacturing managers need to be familiar with the technological, financial, and human resource-based aspects of these operations. They need to be able to solve problems individually and collectively and to motivate others to do so. They must, ultimately, take responsibility for the cost-effective manufacture of quality products.

To achieve these objectives manufacturing managers need a thorough grounding in contemporary managerial practices. The master's in manufacturing management program is designed not just to acquaint students with these practices but, by intensive individual and group exercises, to develop competence in their use.

The program is an offering of the School of Applied Science. Faculty from other schools and colleges within USM and from the business and industrial community will participate as appropriate.

The program is designed to be accessible to part-time students. Only one ten-week, four-credit course is offered at a time. Students move through the program as a cohort, completing the 32-credit program in under two years. Because of this format and because it is important for students to form collaborative relationships as they progress through the program, it is important that they commit to completing the program on schedule.

Admission

The basic requirement for admission is a baccalaureate degree from an accredited college or university. Materials that need to be submitted include a completed application, transcripts of previous post-secondary work, three letters of recommendation including at least one from a current or former employer, a résumé, and an essay describing career/life goals relating to this program. In those cases where a decision cannot be made based on submitted materials, an interview will be required.

All candidates for admission are required to take the Graduate Management Admissions Test (GMAT). GMAT scores must be submitted before admission. Admission/rejection criteria are similar to those for the master of business administration, which are also described in this catalog. Potential applicants should refer to that section for specifics.

At least three years of professional experience in a manufacturing firm is desirable. Candidates should be proficient in mathematics, English composition and fundamentals of computing.

Test of English as a Foreign Language (TOEFL) score of at least 550 is required for students whose native language is not English.

Students may be admitted with certain conditions to be satisfied as stipulated in the letter of acceptance. An example of a condition is further preparation in mathematics or computer fundamentals.

Application and Application Deadline

Application materials may be obtained from the USM Office of Graduate Studies and Research and must be submitted to that office. The mailing address is 96 Falmouth Street, P.O. Box 9300, Portland, ME 04104-9300 and the telephone number is 780-4386.

Application deadline is July 31, 1998, for students entering in September 1998. By this deadline, all materials must have been received, including all transcripts, letters of recommendation, and GMAT scores. It is strongly urged that materials be submitted considerably in advance of the deadline to ensure sufficient time for an interview if needed. Admission decisions will be made monthly for those candidates whose applications are complete.

The Graduate Management Admission Test is scheduled at the University of Southern Maine three times a year. For information on deadline dates and registration for the Graduate Management Admission Test, contact the Testing and Assessment Center at 780-4383. It takes approximately six to eight weeks for test scores to be processed. Descriptive materials can also be obtained from the Graduate Studies and Research Office.

Program Requirements

MMM	610	Statistical Analysis for Manufacturing Management
MMM	620	Simulation/Optimization of Manufacturing Systems
MMM	630	Accounting for Manufacturing Management Decision Making
MMM	640	Design and Analysis
MMM	650	Planning and Decision Making
MMM	660	Quality Management
MMM	670	Leadership in Manufacturing Organizations
MMM	680	Risk, Strategy and Policy

All courses must be successfully completed in accordance with graduate policies and in the order described above. Because of the specialized nature of the courses and program, it is unlikely that other coursework can be substituted.

The incoming cohort will start the program with a two-day experiential learning experience at the University's facility in Freeport. The purpose of this experience is to reinforce the team nature of the program. Courses are offered in ten-

week time periods, generally weekday evenings with occasional weekend intensive sessions.

Collaborative learning, team projects, and use of instructional and communications technology will be integral to the delivery of the program. Students and their employers will be encouraged to bring real problems to the program to be studied and solved.

Program Policies

In addition to the general policies described in the Academic Policies chapter, specific policies of this program are as follows.

1. A student who receives a grade of D+ or lower in a course will be dismissed from the program.
2. Students must maintain a B average or better. A student whose average falls below this level will be placed on probation by the program director. The average must be restored to a B by the end of the next 9 credit hours. Failure to do so will result in dismissal from the program.
3. Students dismissed from the program will be given an exit interview. The purpose of this interview is to help the student understand in which areas improvement is needed to ensure a better probability of success in future academic work. Students who have been dismissed may reapply for admission to a future cohort. Successful remediation in areas identified in the exit interview will be a major factor in the readmission decision.
4. Students who withdraw from the program for any reason must reenter the program in the next cohort at the beginning of the corresponding term in which they withdrew.
5. A student who is admitted to a program may defer entrance until the following cohort.

Fees. This is a premium program with limited enrollment. Because of this, and other costs associated with program delivery, the fees are substantially greater than those for other graduate programs. For information, contact the office of the director at 780-5585.

MMM 610 Statistical Analysis for Manufacturing Management

This course focuses on developing the skills, thought processes, and analytical perspectives necessary to apply statistical tools, techniques, and conceptual frameworks to complex decision-making situations in the manufacturing arena.

Cr 4.

MMM 620 Simulation/Optimization of Manufacturing Systems

Computer-based simulation and mathematical optimization are explored as decision support tools useful to the manufacturing professional. Students apply diverse modeling procedures to problems frequently encountered in production system design, resource planning, inventory control, logistics, scheduling, and sequencing. Cr 4.

MMM 630 Accounting for Manufacturing Management Decision Making

This course focuses on developing the ability to evaluate and use accounting data in making manufacturing resource allocation decisions. Emphasis is placed upon decision-making techniques and control systems which use internal

accounting data and assist management in the implementation of corporate strategy. Cr 4.

MMM 640 Design and Analysis

This course is about facilities design and analysis, process design and analysis, product design and analysis, and the relationships among them. Concepts such as benchmarking, concurrent engineering, and design for manufacture are also included. Cr 4.

MMM 650 Planning and Decision Making

The objective of this course is to enable the student to plan manufacturing systems for the intermediate and short term. Topics include planning for manufacturing resources, the production data base, and the requirements planning approach. Cr 4.

MMM 660 Quality Management

Students learn about organization design and culture, group dynamics, diversity in the workplace, individual performance and well-being, organizational change, and many other organizational behavioral topics which help individuals to become more effective leaders. Cr 4.

MMM 680 Risk, Strategy and Policy

Policy issues related to the assessment and management of risk in the manufacturing arena are introduced. Government policy on safety and

the environment and alternate approaches to the management of risk are discussed. Strategic planning and role playing provide integration of program concepts.

Cr 4.

College of Arts and Sciences

Master of Arts in American and New England Studies

Director: Ardis Cameron

Professors: Conforti, Eastman, Grange, Maiman; *Associate Professors:* Cameron, Cassidy, Edney, Hamilton, Whitmore; *Assistant Professor:* Ryden

Program Description

New England has perhaps the richest cultural heritage of any American region. New England also has a special place in the American imagination; mythic New England embodies some of the most familiar American images. New England has even been called the national homeland. Though it is steeped in tradition, New England is nevertheless a region that has experienced dynamic change and progress. National developments such as nineteenth-century industrialization and mass immigration have frequently occurred first and had their greatest impact in New England.

American and New England Studies is both a regional and an American studies program. The program's focus is on New England, but the region is examined in the broad context of American social and cultural experience as a whole. In addition, American studies interdisciplinary approaches are applied to the examination of New England history, literature, art, architecture, material culture, and geography.

The American and New England Studies Program is committed to studying the traditional, the mythic, and the modern New England. The program seeks:

- to offer college graduates a challenging interdisciplinary program focusing on the study of the New England region;
- to emphasize the critical role of the arts, humanities, and social sciences in understanding New England and in interpreting its distinctiveness to the public;
- to integrate the study of regionalism into American studies;
- to create new opportunities for exchanges among scholars, professionals, and graduate students with common interests in American and New England studies.

Through courses, lectures, and conferences, the program explores New England's distinctiveness and examines the region's contributions to American culture as a whole.

Admission

Admission to the American and New England Studies Program is selective. The program seeks applicants who have a bachelor's degree with a record of academic achievement and who are committed to employing interdisciplinary approaches and materials in the study of New England's cultural heritage and distinctiveness. The program welcomes full-time and part-time students; courses are offered in the late afternoon and evening. All applications are reviewed by an admissions committee comprised of the director of American and New England Studies and faculty who teach in the program. Interviews may be required at the discretion of the Admissions Committee.

Application Materials

In addition to the materials described in the Admissions chapter, applicants for this program must submit:

1. Official scores for the Miller Analogies Test (MAT) or Graduate Record Examination (GRE).
2. Three letters of recommendation on standard application forms or stationery.

Application Deadline

The application deadline is March 15 for fall semester (September) and October 1 for spring semester (January).

Applications received after these deadlines may be considered on a space-available basis. Early acceptance may be considered at the request of the applicant and at the discretion of the Admissions Committee.

Program Policies

In addition to the general policies described in the Academic Policies chapter, specific policies of this program are as follows:

Admissions Credit Students who have not been officially admitted to the program may take courses for admissions credit. Normally, six admissions credits are the maximum allowed. The director of American and New England Studies must approve all requests for admissions credit.

Transfer Credit A student may transfer up to six credits into the American and New England Studies Program. To be considered for transfer credit, previous coursework must be interdisciplinary and must focus on America or New England. In addition, only coursework awarded a grade of B or better will be considered for transfer credit. The Admissions Committee will review all requests for transfer credit. Course materials should accompany these requests.

Time Limit Students must complete all requirements for the degree within six years from the date of first matriculation.

Program Requirements

The curriculum is unique; unlike other regional studies and interdisciplinary programs, the curriculum consists of courses that have been created specifically for the American and New England Studies master's degree and that integrate the arts, humanities, and social sciences. Students may pursue a 30-hour program that includes a thesis or project or they may follow a 36-hour track that does not include a thesis or project. Students who elect the non-thesis/project track must complete two research papers in elective courses.

Required Courses	30-Hour Program	Credit Hours
ANES 600	Creating New England, I	3
ANES 610	Creating New England, II	3
ANES 675	Seminar in American or New England Studies	3
ANES 690	Project	
	or	
ANES 695	Thesis	<u>6</u>
		15
Elective Courses		
Five courses chosen from ANES offerings		<u>15</u>
		30
Required Courses	36-Hour Program	Credit Hours
ANES 600	Creating New England, I	3
ANES 610	Creating New England, II	<u>3</u>
		6
Elective Courses		
Ten courses chosen from ANES offerings		<u>30</u>
		36

Both the 30-hour and the 36-hour program offer students opportunities to focus their coursework in particular areas: history, literature, material culture and the visual arts. In addition, the project and thesis offer students opportunities to demonstrate intellectual independence and creativity by developing programs of study that address individual interests.

ANES 600 Creating New England, I

This required core course examines the development of New England regional identity from the 17th to the mid-19th century. Drawing on interdisciplinary approaches and materials, the course focuses on how regional identity has been both historically grounded and culturally invented. Topics include: invention of New England as a second England; the Yankee character; the

New England town; the creation of regional traditions; and New England reform and cultural pluralism. Cr 3.

ANES 610 Creating New England, II

The second part of the required core sequence, this course continues the examination of New England regional identity from the mid-19th century to the present. Topics include: the colonial

revival; New England's working class and ethnic heritage; nostalgia; the regional revival of the 1920s and 30s; and regional identity and consumer culture. Cr 3.

ANES 615 Folklore and Region

This course will begin by introducing students briefly to the study of folklore, particularly in a regional context, and to the identification and analysis of folkloric "texts" broadly conceived. It will then proceed topically, examining regional folk culture as it relates to various of the elements that help comprise a regional identity: history, economic activity as it is constrained by the region, and the natural and humanly shaped physical environment. Attention will also be paid to variations in regional folk culture according to gender, ethnicity, and class. Each topic will include an extended examination of an example from New England as well as materials from other regions of the country. Cr 3.

ANES 620 Regional Writing and the Sense of Place

This course focuses on New England literature of place including fictional, historical, poetic, and autobiographical writing. It examines the subjective experience of place and the cultural perception and use of space. The course explores how memory, experience, and nostalgia connect individual and collective identity to place. It also offers some comparative perspectives on the sense of place in other American regions. Cr 3.

ANES 628 New England and the Sea

This course will examine the role of the sea in shaping New England society, culture, and thought. The course will focus on the "new maritime history"; literary and artistic responses to the sea; the economic importance of the sea for recreation and for the fishing industry; and efforts to preserve and interpret the region's maritime heritage. Cr 3.

ANES 629 Ethnicity in America

This course will explore the construction, maintenance, and meaning of ethnicity in the formation of American and especially New England culture and society. Focusing on the construction of "ethnicity," the course will historicize concepts of "racial" difference and explore how notions of race and ethnicity were sustained, reappropriated, contested, and resisted in popular culture. Films, minstrel shows, song sheets, and television programs will be highlighted. Cr 3.

ANES 630 The Culture of Consumption

Focusing on New England and the emergence of industrial society, this course will explore popular forms of leisure, pleasure, and consumer

culture in 19th- and 20th-century society. We will explore both popular writers such as P.T. Barnum and Edward Bellamy, as well as theorists as diverse as Thorstein Veblen and C. Wright Mills. Topics include: Victorian identity and consumption; the spa and the health club; rural peddlers; minstrelsy, burlesque, vaudeville, and melodrama; the rise of the department store; working-class style and the culture of wanting; advertising; the New England woman and the Newport belle; the tourist and the commodification of New England. Cr 3.

ANES 633 The Mapping of New England

A study of the history of construction and use of cartographic representations of New England and Maine, to the end of the nineteenth century. The basic theme running through the course is that of cartographic literacy and commercialism: who used the maps and for what purposes? The course is structured around those cartographic modes (specific combinations of geographic knowledge, technological practices, social institutions, and cultural expectations) which have been relevant for New England. The scope of the course will expand to address, when necessary, more general issues in European and North American cartographic history. Cr 3.

ANES 635 Art and New England Culture

This course will examine painting, prints, and photography from the 17th through the 19th centuries; it will focus on New England art and its place in American art history. Students will study style and subject matter and their relation to literature, thought, and social history. Central to this course is the consideration of how region is "imagined" in the visual arts and how these images shape regional and national culture. Topics include: "reading" colonial portraits; landscape painting and the commodification of nature; race, ethnicity, and regional types; Winslow Homer and the masculinization of region; and imaging the New England woman at the turn of the century. Cr 3.

ANES 638 Landscape, Culture, and Region

This course will examine the New England and American human landscapes as texts which can be read to reveal cultural attitudes, values, priorities, and experiences. Emphasis will be on the analysis of ordinary landscapes of the sort which surround us every day. The course will focus on typical landscape "settings" or "compositions," not necessarily on individual components within those landscapes: that is, domestic or residential landscapes, commercial landscapes, industrial landscapes, civic landscapes, historic landscapes, and so on. Cr 3.

ANES 641 Environment and Culture

This course is an interdisciplinary examination of the ways in which occupants of the North American continent, from the pre-contact period to the present, have conceived of and interacted with the natural environment. The history of human use of and attitudes toward the environment will be examined within a cultural context. Course materials will be drawn both from New England and from other regions of the country.

Cr 3.

ANES 644 Twentieth-Century New England Politics

This course examines the politics of New England since 1900, with emphasis on conflicts among the distinct subcultures (White Anglo Saxon Protestant, European-American, and African-American) which have given the region's politics its particular flavor. Special attention will be given to two dramatic political events—the Sacco-Vanzetti case and the Boston busing controversy—in which these conflicts played a significant role.

Cr 3.

ANES 645 Women in Public: Gender and the Social Landscape

This course will explore the gendered social geography of the “public” sphere as it emerged and took shape in 19th- and 20th-century America. How, and to what effect, were social spaces—including courtrooms, city streets, voting booths, parades, department stores, theaters, commercial amusements, tenement stoops, suburbs, parks, and certain spaces in the home—imagined, defined, and organized as masculine or as female space? We will look at the dense physical environment of the city but the course will also explore efforts, especially among New England writers, architects, and reformers, to re-script and reshape the gendered landscape of public culture and the social spheres that define it.

Cr 3.

ANES 647 The social Texture and Everyday Life of New England

This course investigates the social and mental textures of everyday life in New England. How did ordinary people experience and make sense of the world? How did 17th- and 18th-century villagers, 19th- and 20th-century seamen, utopians, midwives, peddlers, outworkers, squatters, itinerants, housewives, railroad porters, migrants, and immigrants organize their lives and invest it with meaning? What and how did the rural poor and the urban wage earner feed themselves and their families, arrange their households, build their homes, and, in general, make a life? The course will also emphasize methodologies for exploring the world of the “inarticulate.”

Cr 3.

ANES 648 No Place Like Home: Domestic Architecture and American Culture

This course will examine the physical form as well as the idea and image of “home” from the 17th through the 20th centuries. House designs and styles and their historic changes and diversity across class and geographic boundaries will be examined. Students will also analyze the idea of home in visual culture (paintings, prints, photography, popular illustrations, film) and written texts (prose, architectural pattern books, advice books, magazines).

Cr 3.

ANES 650 Topics in American and New England Studies

An in-depth study of a significant aspect of New England from an interdisciplinary perspective. Topics will vary from year to year.

Cr 3.

ANES 652 Native American Cultures of New England: From Contact to Confinement

Beginning with an examination of Native American cultures in New England on the eve of European contact, the course focuses on topics such as Native social and political patterns, land usage, subsistence strategies, material culture, dress, status, languages, world views, myths, rituals, and written oral traditions, and cosmologies. Particular attention will be paid to the construction of Native identities in the past as well as the present.

Cr 3.

ANES 655 Historical Archaeology of New England

An examination of the role of historical archaeology in interpreting the past. Several important topics in regional contemporary historical archaeology will be examined including: exploration and settlement during the contact period, landscape research and reconstruction, ethnicity and social inequality, subsistence and food-ways, material culture studies, and the relationship between culture and consumption.

Cr 3.

ANES 658 Seeing is Believing: Visual Culture of 20th-Century America

This course will look at the production and explosion of visual images in 20th-century America. Students will examine varied image types (advertising, film, painting, prints, photography, public art, television, and video) and how these images shape knowledge, experience, and culture. Topics include: the spectacle of city; images that sell; the meanings of abstract art; and documentary photography and surveillance.

Cr 3.

ANES 660 New England Autobiography

An analysis of the origins, development, and variety of autobiographical expression in New England. The course will focus on autobiographies

that illuminate broad aspects of regional history, culture, and identity. Cr 3.

ANES 665 Sex and Gender in New England

The course will explore the relationship between sex and gender and the formation of New England culture and society. Topics include: gender construction and the Salem witch trials; female iconography and the Revolution; the new woman and the Boston marriage; men and the strenuous life; and the role of gender in the design of New England women's colleges. Cr 3.

ANES 668 Writers of Northern New England

This course focuses on literature about the sub-region that Robert Frost referred to as "north of Boston." The course will examine writers who root their work in the landscape, culture, and history of Maine, New Hampshire, and Vermont. Considerable attention will be devoted to contemporary writing. Cr 3.

ANES 670 Public Culture

This course will examine the role of museums, preservationists, and collectors in shaping cultural identities and public memories in 19th- and 20th-century America. Topics will include: ethnographic collections and displays, fine arts museums and patrons, traditions of human display (such as 19th-century "freak shows"), history, anthropological and natural history muse-

ums, festivals, living history sites, and the narrative role of collections, artifacts, and museum design. Cr 3.

ANES 675 Seminar in American and New England Studies

Research on topics in American and New England Studies with opportunities to share problems and results. Cr 3.

ANES 685 Reading and Research

Open to advanced students with exceptional records in the program, this course offers opportunities for reading and research under the direction of a faculty member. The approval of the faculty member and the director is required. This course may be taken only once. Cr 3.

ANES 690 Project

Completion of a two-semester project that may be an independent project or that may combine independent study and work in a historical society, a museum, a cultural organization, or other public or private institution. In consultation with an advisor, the student defines and develops the project in relation to his or her particular interest in American and New England Studies. Cr 6.

ANES Thesis

The product of original research, the thesis should embody an interdisciplinary combination of approaches and/or materials. Cr 6.

***Graduate Certificate
in Applied Statistics***

Coordinator: Maurice J. Chabot

Professors: B.Gupta, S.Gupta; *Associate Professor:* M. El-Taha

The certificate in applied statistics is a departmental program for working professionals in southern Maine who need to use statistical methods in their work. The program can also serve those students who wish to join graduate programs elsewhere in the field of statistics or operations research. Our own upper level undergraduate students with sufficient statistics background can enhance their employability and improve their chances of acceptance into graduate programs by taking selected courses within this program. Students enrolled in the certificate program are not considered to be matriculated in a degree program.

Candidates should have a baccalaureate degree from an accredited institution; and should have completed one of the following two undergraduate USM courses or their equivalents:

MAT 380	Probability and Statistics
MAT 381	Introduction to Probability and Statistics

Candidates who have completed neither of these courses or their equivalents, and who have working knowledge of the topics covered in these courses, must seek permission from the program coordinator before entering the program.

Candidates interested in the program should contact the program coordinator.

Candidates must earn at least **15 credits** by completing the following courses with a cumulative GPA of at least 3.0. No more than **3 credits** can be transferred into the program for equivalent graduate courses completed elsewhere.

Required course: MAT 382 Statistical Inference

Any four of the following courses:

OPR 561	Deterministic Models in Operations Research
OPR 562	Stochastic Models in Operations Research
OPR 563/STA563	System Modeling and Simulation
STA 581	Statistical Quality Control
STA 582	Times Series Modeling
STA 583	Sampling Methods
STA 584	Design and Analysis of Experiments
STA 585	Regression Analysis
STA 586	Fundamentals of Biostatistics

OPR 561 Deterministic Models in Operations Research

Formulation and analysis of deterministic models in operations research; linear programming; integer programming, project management; network flows; dynamic programming; non-linear programming; game theory; group projects on practical problems from business and industry. Prerequisite: MAT 295 or permission of the instructor. Cr 3.

OPR/STA 562 Stochastic Models in Operations Research

Applications of probabilistic analysis to models involving uncertainty. Queueing theory: exponential models and extensions; work and cost identities. Inventory theory: the economic order quantity model, continuous review model, stationary analysis. Reliability theory: structure function, failure rate function, computing system reliability, repair models. Elements of dynamic programming and Markov decision theory. Introduction to simulation analysis. Prerequisite: MAT 380 or MAT 381. Cr 3.

OPR/STA 563 System Modeling and Simulation

Basic simulation methodology; general principles of model building, model validation and verification; random number generation; input and output analysis; simulation languages; applications to computer and communication networks, manufacturing, business and engineering will be considered; group projects on practical problems from business and industry. Prerequisite: MAT 380 or MAT 381 or permission of the instructor. Cr 3.

STA 581 Statistical Quality Control

Basic statistical methods useful in quality improvement: descriptive statistics, certain discrete and continuous distributions; methods and philosophy of statistical process control; control charts for attributes; control charts for variables; process capability analysis. Prerequisite: MAT

380 or MAT 381 or permission of the instructor.

Cr 3.

STA 582 Time Series Modeling

Objectives; examples and basic concepts; estimation and removal of trend/seasonality; fitting ARIMA models to time series data; parameter estimation in time domain; forecasting; introduction to frequency domain analysis of time series. Prerequisite: MAT 380 or MAT 381. Cr 3.

STA 583 Sampling Methods

Objectives: various sampling schemes such as simple random sampling, stratified sampling, systematic sampling, cluster and multistage sampling, PPS sampling; optimum sample size; use of auxiliary variables in sampling; ratio and regression estimates; sources of errors. Prerequisite: MAT 380 or MAT 381 or permission of the instructor. Cr 3.

STA 584 Design and Analysis of Experiments

Design and analysis of experiments with one or more factors: completely randomized design, randomized complete block designs, latin-squares; factorial experiments: 2^n factorial experiments, 3^n factorial experiments and $2^n \times 3^m$ factorial experiments: basic concepts of response surface methodology. Prerequisite: MAT 380 or MAT 381 or permission of the instructor. Cr 3.

STA 585 Regression Analysis

Certain concepts of data reduction; simple and multiple linear regression using matrices; selecting best regression model; residual analysis; analysis of variance and covariance; binary regression models; use of statistical packages such as SAS and MINITAB. Prerequisite: MAT 380 or MAT 381. Cr 3.

STA 586 Fundamentals of Biostatistics

The objectives of this course are to prepare students for careers in biostatistics; to provide a statistical analysis experience through the use of

computer packages in the area of health sciences; and to conduct meaningful research in health sciences. Topics to be covered include discrete and continuous probability models, confidence intervals and hypothesis testing, simple and multiple

linear regression, analysis of categorical data including logistic regression analysis; statistical package SAS will be extensively used throughout the course. Prerequisite: MAT 380 or MAT 381 or MAT 220. Cr 3.

School of Business

Dean: John M. Burt

Associate Dean: Richard A. Grover

Director of External Linkages and Partnerships: Sally M. Paterson

Master of Business Administration

Co-Director and Chair of the MBA Faculty: John J. Voyer

Co-Director and External Program Development: Valarie C. Lamont; *MBA*

Program Manager: Alice B. Cash; *Professor:* Andrews; *Associate Professors:* Artz, Clarey, Grover, Hillard, Manny, Violette, Voyer; *Assistant Professors:* Jackson, Jensen, Lowensohn, Munger, Rahman

Program Description

Established in 1964, 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. While emphasizing the development of a broad perspective, interpersonal skills, and analytical tools of general management, five concentrations are available. 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 foundation courses in order to gain the academic background required for the MBA core courses.

The School of Business has an enrollment of approximately 1,000 students in its undergraduate and graduate programs. 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 is tailored for working students with all courses offered in the late afternoon or evenings.

The School also houses three outreach centers which provide business research, training, and counseling services. Descriptions of the Center for Business and Economic Research, the Small Business Development Center, and the Institute for Real Estate Research and Education are provided after the MBA course descriptions.

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's 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, three letters of recommendation, and a candidate's record of successful business or professional experience. Fully admitted students must have a formula score of 1,100 or higher. (The formula is $(\text{GPA} \times 200) + \text{GMAT}$. The GPA will be computed twice—overall GPA and GPA with the first 60 credits removed. The higher of the two scores will be used in the calculation). For the purposes of computing this score, all undergraduate-level coursework, including courses taken after receipt of the bachelor's degree, is counted. Fully admitted students should have a minimum GMAT score of 500. Applicants whose formula score falls below 1,100 or whose GMAT is lower than 500, but who show evidence of exceptional (a) performance in outside activities, or (b) evidence of creativity and leadership, or (c) accomplishment in business may be granted full admission.

Conditional Admission Applicants whose formula score is between 950 and 1,100 but who show evidence of very good (a) performance in outside activities, or (b) evidence of creativity and leadership, or (c) accomplishment in business may be granted conditional admission. Applicants who would normally be granted full admission but about whom the Admissions Committee has ques-

tions regarding some aspect of the applicant's background (e.g., weak recommendations, low grades in key undergraduate courses) may be granted conditional admission. Applicants whose formula score is below 950 but whose GMAT score is 500 or greater and who show evidence of *exceptional* (a) performance in outside activities, or (b) evidence of creativity and leadership, or (c) accomplishment in business may be granted conditional admission. In all three types of cases, the applicant's Analytical Writing Score will be considered in the decision.

Applicants admitted conditionally will be required to complete a specified set of courses (either foundation, regular or both) with an overall "B" average or better. This specified set will normally contain 12 credits, but may be fewer, depending on the specifics of the case. Successful completion of the conditions will result in full admission to the program. Failure to complete the required conditions will result in dismissal from the program, unless there are extenuating circumstances.

Decisions about which courses conditionally admitted students must take will be made by the Admissions Committee, in consultation with appropriate faculty members. In some circumstances, conditionally admitted students may be counseled to take undergraduate equivalents either in lieu of or in addition to foundation courses.

Transient Students Students must send a written request to enroll in a course, including the rationale for taking the particular course. Students must submit transcripts from (a) all undergraduate institutions attended and (b) the graduate program in which she or he is enrolled. Students must have necessary prerequisites for the desired course. Students must submit a GMAT score. This requirement is waived for students in good standing enrolled in programs at AACSB accredited schools. Students whose programs use GRE, LSAT, MCAT or MAT (Miller Analogies Test) scores may submit those. Note: MAT scores are acceptable *only* for special students or non-matriculated student purposes, and may never be used as a substitute for the GMAT in the regular admission process.

Pursuant to USM policy, special students, like regular students, are expected to provide the program with a score from a standardized test. Students from programs that do not require any standardized test may be allowed to enroll, subject to *very* close scrutiny by the co-director. However, this will be done only in exceptional circumstances. Students in this situation may be asked to take the GMAT prior to being allowed to enroll, or may submit valid scores from other standardized tests they may have taken.

Students must arrange for the head of the home program to send a letter stating that the student is enrolled in good standing in the program, and also stating that the course will count toward earning the degree.

The program office will compute a formula score as in the case of regular applicants. Students following these procedures whose formula scores are 950 or higher and who have a "B" average in their home programs will be allowed by the co-director to enroll in courses, subject to permission of the instructor. All students in this group must sign a non-degree release (see below).

Non-matriculated Students All students wishing to enroll in MBA courses on a non-matriculated basis must follow the application process described for full admission, including submission of a GMAT or other standardized test score. However, consistent with that process, people who hold terminal degrees will not have to submit a standardized test score. Holders of these degrees normally will be allowed to enroll in MBA courses with few restrictions, subject to permission of the instructor and having taken the appropriate prerequisites. Decisions on this type of study may be made by the co-director, alone or in consultation with the Admissions Committee.

Others seeking to enroll in MBA courses will *not* normally be allowed to do so. Exceptions may be made if these prospective enrollees provide evidence of exceptional (a) performance in outside activities, (b) creativity and leadership, and (c) accomplishment in business. Decisions will be made by vote of the Admissions Committee. All students in this group must sign a non-degree release (see below).

Other USM Graduate Students 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 chair of the MBA faculty, have been satisfied. This privilege does not extend to graduate students *conditionally* admitted to other USM graduate programs. All students in this group must sign a non-degree release (see below).

Admitted students whose educational background is lacking the foundation courses listed under Program Requirements will have to complete satisfactorily each of these courses or their equivalents as stipulated in their letter of acceptance.

Written Communication Skills Students admitted with an Analytical Writing Score (AWS) of 4.0 or lower will be required to take a course or courses to improve skills in written communications in English.

Application Material

In addition to the materials described in the Admissions chapter, applicants for this program must submit:

1. A completed application. In the required essay applicants should, in addition to stating their reasons for wanting an MBA, make sure to touch on the following points, as applicable:

- a. Performance in outside activities
- b. Evidence of creativity and leadership
- c. Record of accomplishment in business

2. Official scores from the Graduate Management Admission Test (GMAT). (Note: Candidates with terminal degrees normally are not required to take the GMAT.)

3. Three letters of recommendation.

4. Test of English as a Foreign Language (TOEFL) score of at least 550 for students whose native language is not English.

Application materials may be obtained from the USM Office of Graduate Studies and Research. All applications should be returned to the USM Office of Graduate Studies and Research.

Application Deadline

Applications are reviewed on a rolling basis. Candidates are encouraged to complete applications by August 1 (for fall admission consideration) and December 1 (for spring admission consideration).

Program Policies

In addition to the general policies described in the Academic Policies chapter, specific policies of this program are as follows.

Deferred Admission An applicant admitted for full-time or part-time study must register for that semester for which he or she has been admitted. In certain circumstances, with a written request received prior to the start of the semester in which the student has been admitted, deferred admission will be granted to regularly admitted applicants upon the approval of the MBA director. In the event that no written request is received, a student is considered to have withdrawn from the program.

Transfer Credit 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. A grade of B (3.00) or better must be received in each course requested for transfer credit. To be accepted, the course also must be judged applicable to a student's program of study. A maximum of 15 semester hours of transfer credit may be accepted from AACSB-accredited programs. Up to nine semester hours of transfer credit may be accepted from a regionally accredited program. When possible, students should ascertain whether or not transfer credit will be granted by the School of Business before enrolling in a course at another institution.

First Enrollment An applicant admitted for full-time or part-time study must register in that semester for which he or she has been admitted.

Time Limit In order to be counted toward the MBA core and elective requirements, graduate coursework must be completed within six years of the date a student enrolls in his or her first course numbered MBA 610 or higher. Otherwise, coursework must be repeated.

Non-Degree Release Students taking courses on a non-matriculated basis must sign a release stating that they will not pursue an MBA from USM on the basis of accumulated non-matriculated courses, unless they gain admission through the formal admissions process described earlier.

Grade Policy All graduate courses numbered lower than MBA 610 must be completed with a minimum grade of C (2.00) in order to carry graduate degree credit. All graduate courses numbered MBA 610 or higher must be completed with a minimum grade of C- (1.67) in order to carry graduate degree credit. If a student receives a grade of D+ (1.33) or D (1.0) in a required course numbered MBA 610 or higher, the student must repeat the course. When a student repeats a course numbered MBA 610 or higher, 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) or D+ (1.67) or one grade of F (0.0) in courses numbered MBA 610 or higher will be dismissed 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 may be dismissed by the program director. Any student may appeal any dismissal decision in writing to the MBA Admissions Committee.

A student who has completed the program of study must have a cumulative grade point average of 3.00 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 of 600-level courses may be attempted in order to raise the cumulative grade point average to at least a 3.00.

Readmission A student who is dismissed from the MBA program may not be readmitted.

Special Policies 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, no more than nine credits used to fulfill requirements for that degree may be applied toward completion of the MBA degree.

Program Requirements

Foundation Courses

Credit Hours

0-18

MBA courses numbered below MBA 610 are not applicable toward the 30 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 included in the student's grade point average. However, any of these sub-610 courses in which a student earns less than a C grade (2.0) must be repeated.

Either a minimum grade of C (2.0) 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 sub-610 course requirement. Coursework from non-accredited institutions will be evaluated on an individual basis. Even after admission, students may take undergraduate equivalents to meet foundation course requirements. However, any undergraduate courses taken will not be included in the computation of the student's grade point average.

MBA 601 Economic Analysis

- A. An intensive survey of microeconomic theory 1.5
- B. An intensive survey of macroeconomic theory 1.5

MBA 602 Fundamentals of Accounting

- A. An intensive survey of financial accounting 1.5
- B. An intensive survey of management accounting 1.5

MBA 604 Probability and Statistics for Business Decision Making

3.0

MBA 605 Fundamentals of Managerial Finance

1.5

MBA 606 Management	3.0
MBA 607 Principles of Marketing	1.5
MBA 608 Operations Analysis	
A: Quantitative Business Analysis	1.5
B: Production/Operations Management	1.5

Computer applications skills All students must demonstrate computer skills.

This may be done in one of three ways:

1. A grade of C (2.0) from a regionally accredited institution of higher education in a computer skills course.
2. Successful completion of a computer application skills exemption exam.
3. A grade of C (2.0) in ABU 190, Introduction to Computers in Business.

All admitted students are required to participate in a one-day experiential learning exercise during the first year of enrollment. The experiential learning exercise is held in conjunction with MBA 606 in the fall semester. The exercise is geared toward developing a sense of community and enhanced communications and trust among the MBA students and faculty. Information on the exercise will be provided with the registration information to those students who enroll in MBA 606 and to those for whom MBA 606 is waived. There is a fee for this experience.

The master of business administration program at the University of Southern Maine is composed of 21 credit hours of core courses and 9 credit hours of elective/concentration courses. In addition, up to 18 credit hours of foundation courses may be waived depending on your previous academic background.

	<i>Credit Hours</i>
<i>Core Courses</i>	21.0

MBA 615 Ethical and Legal Issues in Business	3.0
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Select one three-credit course (not an independent study or cooperative education) from each of the following areas:

Accounting	3.0
Finance	3.0
Management	3.0
Marketing	3.0
Operations Analysis	3.0
MBA 680 Organizational Strategy and Planning	3.0

<i>Electives and Concentrations</i>	9.0
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Students may elect to concentrate in one of five areas: accounting, finance, management, marketing, or operations analysis. Please refer to the concentration area for specific course requirements. Students preferring not to concentrate may choose elective courses from one or more of the five areas. Graduate courses outside the School of Business may be taken with the approval of the graduate program co-director.

Cooperative Education Program

Students are encouraged to participate in cooperative education to experience on-the-job learning. Employment in a professional setting provides opportunities to apply and evaluate classroom learning, develop work-related skills, and explore careers. Credit may be received for paid or non-paid positions with new employers, or for new responsibilities with current employers. Credit is not granted for past work experience. Students are encouraged to contact employers to develop co-op positions, or they may learn of positions through the MBA program manager and the Office of Career Services and Cooperative Education. In a typical three-credit co-op experience, a student works a minimum of 140 hours on-site, and meets regularly with a faculty sponsor. The student negotiates a learning contract with the faculty sponsor that contains a job description, the student's learning goals, self-directed learning activities, and the evaluation process. Grading is pass/fail. Refer to MBA 695 for prerequisites and restrictions. For further information, contact the MBA program manager or the Office of Career Services and Cooperative Education.

Accounting

The accounting concentration is designed to meet the needs of students who hold an undergraduate degree in accounting and wish to broaden their analytical, technical, and interpersonal skills in business and accounting. The concentration is also available to those students without a significant accounting background who desire a more detailed exposure to the accounting discipline in preparation for career opportunities in accounting. A student with only an introductory exposure to financial and managerial accounting would need to take up to 15 hours of undergraduate prerequisites with a grade of C or higher in each course in addition to the nine hours of MBA accounting concentration courses.

Select one course from the following list to satisfy the 'area' requirement:

MBA 630	Management Accounting Systems
MBA 632	Financial Statement Reporting and Theory
MBA 633	Taxes and Management Decisions
MBA 634	Advanced Taxation
MBA 635	Advanced Auditing

Concentration: Select three courses in addition to the 'area' requirement. Select at least two courses from above list and not more than one course from the following:

MBA 691	Independent Study (in Accounting)
MBA 695	Cooperative Education (in Accounting)

Note: Additional undergraduate requirements *beyond* ACC 110 and 211 or MBA602:

MBA 620- none
MBA 632 - ACC 213, 301, and 302
MBA 633 - none
MBA 634 - ACC 313 or MBA633
MBA 635 - ACC 213,301, 302, 410
MBA 691 - TBD
MBA 695 - TBD

Finance

The finance concentration offers advanced financial training to professionals who want to specialize in the field of finance. Students choose electives in the areas of corporate, investments, institutions, and financial economics. Topics in international financial management are integrated throughout the finance curriculum. The program is designed to build on the MBA business core by providing a strong conceptual understanding of finance and to develop analytical and critical thinking skills. The finance concentration focuses on the application of financial tools to real world problems, technical competence in the various functions of finance, and professional responsibility and ethics.

Select one course from the following list to satisfy the 'area' requirement:

MBA 620	Financial Management
MBA 626	Advanced Corporate Finance
MBA 627	Investment Management
MBA 628	Financial Institutions

Concentration: Select three courses in addition to the 'area' requirement. Select at least two courses from the above list and not more than one course from the following:

MBA 629	Financial Economics
MBA 632	Financial Statement Reporting and Theory
MBA 691	Independent Study (in Finance)
MBA 695	Cooperative Education (in Finance)

Management

The management concentration integrates three major themes: self-discovery and awareness; building and maintaining effective work relationships with peers, followers, and leaders; and understanding, navigating, and changing the

collective entity known as the work organization. Particular sub-themes include working from the perspective of the individual as central, group as central, and organization as a whole as central; managing in a change environment; creative thinking and acting; and in-depth study of various current and emerging management topics.

Select one course from the following list to satisfy the 'area' requirement:

MBA 640	Organizational Analysis
MBA 642	Leadership
MBA 643	Innovation and Change
MBA 649	Current Topics and Management.
	Topics include but are not limited to:
	Strategic Human Resources Management
	Entrepreneurship and Business Formation
	The Learning Organization
	System Dynamics
	Technology in Management
	International Human Resources Management

Concentration: Select three courses in addition to the 'area' requirement.

Select at least two courses from the above list and not more than one course from the following:

MBA 650	Economics for Business Managers
MBA 668	Service Quality and Customer Satisfaction
MBA 691	Independent Study (in Management)
MBA 695	Cooperative Education (in Management)

Marketing

The goal of the marketing concentration is to give students an understanding of how a market-driven philosophy is translated into organizational practice. The concentration addresses the role of marketing in sustaining a competitive advantage in the marketplace, and the interrelationship of marketing and other functions in the organization. Other themes include the development, implementation, and assessment of marketing programs; an understanding of customer needs; and the building of customer relationships.

Select one course from the following list to satisfy the 'area' requirement:

MBA 660	Managerial Marketing
MBA 665	Consumer Behavior
MBA 668	Service Quality and Customer Satisfaction
MBA 669	Directed Project in Market Research

Concentration: Select three courses in addition to the 'area' requirement. Select at least two courses from the above list and not more than one course from the following:

MBA 630	Management Accounting Systems
MBA 640	Organizational Analysis
MBA 642	Leadership
MBA 643	Innovation and Change
MBA 649	Current Topics in Management
MBA 671	Quality Management: Systems, Strategies, and Tools
MBA 672	Supply Chain Management
MBA 674	Information Systems Management
MBA 676	Forecasting for Business Decision Making
MBA 691	Independent Study (in Marketing)
MBA 695	Cooperative Education (in Marketing)

Operations Analysis

The operations analysis concentration is designed for career-oriented management students interested in analytical decision making. Students develop the knowledge and tools necessary to maintain a systems perspective in problem solving that is consistent with the underlying operational focus of either service-related or manufacturing-based organizations.

The overarching objective of this concentration is to help students learn and apply the most useful quantitative and qualitative decision-making tools to a broad range of business planning and execution problems. Students apply state-of-the-art decision-making technologies to life-sized problems taken from regional businesses. Operations analysis students examine managerial issues crucial to these businesses while developing and reinforcing their ability to explore a variety of problem-solving techniques.

Select one course from the following list to satisfy the 'area' requirement:

MBA 671	Quality Management: Systems, Strategies, and Tools
MBA 672	Supply Chain Management
MBA 673	Business Systems Simulation
MBA 674	Information Systems Management
MBA 676	Forecasting for Business Decision Making
MBA 677	Advanced Topics in Quantitative Analysis

Concentration: Select three courses in addition to the 'area' requirement. Normally, at least two courses are selected from the above list and not more than one course from the following:

MBA 691	Independent Study (in Operations Analysis)
MBA 695	Cooperative Education (in Operations Analysis)

MBA 601 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 602 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 604 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 605 Fundamentals of Managerial Finance

An intensive review of the major areas in corporate finance. The materials are developed by using lectures, problems, cases and selected readings. Prerequisites: MBA 601 A&B, 602 A&B. Cr 1.5.

MBA 606 Management

This course covers the fundamentals of individual, group, and organizational dynamics. The course begins with an all-day experiential learning exercise (mini ropes course). Delivery of the

course then shifts to the classroom where class sessions focus on the fundamentals of management. The course concludes with an all-day organizational simulation designed to integrate management content areas into a realistic whole. Cr 3.

MBA 607 Principles of Marketing

This course presents and expands upon the necessity for organizations to sustain a market-driven philosophy. It addresses the need for understanding the environmental context within which the organization operates, anticipating and meeting the needs of different market segments, developing programs involving products or services, pricing, distribution and promotions, and monitoring the effectiveness of such programs in satisfying consumer needs and wants. Cr 1.5.

MBA 608A Quantitative Business Analysis

This course examines the role, perspective, and commonly used tools of quantitative analysis in business decision making. Emphasis is placed upon developing students' abilities to recognize the need for quantification; formulate business problems quantitatively; select and test computer-based decision-support system models; collect meaningful data; and interpret the implications of analysis results. Prerequisites: MBA 604. Cr 1.5.

MBA 608B Product and Operations Management

An examination of the role of operations within manufacturing and service organizations. Emphasis is placed upon recognizing operational opportunities and tradeoffs, employing quantitative and qualitative tools and decision-support systems to assist strategic and operational deci-

sion making. Topics include: quality management, capacity management, process design, facility location, layout, and production planning. Prerequisite: MBA 608A. Cr 1.5.

MBA 615 Ethical and Legal Issues in Business

This course examines business ethics and attempts to develop practical solutions to ethical issues which confront today's global managers. This course also examines legal issues including such topics as drug testing in the workplace, an employee's right to privacy, sexual harassment, and the rights and responsibilities of officers and directors. Prerequisites: MBA 601 A & B. 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 605. Cr 3.

MBA 626 Advanced Corporate Finance

Selected issues in corporate finance including valuation in both theory and practice, and current developments in financing instruments. In addition, students will use data from local/regional companies and generate case/teaching materials in the areas of valuation and profit planning. These written cases form the basis for course grades. Prerequisite: MBA 605. Cr 3.

MBA 627 Investment Management

An introduction to the various investment media and financial markets from the viewpoint of institutional investors. The course provides an in-depth analysis of the nature, problems, and process of evaluating securities and managing portfolios. Emphasis is placed on the structure of the securities markets, portfolio theory, and trading strategies of portfolio managers. Theoretical and empirical research addressing recent developments in portfolio management will be examined. Prerequisite: MBA 605. Cr 3.

MBA 628 Financial Institutions

This course is an intensive examination of the management of financial institutions including risk management, response to changes in regulations, and mergers and acquisitions. This will be accomplished through exposure to a wide assortment of current literature which examines financial institutions and markets on the domestic and international levels. The primary focus will be how managers of financial institutions manage different types of risks including: interest rate risk; credit risk; off-balance sheet risk; foreign

exchange risk; and liquidity risk. Prerequisite: MBA 605. Cr 3.

MBA 629 Financial Economics

Studies the economic principles and theories that govern financial markets. Examines the supply, demand, and flow of funds in allocating credit and distributing risks in the macrofinancial system. Studies the saving-investment process, the rationale for financial markets, and the role of financial intermediaries. Reviews important empirical and practical issues concerning the operation of financial markets. Special attention is given to the operation of money, capital, futures, foreign financial markets, and the impact of public policy on the structure and performance of financial markets. Selected topics are chosen from antitrust, affirmative action and employment discrimination, and business and property valuation. Prerequisites: MBA 601 A&B, MBA 605. Cr 3.

MBA 630 Management Accounting Systems

Examines how management accounting systems can be used to help businesses survive/succeed in an increasingly competitive global economy. Emphasis is on designing management accounting systems which: (1) support both the operational and strategic goals of the organization, (2) provide feedback to senior management about organizational units' performance, and (3) serve as the linkage between the strategy of the organization and the execution of that strategy in individual operating units. A blend of contemporary theory with practical applications and actual company experiences will be utilized to accomplish the course objectives. Prerequisites: MBA 601 A&B, MBA 602 A&B. Cr 3.

MBA 632 Financial Statement Reporting and Theory

This course presents financial statement reporting with an emphasis on the foundations and employment of generally accepted accounting principles. This course will provide a critical analysis of the strengths and deficiencies in financial reporting, including an overview of international variances. Particular emphasis will be placed upon reviewing financial statements and case studies. Controversial topics such as: asset impairment, accounting for intangibles, lease accounting, income tax accounting, contingent liabilities, marketable securities and debt issues and restructures, earnings per share computations, and accounting for non-monetary compensation will be covered, including an analysis of underlying theory and reasoning of authoritative pronouncements. Prerequisites: MBA 602 or equivalent; ACC 213, ACC 301, ACC 302, or permission of the instructor; literacy in computer usage. Cr 3.

MBA 633 Taxes and Management Decisions

Implications of current federal income tax laws and policies for business management decisions. Recognition of tax traps and potential tax savings. Prerequisite: MBA 602. Cr 3.

MBA 634 Advanced Taxation

An overview of tax laws concerning corporations, flow-through and exempt entities, trusts, and estates. Limited international applications and advanced individual tax issues will also be covered. Research skills will be developed and applied. Prerequisite: ACC 313. Cr 3.

MBA 635 Advanced Auditing

An advanced study of the professional practice of auditing. The role of theory, methodology, and technology involved in the auditing function which leads to the formation of an opinion on a set of financial statements. Includes an overview of audit evidence, standards, and professional ethics. Prerequisite: ACC 410. Cr 3.

MBA 640 Organizational Analysis

Focuses on understanding organizations through different images. Each image draws attention to different aspects of organizing, and leads to different understandings of, and ways of managing the organizing process. Shows how organization members can use these images as tools for informing and guiding action. Prerequisite: MBA 606. Cr 3.

MBA 642 Leadership

The course integrates five perspectives of leadership: individual differences and diversity; transactional leadership; power and politics; transformational leadership; and the physical, psychological, and spiritual dimensions of leader well-being. Prerequisite: MBA 606. Cr 3.

MBA 643 Innovation and Change

The design and application of change strategies to improve organizational effectiveness. The planned, systematic and long-range efforts to change "how an organization operates," with a 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 606. Cr 3.

MBA 649 Special Topics in Management: Introduction to System Dynamics

An examination of how the world can be understood through dynamic processes controlled by positive and negative feedback links. A general introduction to systems thinking, drawing on system dynamics, a computer-based technique for modeling systematically created problems. Requires an understanding of algebra. Prerequisite: MBA 606. Cr 3.

MBA 649 Special Topics in Management: 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 guests in a seminar format that requires student participation and assignments calling for research, report writing, and presentation. Prerequisite: MBA 606. Cr 3.

MBA 649 Special Topics in Management: Strategic Human Resource Management

This course offers an applications-oriented overview of the fundamental issues involved in the practice of human resource management. Human resource productivity and quality of work life are the principal foci of this course. Strategies to enhance productivity and quality of work life comprise the content of the course. Topics covered include: human resource planning, staffing, performance appraisal, compensation and reward system design, training and development, employee rights, employee-management relations, and the international dimension of personnel and human resource management. Prerequisite: MBA 606. Cr 3.

MBA 650 Economics for Business Managers

Provides MBA students with a broad intellectual grounding in economic theory and history, and equips them with a sophisticated grasp of economic issues and policies which define the economic context in which business acts. This grounding will be realized by consideration of the following topics; history of economics thought (including the current status of economic thought), macroeconomics (theory, policy, and performance) and the business cycle, and an historical and comparative approach to understand-

ing U.S. competitiveness. Prerequisites: MBA 601A&B. Cr 3.

MBA 660 Managerial Marketing

This course has a decision-based perspective, relying heavily on the case approach. It focuses on the logical development of market-driven strategies and assessment of their impact on other marketing functions within the organization. Students will gain experience in analyzing complex market behavior, recommending changes in marketing strategy, and articulating the development, implementation, and control of marketing plans. Prerequisite: MBA 602 A&B, MBA 607. Cr 3.

MBA 665 Consumer Behavior

Examines three aspects of consumer behavior: 1) cultural, sociological, and psychological influences on consumer motivation, 2) consumer acquisition of product information and formation of attitudes, and 3) the process consumers use to make consumption decisions. Implications for marketing strategy and segmentation will be discussed and students will apply marketing research techniques to analyze consumer behavior. Prerequisite: MBA 607. Cr 3.

MBA 668 Service Quality and Customer Satisfaction

This class examines the management of service quality. The primary focus is on how organizations identify customer requirements and assess service equality and satisfaction levels. To a lesser extent, the course covers service delivery systems, processes improvement, service marketing, and the interrelationship among operations, marketing, and human resource management. Prerequisite: MBA 607. Cr 3.

MBA 669 Directed Project in Marketing Research

This course provides a fundamental understanding of research methods from the perspective of the marketing manager. It involves the development of a research proposal, which entails the development of a research design, data collection methods, sampling, and data analysis, which will serve as the foundation for an experience-based project. Prerequisite: MBA 607. Cr 3.

MBA 671 Quality Management: Systems, Strategies, and Tools

This course treats all aspects of managing quality through examination of contemporary concepts and methods of design, control, and improvement. Emphasis is placed on developing the students' ability to apply both qualitative and quantitative aspects of this subject matter to quality-related issues found within their own environments. Prerequisites: MBA 608 A&B. Cr 3.

MBA 672 Supply Chain Management

This course examines supply chain concepts and current practice in the context of just-in-time production, total quality management, and continuous productivity improvement. System-oriented managerial tools, models, and techniques are considered for their value-adding potential. Directed projects of the students' choosing are used to address specific, company-based supply-chain problem situations. Prerequisites: MBA 608 A&B. Cr 3.

MBA 673 Business Systems Simulation

Computer simulation is used to examine the quantitative aspects of operational planning and control. Emphasis is placed on defining managerial problems quantitatively and modeling these problems using computer-based simulations. The course extends classic procedures in queueing theory, decision analysis, project planning, network and inventory analysis. Typically, the course analyzes problems concerning resource planning, inventory control, scheduling, sequencing, material handling, and reliability within logistics systems, production systems, and service-delivery systems. Prerequisites: MBA 608 A&B. Cr 3.

MBA 674 Information Systems Management

Frameworks and practical approaches for effectively managing information systems technology within business organizations. Students completing this course will be able to analyze complex information systems activities, evaluate their effectiveness, identify underlying causes of problems, and make reasonable recommendations for improving the situation. This course covers these major topics: planning, organization, new technology, project management, management control, organizational culture, and leadership as they relate to effective information systems. Prerequisites: MBA 608 A&B. Cr 3.

MBA 676 Forecasting for Business Decision Making

This course treats both the quantitative and qualitative aspects of forecasting for business decision making. With the help of PC-based software, tools and techniques for short, medium, and long-range forecasting are developed conceptually and exercised. Emphasis is placed upon developing the students' ability to apply this subject matter to situations relevant to their own work environments. Prerequisites: MBA 608 A&B. Cr 3.

MBA 677 Advanced Topics in Quantitative Analysis

This course introduces and applies advanced tools, techniques, and perspectives drawn from operations research and statistics. While concep-

tual frameworks are developed and mathematical foundations are presented, emphasis is placed upon developing the students' ability to identify, formulate, and solve complex real-world business problems. Prerequisites: MBA 608 A&B.

Cr 3.

MBA 680 Organizational Strategy

A study of how organizations form a coherent pattern to their actions over time. Emphasis on global strategy issues. Examines strategic tools such as strategic planning, competitive analysis, and the value chain. Examines processes that describe strategy formation in global, entrepreneurial, cultural, mature, diversified, innovative, and professional contexts. Prerequisites: MBA 615, completion of 'area' course in finance, management, and marketing.

Cr 3.

MBA 691 Independent Study

Selected topics in the areas of business and/or administration may be studied and researched on an independent basis. Enrollment is normally limited to MBA degree candidates. Prerequisites: permission of the instructor and the director of graduate programs.

Cr 1-3.

MBA 695 Cooperative Education

This cooperative education course is described in the preceding text. Prerequisites: completion of foundation courses, 3.0 GPA or higher, and permission of the instructor and MBA director. Enrollment is normally limited to MBA majors who have not completed their degree requirements. A maximum of three credits of MBA 695 may be used toward the degree.

Cr 1-3.

Master of Manufacturing Management

Director: James W. Smith

Faculty are drawn from the School of Applied Science and the School of Business and include adjunct faculty as well.

The goal of the master's degree in manufacturing management program is to prepare individuals for leadership roles in manufacturing-focused operations. Manufacturing managers need to be familiar with the technological, financial, and human resource-based aspects of these operations. They need to be able to solve problems individually and collectively and to motivate others to do so. They must, ultimately, take responsibility for the cost-effective manufacture of quality products.

To achieve these objectives manufacturing managers need a thorough grounding in contemporary managerial practices. The master's in manufacturing management program is designed not just to acquaint students with these practices but, by intensive individual and group exercises, to develop competence in their use.

The program is delivered collaboratively by the School of Applied Science and the School of Business. Faculty are drawn from these schools and from the business/industrial community. Faculty from other schools and colleges of the University will participate as appropriate.

The program is designed to be accessible to part-time students. Only one ten-week, four-credit course is offered at a time. Students move through the program as a cohort, completing the 32-credit program in under two years. Because of this format and because it is important for students to form collaborative relationships as they progress through the program, it is important that they commit to completing the program on schedule.

A complete description of the master of manufacturing management program is offered under the School of Applied Science section of this catalog.

Center for Business and Economic Research

Director: Richard J. Clarey

Senior Research Associates: B. Andrews, C. Colgan, J. Heath, D.B. Hodson, J. Jensen, R. McMahon

The Center for Business and Economic Research (CBER) was formed in 1974 as a business development and research project. CBER serves as a conduit for bringing the expertise and skills of Business School faculty to the challenges and opportunities facing the public and private sectors in Maine and operates within

the School of Business at the University of Southern Maine. CBER is dedicated to helping the state prosper.

Supported by both public and private sources, the Center offers assistance to economic development districts, profit and nonprofit organizations, and individuals through its Technical Assistance Center. Business services provided by CBER include market research, forecasting, strategic planning, quality management, and continuous improvement. The Center also conducts applied research involving the design and testing of innovative economic development strategies, feasibility studies, design and administration of surveys, economic modeling, and social and economic measurement, with recent focus on new ways to assist businesses and people. CBER is also responsible for the quarterly publication of *Maine Business Indicators*. For additional information, contact the Center for Business and Economic Research, University of Southern Maine, P.O. Box 9300, Portland, ME 04104-9300, (207) 780-4187.

Maine Small Business Development Centers

Director: Charles F. Davis

Established in 1977 as one of eight pilot programs across the country, the Maine Small Business Development Centers (MSBDC) provide comprehensive business assistance to emerging and existing companies statewide. Through a network of seven subcenters, sixteen satellite offices, and a staff of qualified, experienced business counselors, the MSBDC provides business diagnosis/analysis, one-on-one counseling, management information and business research services, seminars and conferences, and linkage with other economic development organizations. In addition, the MSBDC, in conjunction with the University of New Hampshire's Office of Economics Initiatives/NHSBDC, and the Vermont SBDC, produces the nationally recognized Northern New England Products Trade Show. This wholesale, juried trade show is held annually in Portland and features giftware and specialty food products manufactured in the three states. The MSBDC is a partnership of the U.S. Small Business Administration, the Maine Small Business Commission, the University of Southern Maine's School of Business, and local sponsoring organizations. More information can be found on the MSBDC's home page (<http://www.usm.maine.edu/~sbdc>) or by contacting the MSBDC State Office at the University of Southern Maine, P.O. Box 9300, Portland, ME 04104-9300; (207) 780-4420.

Institute for Real Estate Research and Education

Director: Valarie C. Lamont

The Institute for Real Estate Research and Education was established to address the statewide education and research needs of the real estate community. The Institute consists of two centers: The Center for Real Estate Education (CREE) was established in 1977 and provides prelicensing and continuing education courses in real estate, appraisal, and property management. A variety of media is used to address the educational needs of students, including live classroom, public television, video and correspondence courses. Selected real estate courses can be used for academic credit. The Center for Housing and Land Use was established in 1987 to conduct, disseminate, and promote research related to real estate issues in Maine and nationally. Research activities are undertaken at the local, county, regional, and state levels. Liaison is maintained with other government agencies, public and private associations, and other organizations which have an interest in public policy related to housing and land use. Persons interested in additional information may contact the Institute for Real Estate Research and Education, University of Southern Maine, 68 High St., Portland, ME 04101, (207) 874-6520.

College of Education and Human Development

Dean: Richard E. Barnes

Director of Professional Development Center: George C. Lyons

Director of Center for Educational Policy, Applied Research and Evaluation: David L. Silvernail

Director of Southern Maine Partnership: Lynne Miller

Director of Student Affairs and Administration: Jane Andrews

Admissions and Advising Office, 118 Bailey Hall, Gorham, Maine 04038,
Telephone: (207) 780-5306

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

Center for Educational Policy, Applied Research, and Evaluation, 118 Bailey Hall, Gorham, Maine 04038, Telephone: (207) 780-5044

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 lifestyles, and 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 and Human Development has been engaged in developing programs of study that prepare educators and human development practitioners for America's future. The College and allied programs in art, music, and applied science at the University of Southern Maine prepare professionals for teaching, counseling, school psychology, administration, and teach leadership. The content knowledge, skills, and understandings needed for these areas form the heart of our programs. Common to all of these fields is an emphasis on *Connections and Partnerships, Reflection and Critical Inquiry, Diversity, and Performance Assessment*.

Graduate Education Programs

Within the College of Education and Human Development, the Department of Professional Education, the Department of Teacher Education, and the Department of Human Resource Development offer the following graduate programs:

Department of Human Resource Development

Adult Education Program: concentrations in training and development, educational gerontology, English as a second language, community/international education, autobiographical learning, counseling, student affairs in higher education, and self-designed

Counselor Education Program: specialties in school counseling, mental health counseling (professional counseling and clinical counseling), rehabilitation counseling, and psychosocial rehabilitation counseling

School Psychology: prepares the student to be licensed as a school psychological service provider

Department of Professional Education

Educational Leadership Program: a focus on the preparation of leaders for educational settings

Industrial Education Program: develops professional competency in education and technology

Literacy Education Program: focuses on literacy development and instruction at all levels; includes ESL

Special Education Program: concentrates in elementary special education, secondary special education, gifted and talented education

Department of Teacher Education

Extended Teacher Education Program (ETEP): pre-service teacher preparation program, levels K-12, leading to a master of science in education with a concentration in teaching and learning

Graduate Degrees

The College of Education and Human Development offers the following degrees:

Master of Science in Education with concentrations in:

Educational Leadership

Industrial Education

Literacy Education

Teaching and Learning

Master of Science in Adult Education

Master of Science in Counseling

Master of Science in School Psychology

Master of Science in Special Education

Certificates of Advanced Study (CAS)

The College of Education and Human Development offers the following certificates of advanced study: Adult Learning; Counseling; Educational Leadership; English as a Second Language; and Literacy Education.

Admission to Degree Programs

Graduate programs seek candidates whose baccalaureate degree program, scholastic achievement, interest, motivation, and personal recommendations are indicative of success in graduate education studies and the chosen profession.

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 combined verbal and quantitative scores on the Graduate Record Examination (requirement waived for applicants already holding a graduate degree);
4. Test of English as a Foreign Language (TOEFL) score of at least 550 for students whose native language is not English.

Applicants who fail to meet the standards for #2 or #3 must enclose a letter asking for special consideration, in which they give evidence of ability to complete graduate studies successfully. Without such a letter, applications which fail to meet eligibility requirements may be automatically rejected.

Special admission requirements are listed for educational leadership, special education, teacher education, counselor education, adult education, and school psychology.

Interviews are required for all candidates applying for counselor education, adult education, and school psychology. Other programs may require interviews and/or writing samples as part of the application process.

Candidates approved for admission during the fall will matriculate in January while candidates approved for admission during the spring may choose to matriculate in May or September. Candidates approved for admission must register for at least one course in the semester in which they have been matriculated. Exceptions to this policy must be approved by the department chairperson for their program.

Please consult the following pages for details.

Application Materials for Degree Programs

Candidates for admission must file a complete application, including test scores, with the College of Education and Human Development's Admissions and Advising Office prior to the deadlines defined below.

A complete application contains the following items:

1. One completed copy of the application form.
2. Official transcripts of all previous college or university work (a transcript is official only if sent directly from the awarding institution).
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 and professional work. Recommendations should be returned directly to the Admissions and Advising Office, 118 Bailey Hall, Gorham, Maine 04038.
4. Official scores on the Miller Analogies Test or the Graduate Record Examination, taken within five years of application (scores are official only when sent directly from the testing service).
5. An application fee of \$25.00 (nonrefundable).

Admission to CAS Programs

Criteria for admission includes successful completion of a master's degree, strong recommendations, documentation of excellent written communication skills, and clarity and strength of professional goals.

Application Materials for CAS Programs

Candidates for admission must file the following materials with the College of Education and Human Development's Admissions and Advising Office prior to the deadlines specified below:

1. One completed copy of the CAS application form with \$25.00 application fee.
2. Official copies of college/university transcripts from all previous graduate work, including previous coursework at USM.
3. Three letters of recommendation attesting to the applicant's knowledge of current scholarship, capacity to connect theory and practice in posing and solving educational problems, achievement of excellence in educational practice, demonstrated capability and motivation to engage in advanced graduate study.
4. A brief essay (500-750 words) which includes the applicant's reason(s) for pursuing advanced graduate study, the proposed focus of the applicant's program, including specific courses if known, and an explanation of how the proposed plan of study fits the applicant's personal and professional goals.

Application Deadlines

It is the applicant's responsibility to ensure that all application materials are received by the Admissions and Advising Office prior to the application deadline. All materials relating to an application become the property of the University of Southern Maine.

All eligible applications are reviewed by a graduate education admissions committee which holds final responsibility for admission decisions. Applicants are notified by mail of admission decisions by the program or the Admissions and Advising Office.

The following application deadlines apply:

Degree Programs

Adult Education	February 1 and September 15
Counselor Education	February 1
Educational Leadership	February 1 and September 15
English as a Second Language	February 1 and September 15
Extended Teacher Education	January 8
Literacy Education	February 1 and September 15
School Psychology	February 1
Special Education	February 1 and September 15
Certificate of Advanced Study Programs	February 1 and September 15

Admissions Appeals

Applicants may appeal an admissions decision by submitting a written appeal to the department chair for the appropriate program within 30 days of notification of rejection.

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

Information that 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 dean of the College of Education and Human Development. Further appeals may be made to the associate provost for Graduate Studies and Research.

Graduate Assistantships

A limited number of assistantships are available for graduate education students. Assistants must carry a minimum of 6 credit hours per semester. Duties may involve teaching, research, advising, office administration, and supervision of student teachers.

Applications for assistantships are available from the Admissions and Advising Office, 118 Bailey Hall. The recommended application deadline is April 1.

Graduate Scholarships

The College of Education and Human Development has limited tuition scholarships available for continuing CEHD graduate students. Awards are based on academic merit, professional promise, and financial need. Recipients must be currently matriculated students intending to take 3 or more credits per semester during the following year.

Applications for graduate scholarships are available from the Admissions and Advising Office, 118 Bailey Hall, and are due March 1.

Program Policies

In addition to the general policies described in the Academic Policies chapter, specific policies for education programs are as follows:

Transfer Credit A maximum of six credit hours may be approved as transfer credit, provided these credits were earned no more than three years prior to matriculation and grades of B or better were received. Additional transfer credit may be approved by the appropriate program chair in unusual circumstances.

Admission Credit A maximum of six credits taken during the semester of application may be approved by the appropriate department chair for admission credit. These are in addition to transfer credits. In exceptional cases, students may petition to have additional credits accepted, upon admission to a program.

Undergraduate Credits Graduate credit will not be given for courses taken to fulfill undergraduate degree requirements. Any other advanced undergraduate-level courses must be approved in advance by appropriate College of Education and Human Development graduate faculty if those credits are to be applied to fulfill graduate program requirements.

Course Waivers Should a student wish to waive course requirements or request course substitutions, he or she must contact their faculty advisor to work out program changes. No more than 6 hours of academic credit may be waived or substituted.

Comprehensive Examination/Portfolio/Practicum/Project All degree students must complete a comprehensive examination/portfolio/practicum/project that will assess the student's breadth and depth of knowledge of the program field. Please consult each program of study for the specific information regarding comprehensives, portfolios, practica, or projects.

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.

Information on examination dates and comprehensive examination/portfolio/practicum registration is available from individual program offices.

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.

Teacher Education Program Policy The faculty of the College of Education and Human Development reserves the right of retaining only those students who, in the judgment of the faculty, satisfy the requirements of scholarship, maturity, and personal suitability for teaching.

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

Department of Human Resource Development

Chair: C.E. (Zark) Van Zandt

Professors: Brady, Murphy, Sutton, Van Zandt;

Associate Professors: Atkinson, Fall, Steege, Stevens, Vess;

Assistant Professors: Katsekas, Larson; *Instructors:* Bishop, Collins

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

Three graduate programs are offered by the Department: adult education, counselor education, and school psychology. The adult education program offers concentrations in training and development, educational gerontology, community/international education, English as a second language, autobiographical learning, counseling, and self-designed. The counselor education program offers specialties in school counseling; rehabilitation counseling; psychosocial rehabilitation counseling; and mental health counseling with specialties in professional counseling and clinical counseling. The Department also has the responsibility of teaching all graduate and undergraduate courses related to human development and the family.

Coursework is offered on the Gorham campus. Summer institutes and other professional development activities are offered on a regular basis.

Admission Requirements

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

Evidence in support of admission shall include:

1. Transcripts of all previous work.
2. Results of the Miller Analogies Test or the Graduate Record Examination (must be taken within five years of the application deadline date).
3. Three letters of recommendation addressing your potential for success in the program and as a counselor, adult educator, or school psychological examiner.
4. 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.

For the Adult Education and School Psychology Programs, the narrative should address the following subjects:

- a. relevant educational and experiential background;
- b. reasons for desiring to be in the helping professions;
- c. commitment to pursuing a career in adult education or school psychology;
- d. reasons for seeking admission to the program;
- e. a statement of personal philosophy;

f. a statement of personal strengths and weaknesses.

For the Counselor Education Program, the narrative shall be in the form of an autobiography that relates the applicant's experiences that have led to an interest in counseling and application to the counselor education program. It should be limited to three (3) typewritten, double-spaced pages.

5. The interview. The admissions process requires a formal interview. Candidates to be interviewed will be selected on the basis of the above information.

Adult Education and School Psychology Programs

During the interview, issues relating to the following topics will also be covered: a) self-awareness; b) awareness of social issues; c) awareness of others as persons; d) communication skills; and e) commitment to the field.

Counselor Education Program

Candidates to be interviewed will be rated on three areas of personal criteria: a) understanding of and commitment to the counseling field; b) self-awareness; and c) thinking skills/decision making.

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 the counselor education, adult education, or school psychology programs.

The application deadlines for the adult education program are September 15 and February 1 and an application must be complete as of those dates to be considered. Applications to the counselor education and school psychology programs will only be considered once each year and must be complete by the February 1 deadline. **Students must take responsibility to ensure that all admissions materials are submitted prior to the deadlines.** All materials sent in support of an application become the property of the Admissions and Advising office and will not be returned to the student.

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

All graduate students must successfully complete a comprehensive examination/portfolio. Please refer to the Department's student handbook for details.

Transfer Policy

Graduate students in master's level programs in adult education, counselor education, and/or school psychology at other universities may transfer into our program, bringing all of their credits with them, under the following minimum conditions:

1. The program they are transferring is an approved program from an accredited university.
2. They are in good standing and come with the recommendation of the program coordinator.
3. They undergo a successful interview process with our faculty.
4. They agree to take their final 21 hours, including the internship requirement, in the counselor education or school psychology program, or the final 12 hours, including directed study or internship and graduate seminar, in the adult education program.

Adult Education Program

The master of science in adult education, started in 1972, is the only graduate program of its kind 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.

Program Requirements

Basic Core (12 credits)		Credits
HRD 604	Self-Directed Education: Orientation	1
HRD 605	Self-Directed Education: Review and Focus	1
HRD 606	Self-Directed Education: Professional Applications	1
HRD 600	Adult Education and Human Resource Development	3
EDU 600	Research Methods and Techniques	3
HRD 661	Life Span Development II	3
		or
HRD 631	The Adult Learner	12

Middle Core (12 hours required)		Credits
HRD 661	Life Span Development II	3
Choose one of the following three counseling courses:		
HRD 620	Fundamentals of Counseling Skills	3
HRD 621	Fundamentals of Counseling Theories	
HRD 626	Group Process and Procedures	
HRD 630	Facilitating Adult Learning	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	<u>3</u>
		12

(A course such as 661 or 631 can be used only once to meet a program requirement.)

Field-Based Practice Courses (3 credits)	
HRD 687	Internship in Adult Education and Human Resource Development
HRD 698	Directed Study in Human Resource Development
HRD 699	Independent Study in Human Resource Development

Three credits of either HRD 687 or HRD 698 are required. A maximum of nine credits in self-designed coursework may be counted toward this degree.

	<u>3</u>
	27
Concentration Courses (9 credits)	9
Senior Course (3 credits)	
HRD 649	Capstone Seminar in Adult Education and Human Resource Development
	<u>3</u>
Total Program Credit Hours	39

Concentrations (3 courses, 9 credit hours)

1. Training and Development

HRD 608	Career Development
HRD 635	Training and Staff Development
HRD 640	Human Resource Development in Organizational Settings
HRD 671	Organizational Behavior
HRD 644	Organization Development
HRD 647	Work and Learning Institute

2. Educational Gerontology

HRD 557	Gerontology for Educators
HRD 558	Institute in Educational Gerontology (summer intensive): Aging and Life Review

- | | |
|---------|---|
| HRD 559 | Institute in Educational Gerontology (summer intensive): Aging, Death and Bereavement |
|---------|---|
3. Community/International Education

HRD 637	Community Education
HRD 641	Human Resource Development in Community Settings (HRD 631 and HRD 632 are required from the Middle Core for this concentration)
HRD 646	International Adult Education
 4. English as a Second Language

EDU 520	Reading Development and Instruction
EDU 560	Methods of Teaching Second Languages
EDU 561	Aspects of the English Language
EDU 562	The Multicultural Classroom
 5. Counseling

HRD 608	Career Development
HRD 620	Fundamentals of Counseling Skills
HRD 621	Fundamentals of Counseling Theories
HRD 626	Group Process and Procedures
HRD 690	Individual Counseling Practicum
 6. Autobiographical Learning

HRD 558	Summer Institute: Aging and Life Review
HRD 664	Culture, Tradition, and the Life Cycle
HRD 693	Life Stories and Personal Mythmaking
 7. Student Affairs in Higher Education

HRDX555	Introduction to Student Affairs in Higher Education
HRDX556	Summer Institute in Special Topics

Note: This concentration requires a variation in the basic and middle core requirements; please consult with your advisor.
 8. Self-Designed

If a concentration is not desired, students may select, with advisor approval, a number of elective courses around a theme from Departmental offerings or other graduate offerings at USM and in the University System.

Minimum number of credit hours required for the degree: 39

Special Note: Students in the adult education program are required to complete three credits (300 on-site hours) of HRD 687 (Internship in Adult Education and Human Resource Development) or HRD 698 (Directed Study in Human Resource Development). HRD 687 is designed to provide professional experience in the student's 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 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.

Certificate of Advanced Study in Adult Learning

The certificate of advanced study program in adult learning is designed for the experienced educator-teacher, counselor, administrator, program planner, or policy maker—who works with adults in any educational setting, or seeks to explore the use of adult learning strategies as an alternative educational approach for working with younger learners. The 30-credit-hour program emphasizes personal learning as a central theme, both as an approach to educator development and as a set of concepts and tools for working with adults in schools, businesses, social service agencies, hospitals, and other community organizations where adult education programs are planned and delivered. These personal learning tools include life story telling, portfolio development, narrative analysis, personal mythmaking, autobiography, journal writing, workbooks, essay writing, visualization and a variety of other educative techniques. This is an individualized, flexible program which permits students to apply personal learning tools to field-based projects.

Counselor Education Program

Over the past 30 years, the program has provided the state of Maine with approximately 1,000 counselors in school, rehabilitation, and mental health 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.

The master of science in counseling degree provides its graduates with the counseling knowledge and skills used in school, mental health, 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 specialties—school counseling, rehabilitation counseling, psychosocial rehabilitation counseling, and mental health counseling (professional counseling and clinical 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. 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.

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 application.
- 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. Knowledge of career development theory and techniques and skills in the development of information services.
- H. An integration of the academic and applied knowledge into a personal model of professional practice.
- I. A sensitivity to the unique perspectives of people living and working in a pluralistic society.
- J. A commitment to ethical practice in counseling.
- K. A professional identity within the counseling profession.

The rehabilitation counseling specialty holds accreditation from the Council on Rehabilitation Education (CORE). Graduates of this specialty are eligible to sit for the Certified Rehabilitation Counseling examination. The School counseling and mental health counseling specialties hold accreditation from the Council for the Accreditation of Counseling and Related Education Programs (CACREP). Graduates of this specialty are eligible to sit for the National Counselor Examination.

Program Prerequisite

HRD 500

Orientation to the Counseling and School Psychology Professions

This three-credit course is a prerequisite to the program (no credit toward degree). This course must be taken prior to matriculation or during the first semester following matriculation.

Program Requirements

Required Core Courses for All Specialties		Credit Hours
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
EDU 600	Research Methods and Techniques	<u>3</u>
		18
Additional Courses Required for Specific Specialties		
School Counseling		
HRD 603	Consultation	3
HRD 607	School Guidance Programs and Services	3
HRD 608	Career Development	3
HRD 609	The Practice of School Counseling	3
HRD 622	Counseling Children and Adolescents	3
HRD 627	Group Counseling	3
HRD 660	Life Span Development I	3
HRD 664	Tradition, Culture and the Life Cycle	3
HRD 686	Internship in Counselor Education (600 hours)	<u>6</u>
Total credit hours		48
Rehabilitation Counseling		
HRD 610	Introduction to Rehabilitation Services	3
HRD 611	Medical Aspects of Disability	3
HRD 612	Psychological Aspects of Disability	3
HRD 615	Vocational Aspects of Disability/Placement in Rehabilitation	3
HRD 641	HRD in Community Settings	3
HRD 661	Life Span Development II	3
HRD 686	Internship in Counselor Education (600 hours)	6
HRD 692	Advanced Individual Practicum	3
Electives		<u>3</u>
Total credit hours		48
Psychosocial Rehabilitation Counseling		
HRD 610	Introduction to Rehabilitation Services	3
HRD 611	Medical Aspects of Disability	3
HRD 612	Psychological Aspects of Disability	3
HRD 614	Psychosocial Rehabilitation	3
HRD 615	Vocational Aspects of Disability/Placement in Rehabilitation	3
HRD 641	HRD in Community Settings	3
HRD 661	Life Span Development II	3
HRD 686	Internship in Counselor Education (600 hours)	6
HRD 692	Advanced Individual Practicum	<u>3</u>
Total credit hours		48
Mental Health Counseling		
Professional Counseling Specialty		
HRD 608	Career Development	3
HRD 627	Group Counseling	3
HRD 641	HRD in Community Settings	3
HRD 660	Life Span Development I	3
HRD 664	Tradition, Culture and the Life Cycle	3
HRD 686	Internship in Counselor Education (600 hours)	6
Electives		<u>9</u>
Total credit hours		48
Clinical Counseling Specialty		
HRD 608	Career Development	3
HRD 617	Crisis Intervention	3
HRD 627	Group Counseling	3
HRD 641	HRD in Community Settings	3
HRD 655	Diagnosis and Treatment Planning	3

HRD 660	Life Span Development I	3
HRD 664	Tradition, Culture and the Life Cycle	3
HRD 671	Physical Bases of Behavior	3
HRD 674	Abnormal Psychology	3
HRD 686	Internship in Counselor Education (1,200 hours)	6
Electives		<u>9</u>
Total credit hours		60

Electives Graduate students in the counselor education program may select electives in the fields of rehabilitation, mental health, school counseling, or substance abuse. A variety of electives are offered each semester.

Substance Abuse Expertise

For those persons interested in working in the area of substance abuse, the counselor education program offers coursework which will enable students to obtain a Certificate in Substance Abuse Counseling. This expertise is available as part of either the professional counseling or clinical counseling specialties. The following courses are required for the certificate:

HRD 616	Psychopharmacology and Substance-Related Disorders
HRD 617	Crisis Intervention
HRD 618	Perspectives in Chemical Dependency
HRD 628	Introduction to Marriage and Family Counseling
HRD 686	Internship in Counselor Education (600 hours in an in-patient/out-patient substance abuse treatment facility)

Students who complete this certificate as part of their master's degree meet all academic requirements necessary to become a Licensed Alcohol and Drug Counselor (LADC) in Maine.

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 an opportunity to integrate formal coursework with on-the-job experience in selected helping institutions. A Department application must be completed at least one semester prior to a student's taking HRD 690. A Department application must also be completed at least one semester prior to each semester the student plans to take HRD 686.

Students may pursue a directed study or independent study project. HRD 698 (Directed Study in Human Resource Development) provides students with 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 Human Resource Development) provides students with the opportunity to pursue a library-based project independently, planning and exploring a topic of interest in the field of counselor education. Both opportunities are available for students who want to investigate knowledge that cannot be obtained by enrollment in the normal HRD curriculum.

Rehabilitation Counseling Specialty Note: The master's program in rehabilitation counseling is intended to promote quality rehabilitation services to individuals with disabilities through the education of rehabilitation professionals, the provision of service to rehabilitation organizations, and the sponsorship of rehabilitation related research and training. The graduate program's primary goal is to help students acquire the basic foundation, knowledge, skills, and experiences necessary to enter the profession of rehabilitation counseling and practice effectively as rehabilitation counselors.

The program's mission is achieved through pursuit of the following objectives:

- To teach students the basic philosophic tenets of rehabilitation, specifically:
 1. the value, worth, dignity, and capabilities of all individuals with disabilities;
 2. the right of all people to full participation in society with individuals in

- settings of their choice;
- 3. the treatment of individuals with disabilities as equal partners in the rehabilitation process;
- 4. the emphasis on societal, community, and professional change as much as individual change;
- 5. the importance of hope, individual capacity, community inclusion, support, and education; and
- 6. the adherence to the Code of Professional Ethics for Rehabilitation Counselors.

To provide the practical knowledge and skills so that students become competent rehabilitation counselors in a wide variety of settings through:

- 1. the use of class and community experiences to acquaint students with rehabilitation philosophies, methods, and organizations;
- 2. the exposure to varied, experiential and field-based learning in rehabilitation counseling.

To offer services, training, and research to area rehabilitation agencies, consumer groups, and professional organizations through faculty and students:

- 1. participation on local professional and consumer boards and committees;
- 2. presentation at local and regional conferences;
- 3. provision of local in-service training and consultations.

This master's degree program is designed to offer graduate studies that will provide students with the basic competencies to provide rehabilitation counseling to a broad range of individuals with disabilities in a variety of settings, such as state vocational rehabilitation facilities, independent living centers, rehabilitation hospitals, employment assistance programs, private industry, the veteran's administration, and private-for-profit rehabilitation companies.

Certificate of Advanced Study in Counseling

The certificate of advanced study program in counseling is designed to offer a broad range of professional development opportunities for practicing counselors. The overall goal of the certificate program is to enhance and enrich the counselor's educational foundation and to give focus to advanced knowledge and skills that will shape future professional practice. The CAS in counseling requires 30 credit hours of graduate coursework. Students will work cooperatively with faculty to self-design a certificate program that is substantive, developmental, and focused and may also take advantage of special certification options in counseling supervision, play therapy, substance abuse counseling, and psychosocial rehabilitation counseling.

School Psychology Program

The master of science in school psychology offers the student comprehensive studies that integrate general psychological content, methodology, and research with educational principles and practitioner skills. It is oriented toward acquisition of those technical and communication skills necessary for effective functioning as a school psychological examiner, as well as meeting Maine state certification requirements. A more detailed listing of program outcomes can be found in the program handbook. Through practicum training students are introduced to children's cognitive, social, and emotional behavior, instructional models and teaching styles; and the differential effects of teacher-student interactions and classroom climate. Students demonstrate competencies in assessment and interventions through completion of a comprehensive examination and a performance-based portfolio. During the final portion of the program, students participate in a 1,500 clock hour internship in the public schools, working under the supervision of a licensed Psychologist or a Certified School Psychological Service Provider. Individuals graduating from this program are eligible to sit for the examination leading to licensure as a psychological examiner by the Maine Board of Examiners of Psychologists, for certification as a nationally certified school psychologist, and to be certified by the Maine Department of Education as a school psychological service provider.

Program prerequisite: HRD 500, orientation to the counseling and school psychology professions. This one-credit course must be taken prior to matriculation or during the first semester following matriculation.

Program Requirements*			Credit Hours
	<i>Psychological Foundations</i>		
	HRD 660	Life Span Development I	3
	HRD 664	Culture, Tradition, and the Life Cycle	3
	HRD 671	Physical Bases of Behavior	3
	HRD 674	Abnormal Psychology	3
	HRD 676	Cognitive-Affective Bases of Behavior	<u>3</u>
			15
	<i>Educational Foundations</i>		
	SED 611	Nature and Needs of Learners Who Are Exceptional	3
	Elective within Graduate Professional Education		3
	<i>Assessment</i>		
	HRD 677	Cognitive and Psychoeducational Assessment (3 credits each of two consecutive semesters)	6
	HRD 678	Personality and Behavioral Assessment	6
	<i>Intervention</i>		
	HRD 603	Consultation	3
	HRD 622	Counseling Children and Adolescents	3
	HRD 626	Group Process & Procedures	3
	SED 615	Classroom & Behavior Management for Children Who Are Exceptional	3
	<i>Research</i>		
	EDU 600	Research Methods & Techniques	3
	HRD 659	Research Methods in Applied Intervention	3
	<i>Professional School Psychology</i>		
	HRD 670	Seminar in School Psychology	3
	SED 682	Special Education Law: Conflict and Resolution	3
	HRD 688	Internship in School Psychology: Assessment & Intervention (1,500 clock hours)	8
	HRD 694	Practicum in School Psychology	2
	HRD 697	Independent Study: Orientation to School Psychology	<u>1-3</u>
	Total Program Credit Hours		68-70
	*A course in tests and measurement must be taken prior to graduation (no credit toward degree).		

HRD 500 Orientation to the Counseling and School Psychology Professions

This introductory course is designed to acquaint individuals who are preparing to enter the counseling or school psychology professions with a broad overview of the professions' historical and theoretical foundations and to begin the development of a professional identity. This course should be taken prior to matriculation into the counselor education program (3 credits) or must be taken the first semester following matriculation. School psychology students (1 credit) must take this course during their first year. Cr 1-3.

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 area of family life that are relevant to educators. The course will provide a multi-disciplinary overview of major theories of family behavior, precursors to marital and family life, and the variability of family life across the life span. Consideration will be given to such issues as parenting styles, sibling relationships, effects of divorce, single-parent families, blended families, family violence, and substance use, abuse, and dependence within the family. Cr 3.

HRD 504 Women's Issues in Counseling

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 suf-

ficiently describe mental health problems today. Thus, the course focuses on the role of human services professionals in promoting and understanding these concepts. Cr 3.

HRD 530 Death, Dying and Bereavement

This course examines the phenomenon of death in modern society. Issues such as the meaning of death, the dying process, survivorship, suicide and how death affects individuals of various ages are treated. Special attention is paid to the role of the professional in death education.

Cr 3.

HRD 557 Gerontology for Educators

This introductory course examines key issues such as demographic trends, theories of aging, problems and opportunities in later-life learning, productive retirement, and educational opportunities for elders. A major goal of the course is to invite professional educators to explore human aging with an eye toward improving teaching and/or program development with elder populations.

Cr 3.

HRD 558 Summer Institute in Educational Gerontology: Aging and Life Review

This course examines the process of life review and its role in human aging. The phenomena of memory, imagination, and identity in later age will be examined. Participants will develop practical methods of facilitating life review of themselves and older clients.

Cr 3.

HRD 559 Summer Institute in Educational Gerontology: Aging, Death and Bereavement

This course examines the phenomenon of death in modern society, with a special emphasis on implications for older persons. Issues such as the meaning of death, the dying process, survivorship, and suicide are treated. Special attention is paid to the role of the professional in death education.

Cr 3.

HRD 600 Adult Education and Human Resource Development

This is the mandatory first course in the master's program in adult education. 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.

Cr 3.

HRD 602 Counseling Services for Students with Exceptional Needs

This course focuses on the role of the counselor in working with students who have special learning needs. Content will include an overview of the historical development of special education laws and regulations, methods for assessing

and identifying students with exceptional needs, guidance and counseling interventions and responsibilities, and parent consultation and community resource services.

Cr 3.

HRD 603 Consultation

This course is designed to introduce students to the practice of consultation within the counseling profession. 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: matriculated graduate student or permission of the professor.

Cr 3.

HRD 604 Self-Directed Education: Orientation

This is the first of three one-credit core courses that establish the foundational concepts and skills of self-directed education to be built on throughout the program. This course introduces new and interested students to the adult education program, and emphasizes educational planning, key books and themes, professional networking, reflective writing and development of a professional portfolio. This course is to be taken at the beginning of the program. Prerequisite: none.

Cr 1.

HRD 605 Self-Directed Education: Review and Focus

This is the second of three one-credit core courses that establish the foundational concepts and skills of self-directed education. The course is intended for students who have completed 12-18 hours of coursework in the program, to enable them to reflect upon and strengthen their interest in adult education and to plan the rest of their program, especially their field work and capstone seminar topic. Students will carry out explorations of resources that can enhance their professional knowledge and practice. Prerequisite: 12-18 hours of coursework, including HRD 604.

Cr 1.

HRD 606 Self-Directed Education: Professional Application

This is the second of three one-credit core courses that establish the foundational concepts and skills of self-directed education. The course is intended for students who have completed 30-36 hours of coursework, to prepare them for the comprehensive examination and future learning and work. Students will undertake outreach projects intended to help them transfer the concepts and skills of self-directed education to their professional careers and personal lives. Prerequisites: 30-36 hours of coursework, including HRD 604 and 605.

Cr 1.

HRD 607 School Guidance Programs and Services

This course is intended for those preparing to be school counselors. It is designed to consider the conceptual framework for comprehensive developmental guidance and counseling practices in elementary and secondary schools. Major areas of focus include program management, guidance curricula, individual planning and advising, and responsive services that are organized to meet the educational, personal, and career needs of students. Prerequisite: Open to matriculated graduate students in the counselor education program or by special permission of the instructor.

Cr 3.

HRD 608 Career Development

This course will examine the ways in which counselors assist people of all ages in their life/career development. Emphasis will be on understanding theories, information systems, materials, activities and techniques for fostering career awareness, exploration, decision making, and preparation. The interrelationships among work, family, and other life roles, including multicultural and gender issues, will also be addressed.

Cr 3.

HRD 609 The Practice of School Counseling

This course is an introduction to the school counseling profession and current issues in the field. Assignments will incorporate field experiences that promote reflective learning and skill building. Prerequisite: matriculated student or by permission of 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 will focus on physical disabilities from the perspective of rehabilitation counseling. Diagnostic methodology, prognosis, treatment, and causes will be examined as they relate to the rehabilitation plan, vocational placement, and/or potential for independent living.

Cr 3.

HRD 612 Psychological Aspects of Disability

This course will provide students with an understanding of the psychological elements related to the disability experience and its impact on the individual. The course will consider adjustments to disability from an individual's perspective with

attention given to the effect of society and culture on this process. Prerequisite: HRD 610 recommended.

Cr 3.

HRD 614 Principles of Psychosocial Rehabilitation

This course is designed to provide a foundation of knowledge and skills useful in habilitation and rehabilitation work with persons who have psychiatric disabilities. A major emphasis of this course will address skill development and attitudinal changes needed by the helper/counselor/caseworker in implementing a compensatory model vs. a medical model of treatment for persons with psychiatric disabilities. Text material, research articles, guest presentations, videos, community site visits, and "real play" through extensive dyad/small group student interaction, will be employed to promote learning. This course is required for the master's degree candidates in psychosocial rehabilitation, however, it is also open to persons interested in this innovative approach to mental illness.

Cr 3.

HRD 615 Vocational Aspects of Disability and Placement in Rehabilitation

This course will discuss job selection, analysis, modification, and development skills useful in the placement of persons with disabilities. The role, function, and technique of the rehabilitation counselor in job placement of persons with severe disabilities will be examined.

Cr 3.

HRD 616 Psychopharmacology and Substance-Related Disorders

This course provides participants from non-scientific backgrounds with a basic understanding of the effects of licit and illicit drugs. The role of these drugs in distorting brain chemistry and promoting substance-related disorders will be explored. Relationships between substance-related disorders and mental illnesses will be outlined. Interactions among the biological, psychological/emotional, and behavioral aspects of substance abuse will be examined in relation to symptom reduction and identification, intervention strategies, and the treatment of substance abusing clients.

Cr 3.

HRD 617 Crisis Intervention

This course introduces students to the theory and practice of crisis intervention. A theoretical perspective will be established, and short-term crisis counseling strategies will be examined. Several different crisis situations will be discussed in relationship to agencies or persons responsible for interventions. Prerequisites: HRD 620 or permission of the instructor.

Cr 3.

HRD 618 Perspectives on Chemical Dependency

This course will focus on the overall dynamics of chemical dependency and will serve as an introduction to understanding the various stages, processes, and effects of such addictions. Specific topics will include social and psychological dynamics of chemical dependency involving family, peers, and co-workers. The roles which professional educators, human service workers, and other helping professionals play in prevention, early intervention, and the various approaches to recovery and aftercare will be considered in depth. 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 case-work 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 nonverbal 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

This course is for those who are or will be engaged in counseling in an educational or mental health setting. Selected theories and related techniques will be closely examined. Research literature which has a bearing on the effectiveness and noneffectiveness of counseling will be reviewed. Cr 3.

HRD 622 Counseling Children and Adolescents

This course examines selected theories, related techniques, and skills for counseling children and adolescents. Attention will be given to examining personal philosophies about working with children and adolescents, and to the exploration of possible interventions for various counseling situations with these populations. Counselor effectiveness literature will be reviewed. Prerequisite:

matriculation in counselor education or school psychology and HRD 660, or permission of instructor. Cr 3.

HRD 623 Theories and Applications of Play Therapy: Summer Institute

This intensive, one-week summer institute presents an overview of the various theories of play therapy and examines them in the social, cultural, and economic contexts in which they were first implemented. Applications of the theories to special settings and with special populations will be explored. The course is an introductory course and is one of the required courses for becoming a registered play therapist. Prerequisite: none. Cr 3.

HRD 624 Child-Centered Play Therapy

This course is intended for those students who wish to use a child-centered theory of play therapy in counseling children. It presents the theoretical framework of a child-centered approach to working with children and begins the necessary training for skill development in using this theory. Prerequisites: HRD 620 and 622. Cr 3.

HRD 626 Group Process and Procedures

This course focuses on basic principles of group development and on dynamics of group interaction. The improvement of facilitative skills will be emphasized. Open to matriculated graduate students only. Cr 3.

HRD 627 Group Counseling

This course focuses on the development of concepts, attitudes, and skills necessary to lead counseling groups effectively in a variety of settings. Integration of group dynamics with counseling theory and group techniques is emphasized. Additionally, behavior of leader and participants will be analyzed to promote a deeper understanding of group roles and functions. Prerequisites: HRD 620 and 626 or equivalent. 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: matriculated graduate student or permission of the instructor. Cr 3.

HRD 629 Human Sexuality for Counselors

The aim of this course is to provide information about human sexuality, to heighten an individual's awareness of his/her own sexuality

and of sexual issues, and to integrate this knowledge to improve the overall effectiveness of 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: matriculated graduate student or permission of instructor. Cr 3.

HRD 630 Facilitating Adult Learning

This course examines the theory and practice of facilitating adult learning. The aim of the course is to develop a working knowledge of numerous approaches to facilitation including analysis of students' strengths and weaknesses in particular learning contexts. Special emphasis will be placed on developing skills in making presentations and leading group discussions. Cr 3.

HRD 631 The Adult Learner

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

HRD 632 Program Development in Adult Education and Human Resource Development

This course presents the models, techniques, and practices of constructing curricula and developing programs for adult learners as individuals, groups, and community organizations. The course covers both educational and training programs and emphasizes practice, skill acquisition, and competence in curriculum development for adults with diverse needs and in diverse learning environments. Cr 3.

HRD 633 Managing Adult Education and Human Resource Development

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

HRD 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 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 social trends bearing upon the quality of community life as context for analysis of community and community change; then, moves to community education process, program, and skills of delivery as studied in specific community settings. Cr 3.

HRD 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 to 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. Cr 3.

HRD 641 Human Resource Development in Community Settings

Schools, hospitals, employment agencies, welfare offices, home health agencies, rehabili-

tation 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. Cr 3.

HRD 644 Organization Development

This course introduces the student to the theory, concepts, practices, skills, and tools of organizational development. A variety of intervention strategies and techniques are explored. Emphasis is placed on the facilitator role in successful organizational interventions. Cr 3.

HRD 646 International Adult Education

This course will provide students with a broad overview of some of the historical roots and current practices of adult education internationally. It will provide information about significant leaders and agencies, as well as subjects such as: women's education, literacy, peace and human rights, research, the environment, and new technology as they relate to adult education. Cr 3.

HRD 647 Work and Learning Institute

The course examines concepts of the learning workplace, including double loop learning, team learning, action reflection learning and personal learning. Students explore how such learning strategies are being used to transform workplaces. Learning strategies are applied in actual work situations. This is an advanced level course intended primarily for students in the training and development concentration. Cr 3.

HRD 649 Seminar in Adult Education and Human Resource Development

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

HRD 655 Diagnosis and Treatment Planning

This course will focus on the current diagnostic systems and their use. The development of treatment plans and the use of related services will be reviewed. The role of assessment, intake interviews and reports will be examined. Prerequisites: HRD 660, 664, 671, and 674 or permission of the instructor. Cr 3.

HRD 656 Clinical Supervision

This course introduces students to the practice of clinical supervision within the counseling profession. The course will focus on such topics as the history of supervision, supervision models, tasks and functions of supervision, relationships in supervision, supervisory responsibilities, administration, cultural differences, and ethical standards. An organizing principle of this course will be to examine these topics from three perspectives: theoretical knowledge, skill development, and self-awareness. Prerequisite: master's degree in counseling or permission of the instructor. Cr 3.

HRD 659 Research Methods in Applied Interventions

The purpose of this course is to teach students methods of evaluating the efficacy of applied interventions, such as consultation, behavior management, social skills training, group counseling, and individual counseling. This course will emphasize the applications of single-case experimental designs and qualitative methods in evaluating the effectiveness of interventions. The course includes practical experiences in the design of behavioral assessment procedures and single case design methodologies. The initial 6 weeks of the course include practical experiences, while the remainder of class sessions are linked with the internship experiences. During the internship, students are expected to conduct an intervention and evaluate the intervention using single case design methods. Supervision of practical and internship experiences will be conducted by University faculty and the field-based certified school psychologist/certified school psychological service provider. Prerequisites: HRD 677, 678, 603, and 697 (or the equivalent experiences). Cr 3.

HRD 660 Life Span Development I

This course examines the process 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 is described. Cr 3.

HRD 661 Life Span Development II

This course 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 is described. Cr 3.

HRD 664 Culture, Tradition and the Life Cycle

This course focuses on multicultural awareness, and on understanding the cultural foundations of human growth and development. The theoretical and research emphasis will be on adulthood and aging, while developmental issues will focus on the role of cultural values and traditions across the entire life span. The course considers specific ethnic groups of northern New England to see how traditions might influence attitudes toward growth potential. Cr 3.

HRD 665 Psychological Measurement and Evaluation

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

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

HRD 670 Seminar in School Psychology

This course examines professional issues and concerns confronting the school psychology practitioner, including certification and licensure requirements, legal and ethical issues, roles and responsibilities, and relationships to general and special education. Prerequisite: permission of instructor. Cr 3.

HRD 671 Physical Bases of Behavior

This course is an examination of neural, endocrine, and response systems that are related to attention, motivation, emotion, memory, and psychological and/or learning disorders. It includes consideration of neurological and health problems of children and adolescents. Cr 3.

HRD 674 Abnormal Psychology

This course provides an overview of normal and abnormal personality development and functioning. Emphasis is on symptom patterns, etiology, family dynamics, school dynamics, socio-cultural factors, and treatment of developmental and behavioral disorders from early childhood through adulthood. Cr 3.

HRD 676 Cognitive-Affective Bases of Behavior

This course is an introduction to concepts and principles of conditioning and reinforcement, perception and attention, memory, information processing, and problem solution. The course includes the social/affective and linguistic bases of learning and cognition as well as consideration of the acquisition or loss of habit patterns. Cr 3.

HRD 677 Cognitive and Psychoeducational Assessment

This is an examination of the historical and theoretical bases of individual differences and intellectual and psychoeducational testing. Supervised practice in administration, scoring, interpretation, and reporting assessment results. Prerequisite: open to school psychology majors with permission of the instructor. Offered in a two-semester sequence, three credits each semester. Cr 6.

HRD 678 Personality and Behavioral Assessment

This course examines projective and non-projective techniques of evaluating personality characteristics and behavioral patterns of school-aged children. The course includes integration of evaluation results into a comprehensive diagnostic and descriptive personality profile. Prerequisites: HRD 677 and permission of instructor. Cr 6.

HRD 686 Internship in Counselor Education

This course will provide an opportunity for the student to integrate formal coursework with on-the-job experience in selected institutions. Prerequisite: HRD 690. Cr 1-12.

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 advisor. On approval, the intern completes his/her planned program under the supervision and evaluation of a responsible person for the internship assignment. Cr 1-9.

HRD 688 Internship in School Psychology

The 1,500-clock-hour internship is a full-time, supervised experience within a public school system. The internship provides the student with specific skills and competencies in the role and function of the school psychological examiner. Prerequisites: satisfactory completion of HRD 677, 678, 603, 694, and 697, or permission of instructor. Cr 8.

HRD 689 Internship in Clinical Supervision

This course will provide an opportunity to develop advanced skills in clinical supervision. Interns will be assigned to supervise master's level students in such courses as practicum and internship. Prerequisites: HRD 656 and 696. Cr 3.

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, videotapes, audio tapes and demonstrations are used in helping each student develop an integrated counseling style. Prerequisites: HRD 607, 620, 621, 622 (school counseling specialty only), and 626. 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, videotapes, 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 HRD 690. Prerequisite: approval of the supervising 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 emphasis will include the staffing of actual cases and a knowledge of community resources available to the counseling clientele. Prerequisite: HRD 690. Cr 3.

HRD 693 Life Stories and Personal Mythmaking

This course serves as a reflective, self-exploration component of the master's program for counselors, educators, administrators, and other service-providing professionals. It offers a theoretical and methodological framework for the in-depth study of individual lives. As a course in autobiographical reflection, the underlying assumption is that telling the stories of our lives is an important way of uncovering the personal truth in our lives. As a course in theory and research, it takes a broad look at the study of lives approach to defining personality development across time, drawing upon the writings of those from various disciplines who use personal narratives and life stories as primary documents. The seminar uses a workshop approach, combining autobiographical writing, personal mythmaking, writing circles, and life story interviews to better understand process and pattern in life cycle development from a subjective point of view. Cr 3.

HRD 694 Practicum in School Psychology

The 200-clock-hour practicum is a supervised experience within a public school or human service setting. The practicum provides the student with experiences in psychological assessment, consultation, and school psychology practice. Prerequisite: satisfactory completion of HRD 677, 678, 603, and 697; satisfactory completion of practica experiences interwoven within content courses. Prerequisite: permission of program faculty. Cr 2.

HRD 695 Practicum in Play Therapy

This course is an intensive supervised experience applying professional knowledge and skills in the practice of counseling children using play therapy techniques. Role playing, video tapes, and demonstrations are used in helping each student develop an integrated counseling style. Prerequisites: HRD 620, 622, 623, 624, and 690. Cr 3.

HRD 696 Practicum in Individual Supervision

This is an intensive supervised experience in applying specialized knowledge and skills to the practice of clinical supervision. Students will be assigned supervisees and through observation, audio/video tapes, and co-counseling, will both supervise and be supervised. Prerequisite: HRD 656 and matriculation in CAS programs. Cr 3.

HRD 697 Independent Study: Orientation to School Psychology

This course is designed to provide students with an orientation to the role and function of the school psychologist and to orient the student to the delivery of regular education, special education, and psychological services within school settings. Completion of HRD 697 is required prior to beginning HRD 688 Internship in School Psychology.

Cr 1-3.

HRD 688 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 registration.

Cr 1-6.

Department of Professional Education

Chair: Margo Wood

Professors: Capelluti, Cohen, Lyons, Miller, O'Donnell, Silvermail, Wood;
Associate Professors: Amoroso, Barnes, Broyles, Curry, Goldsberry, Nannay, Rees, Zaner; *Assistant Professors:* Bazinet, Nye; *Adjunct Assistant Professor:* Bouchard

Educational Leadership Program

The master of science in education degree in educational leadership focuses on the preparation of leaders for educational settings that promote equal learning opportunities for all students. The 39-credit program of study is designed to develop general leadership perspectives and specific technical skills for people assuming roles as principals, special education administrators, or teacher leaders.

Special Admission Requirements

In addition to the general requirements of the College, candidates should provide evidence of: strong overall undergraduate performance; professional experience (with preference given to those candidates with three or more years of teaching and evidence of successful leadership experience in school settings); a well-written, thoughtful personal statement; recommendations from persons able to comment from direct knowledge of the applicant's potential for success as a building administrator or instructional leader; other related academic or professional experiences.

Programs of Study

The educational leadership program is divided into two strands, both of which begin with a core of four common courses and then divide into two separate programs of study that focus on either administrative leadership or teacher leadership. Graduates of the educational leadership program will be able to:

1. evaluate research and use it as a tool to improve educational practice;
2. analyze and understand teaching as a science, an art and a craft and develop strategies for its improvement;
3. plan, implement, and evaluate programs of curriculum instruction that promote learning for all students;
4. establish clear learning standards and multiple forms of assessment of student learning;
5. work effectively as a member of a team and as a collaborative change agent;
6. demonstrate reflective practice tools, strategies and habits of mind; and
7. utilize appropriate communication when interacting with the internal and external environments.

The common core courses are:

EDU 600	Research Methods
EDU 603	Analysis of Teaching
EDU 604	Curriculum Development
EDU 605	Testing and Assessment

Administrative Leadership Strand

The administrative leadership strand leads to certification in Maine as a building principal or special education administrator. In addition to the common outcomes, graduates of the program will be able to:

- understand the culture of schools, leadership theories, and the impact of the leadership function;
- assess school climate and culture and develop a positive organizational environment for adult and student learning;
- understand the politics of decision making and how to make decisions that promote the school-wide agenda for learning;
- fulfill the daily operations and management requirements of the principalship;
- understand legal constraints and precedents which dictate educational policy and practice;
- supervise and evaluate teacher performance and provide positive mechanisms for the improvement of practice;
- understand and apply knowledge about adult learning and teacher development.

In addition to the four core courses, degree candidates complete the following courses:

EDU 670	Introduction to Administration
EDU 671	Organizational Behavior
EDU 672	Political Basis for Decision Making
EDU 677	Seminar in School Management
EDU 678	School Law
EDU 679	Evaluation and Supervision
EDU 680	Staff Development
EDU 685	Internship (a two-semester course)

Special Education Administration

Students seeking certification in special education administration take the following courses:

EDU 600	Research Methods
EDU 603	Analysis of Teaching
SED 618	Programming for Learners with Special Needs
EDU 670	Introduction to Administration or
SED 684	Administration in Special Education
EDU 671	Organizational Behavior
EDU 672	Political Basis for Decision Making
EDU 677	Seminar in School Management
EDU 678	School Law
EDU 679	Evaluation and Supervision
EDU 680	Staff Development
EDU 682	Special Education Law: Conflict and Resolution
EDUX 686	Internship in Special Education Administration (a two-semester course)

Teacher Leadership Strand

The teacher leadership strand prepares educators for roles as team leaders, staff development specialists, curriculum developers, and lead teachers. Students may enroll in a concentration leading to certification as a curriculum coordinator or middle level teacher in Maine. In addition to the common outcomes, graduates of the teacher leadership strand will be able to:

- evaluate the societal values, trends, and issues that impact upon education;
- conduct classroom research using both qualitative and quantitative methods;

- c) demonstrate expertise in an area of concentration relevant to their own setting; and
- d) complete extensive action research projects drawing upon multiple resources and strategies.

In addition to the four core courses, candidates complete the following courses:

EDU 610	Critical Issues in Teaching and Learning
EDU 601	Naturalistic Inquiry and Qualitative Research
EDU 612	Practicum/Seminar (a two-semester capstone)

Students complete an additional 15 credit hours in a concentration of their choice. The following are approved concentrations:

American and New England Studies Concentration

ANES 600 Creating New England I

ANES 610 Creating New England II

3 credit seminar on development of interdisciplinary curriculum

Two courses from the American and New England Studies graduate program, selected with the advisor's approval.

Middle Level Concentration*

EDU 514 Improving Teaching in Content Areas Through Literacy

EDU 615 Middle Level Curriculum and Organization

EDU 617 Teaching in the Middle Level School

EDU 619 Special Topics in Middle Level Education

HRD 669 Adolescent Development

Curriculum Concentration*

EDU 671 Organizational Behavior

EDU 679 Evaluation and Supervision of School Personnel

EDU 680 Staff Development

One additional curriculum course

One HRD course such as

HRD 661 Life Span Development II

HRD 626 Group Process/Procedures

HRD 631 The Adult Learner

* These concentrations lead to certification and endorsements in Maine.

Students may also self-design individual concentrations under the supervision and with the approval of their advisors.

Assistant Principal Certificate Program

Part of the administrative leadership strand of the educational leadership program is the assistant principal certificate program, designed to meet the state requirements for a Maine assistant principal's certificate and to provide a foundation for graduate work in educational administration. This 12-credit program will consist of four courses, offered over a 14-month period:

EDU 670 Introduction to Administration

EDU 671 Organizational Behavior

EDU 678 School Law

EDU 679 Evaluation and Supervision

Courses may be taken in any sequence. At the conclusion of the certificate program, students will not only have satisfied state requirements for a Maine assistant principal's certificate but will have completed a significant part of the entry and foundation coursework for a master's degree in educational administration. In addition, they will receive USM certificates of program completion which can be cited on résumés and vitae. Although credits from the certificate program may be transferable to a master's program, students who wish to matriculate in the master's program must apply separately for admission to the graduate program.

Admission Requirements

1. Bachelor's degree
2. Experience in public and private elementary or secondary education.
3. Completed application materials, which include:
 - a) Completed assistant principal certificate program application and \$10 registration fee;
 - b) A brief explanation of the time frame in which you plan to complete the certificate program;
 - c) Current résumé.

Certificates of Advanced Study in Educational Leadership

The certificate of advanced study program in educational leadership is designed to meet the needs of practicing educators, including teachers, principals, curriculum directors, and superintendents, who are interested in pursuing advanced academic work in educational reform and leadership. The CAS requires 30 credit hours of graduate coursework beyond the master's degree, including a capstone experience. Students are engaged in careful reading of research and scholarship, oral and written presentations, and action research. As a result of completing this program, students will have demonstrated: self-assessment and reflective practice tools, skills, and habits of mind; research design methodological decision-making skills; advanced oral and written communication skills; knowledge of current scholarship in educational reform and leadership; and capacity for connecting theory and practice in posing and solving educational problems. Maine certification as a principal, assistant principal, or curriculum coordinator may be earned through the CAS program.

Industrial Education Program

Students will be admitted to the industrial/technology education program as a cohort group for the three-year cycle of coursework. For information about the next program cycle, please contact the coordinator of Technology Education, Department of Technology, USM, Gorham, Maine 04038, telephone 780-5450.

The primary purpose of the master of science in education degree in industrial education is to develop the professional and personal competencies of industrial arts/technology education and vocational/occupational (trade and industry) teachers so they may successfully progress in their chosen field. Program experiences are designed to assist students in becoming change agents committed to improving the quality of education and life for the citizens of today and tomorrow.

The industrial education graduate program at the University of Southern Maine is concerned with the development of professional competencies in education and technology. Specifically, upon graduation, the students will be able to:

1. exhibit an acceptable degree of professional competence and proficiency essential for meeting educational, social, and technological challenges;
2. explain how industrial/technology education affects the development of learners in a contemporary technological culture;
3. analyze and evaluate recent issues and innovations in industry and technology and initiate curriculum revision accordingly;
4. interpret and initiate scholarly research in industrial/technology education and utilize the results of research for professional development;
5. explain the historical development, cultural impact, and projected future implications of technology on society.

Program of Study

The industrial education program requires a minimum of 33 credit hours of study. The program of study includes the following:

Core Courses (21 credit hours)

EDU 600	Research Methods and Techniques
EDU 605	Testing and Assessment
EDU 610	Critical Issues in Teaching and Learning
ITE 650	Technology: Its Evolution and Social Impact
ITE 651	Curriculum Trends in Industrial/Technology Education

ITE 653A&B Contemporary Problems/Technical
Developments in Selected Technologies
(Directed Study)

Electives (6 credit hours)

Students will take a minimum of 6 graduate credit hours in coursework selected from professional education programs with the consent of their advisors.
Capstone Experience (6 credit hours)

Students will complete a minimum of 6 credit hours through ITE 655 Practicum/Seminar or through a master's thesis.

Admission Requirements

The requirements stated in the Academic Policies chapter and those identified under the College of Education and Human Development section will apply to all industrial education graduate students. A candidate's undergraduate background should be in the field of industrial education. Those seeking admission with a degree in another discipline will be considered on an individual basis by the Department of Technology graduate faculty.

Literacy Education Program

The master of science in education degree in literacy education provides students with a sound theoretical and empirical knowledge base relating to literacy acquisition. The purpose of the program is to enable students to become informed decision makers who are capable of designing and implementing appropriate up-to-date instruction in reading and writing at all levels. Participants will acquire the knowledge and skills necessary to become effective advocates for improving literacy instruction in their schools. The program is designed for classroom teachers, literacy specialists, and other experienced educators whose primary responsibility is helping students to become competent language users. The master of science in education in literacy education requires 33 hours of coursework and successful completion of the comprehensive examination. Students' performance in coursework and practical is reviewed prior to enrollment in the clinical experience, EDU 529. A positive evaluation by faculty is a prerequisite to enrollment in this final phase of the program.

Program of Study

Required Courses (33 credit hours)

EDU 510	The Writing Process
EDU 520	Reading Development and Instruction
EDU 607	Teacher Research in Literacy
EDU 511	Children's Literature or
EDU 513	Adolescent Literature
EDU 514	Improving Teaching in Content Areas Through Literacy
EDU 622	Designing and Managing Literacy Instruction, PS-3 or
EDU 630	Designing and Managing Literacy Instruction, 4-8
EDU 621	Literacy Problems: Assessment and Instruction
EDU 560	Methods of Teaching Second Languages
EDU 639	Practicum in Literacy Education
EDU 634	Seminar in Literacy Research
Additional offering	
EDU 633	Special Applications in Literacy

***Certificate of Advanced
Study in Literacy
Education***

The certificate of advanced study program in literacy education is designed to meet the needs of classroom teachers, administrators, and other educators who want to pursue advanced graduate study in literacy education and related areas. The CAS requires 30 credit hours of graduate coursework, including a capstone experience. Students may design a program to suit their needs for ad-

vanced study. The program will vary, depending on the focus of the master's degree and the student's goals. Participants will have considerable choice in self-designing coursework and projects and will work closely with a faculty advisor. Maine certification as a literacy specialist may be earned through the CAS program.

Literacy Education Program, ESL Concentration

The master of science in education degree in literacy education with a concentration in English as a second language provides students with the theoretical and empirical knowledge base related to language acquisition for limited English proficient (LEP) learners. The emphasis is on literacy development in the second language and is designed to provide classroom practitioners with the skills to assess language deficiencies properly and implement instruction to improve learner proficiency for competent second language use.

Program of Study

Required Core Courses (27 credits)

EDU 510	The Writing Process*
EDU 514	Improving Teaching in Content Areas Through Literacy
EDU 520	Reading Development and Instruction*
EDU 560	Methods of Teaching Second Languages*
EDU 561	Aspects of the English Language*
EDU 607	Teacher Research in Literacy
EDU 635	Seminar in Second Language Literacy
EDU 639	Practicum in Literacy Education
ESL Electives (6 credits)	
EDU 562	The Multicultural Classroom*
EDU 564	Second Language Curriculum Design*
EDU 563	Language Testing and Assessment*

Other electives can be selected from the literacy education program course offerings described in this catalog.

State endorsement in ESL requires professional teacher certification as well as coursework in ESL instruction. The starred (*) courses above meet state requirements and should be selected with the guidance of an advisor. Further information on the ESL concentration and courses may be obtained from the program coordinator.

Certificate of Advanced Study in ESL

The certificate of advanced study program in English as a Second Language (ESL) is designed to meet the needs of classroom teachers, administrators, and other educators who want to pursue advanced graduate study in ESL and related areas and/or earn Maine ESL endorsement. The CAS requires 30 credit hours of graduate coursework beyond the master's degree, including a capstone experience. Students may design a program to suit their needs for advanced study. The program will vary depending on the master's degree focus and the goal of the student. Participants will have considerable choice in self-designing coursework and projects and will work closely with a faculty advisor.

Special Education Program

The master of science in special education degree provides training for individuals who wish to work in the area of special education and who have had previous experience in education or human services. Cross categorical preparation is offered at two levels: elementary education and secondary education. In addition, there is a specialty program in gifted child education. There is also a course sequence in special education administration offered for those individuals matriculated into the educational administration program. The master of science in special education requires 39 credits of coursework.

Graduates will develop a range of knowledge and skills relating to children and youth whose needs are exceptional. Specifically, graduates will be able to describe and/or demonstrate:

1. educational and behavioral characteristics, needs, and services appropriate

- ate for children and youth, including state and federal laws, regulations, court decisions, and guidelines;
2. methods of assessing academic, behavioral, social, pre-vocational, and vocational strengths and weaknesses of students;
3. methods, materials, and procedures for organizing, conducting, developing, and evaluating individualized educational programs;
4. the effects of race, culture, gender, and socioeconomic status on individuals;
5. methods, materials, and procedures for accommodating students who have diverse racial and cultural backgrounds;
6. methods of ensuring equity and fairness in the practice of special education;
7. methods of managing disruptive and inappropriate student behavior and fostering pro-social behavior;
8. processes of consultation and program planning with parents, teachers, and other professionals, including interpersonal skills and techniques associated with effective consultation; and
9. principles of organizing and administering special education programs as well as the supervision of teachers, aides, and other professionals who deliver services to individuals.

Program of Study

A. Elementary and Secondary Special Education

Core (21 credits)

EDU 600	Research Methods and Techniques
SED 611	Nature and Needs of Learners Who Are Exceptional
SED 615	Classroom and Behavior Management for Learners with Special Needs
SEDX 618	Programming for Learners with Special Needs
SED 653	Assessment in Special Education
SED 679	Consultation and Special Education
SED 682	Special Education Law: Conflict and Resolution

Intervention Level One (9 credits)

EDU 520	Reading Development and Instruction
SED 614	Methods in Teaching Mathematics for Children with Special Needs
SED 639	Communication Disorders in Children

Intervention Level Two (3-12 credits)

EDU 510	The Writing Process
SED 621	Literacy Problems: Assessment and Instruction
SED 643	Educating Students Who Are Deaf and Hard of Hearing in Public Schools
SED 654	Assessment for Instruction
SED 684	Administration in Special Education
SED 687	Technology in Special Education
SEDX689	Prevocational/Vocational Assessment and Education
SED 690	Psychology of Adolescents with Disabilities
SED 692	Transitional Planning and Programming for Secondary Students

Intervention Level Three (6 credits)

(This course is required for students without prior certification in special education.)

SED 688	Internship in Special Education (6 credits)
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Capstone (6 credits)

SED 685	Advanced Seminar in Special Education
SED 699	Directed Study

B. Education of the Gifted/Talented

Core (12 credits)

EDU 600	Research Methods and Techniques
SED 611	Nature and Needs of Learners Who Are Exceptional
SED 653	Assessment in Special Education
SED 699	Directed Study or EDU 699 Independent Study

Specialization (12 credits)

SED 659	Education of the Gifted/Talented
SED 660	Curriculum and Methods for Teaching the Gifted
SED 662	Productive Thinking and the Gifted Learner
SED 663	Management in Education of the Gifted

Electives (15 credits, selected with the consent of the advisor)

SED 550	Teaching Gifted Students in the Regular Classroom
SED 661	Advanced Curriculum and Methods for Teaching the Gifted
SED 664	Gifted Students in Special Populations
SED 665	Institute for Program Planners in Education of the Gifted/Talented
SED 666	Models in Education of the Gifted
SED 667	Social/Emotional Needs of the Gifted
SED 668	Seminar in Education of Gifted/Talented
SED 669	Technical Assistance System
SED 670	Secondary Programs for the Gifted/Talented
SED 679	Consulting for the Resource Teacher

Other electives may be selected in consultation with the advisor.

C. Special Education Administration (open only to students matriculated in the educational administration program). See section on educational leadership program for specific requirements.

Portfolio

All students in the special education program, including those concentrating in special education administration, must complete a professional portfolio. The purpose of the portfolio is to provide an opportunity for students to reflect upon the knowledge they have gained in the program. It is expected that the portfolio responses will demonstrate the integration of knowledge, an understanding of the principles of one's specialty area, the application of knowledge to practice, an understanding of research methodology, and the ability to communicate well. Students are encouraged to discuss the portfolio process in more detail with their advisors.

EDU 510 The Writing Process

This course emphasizes the development of writing proficiencies through a process approach. Writing growth and its relationship to reading and oral language development are 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. Students gain experience with the writing process through participation in an ongoing, in-class writing workshop. Appropriate for elementary and middle level teachers; secondary teachers can be accommodated. 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 of using books to individualize reading instruction. Students are expected to read widely in juvenile collections in order to establish a basis for selecting appropriate literary fare. Cr 3.

EDU 513 Adolescent Literature

This course is designed for the middle or sec-

ondary 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. Cr 3.

EDU 514 Improving Teaching in Content Areas Through Literacy

This course explores literacy techniques and processes that can be applied by content teachers to enhance learning. Emphasis is on competencies that students use in content areas and strategies for teaching them how to apply them—a process of integrating the teaching of reading/writing/study skills while teaching a subject matter. The course has practical application for all classroom teachers in grades 4 through 12. Cr 3.

EDU 515 Teaching Writing: Middle/Secondary Levels

This course is designed for teachers of grades five through twelve in language arts and other content areas. Focus is on writing as a process. Topics include using writing for promoting content learning as well as testing knowledge. Cr 3.

EDU 520 Reading Development and Instruction

In this course the development of literacy is traced, and conditions which foster its growth are examined. Topics are related to major stages of literacy development and include: preschool influences on literacy, initial reading, the development of fluency, vocabulary development, comprehension, study skills, and refinement of reading. Informal diagnostic techniques are demonstrated and practiced. The invariant nature of literacy acquisition among students of all ages is stressed. Cr 3.

EDU 524 Supervised Practicum in Literacy

This experience is given in conjunction with the Literacy Center or the Reading and Writing Workshop. Working under supervision, students use selected assessment instruments with adults/children who have learning and reading difficulties. Cr 1-6.

EDU 560 Methods of Teaching Second Languages

This course explores current methods and practices of teaching second languages, including ESL, at various age and proficiency levels with an examination of the underlying assumptions about language and language learning; the role of the teacher; the role of learners; the nature of learning experiences; and the role of instructional materials. Emphasis will be on evol-

ving a thoughtful approach to meaningful ESL classroom instruction, as well as on the application of course content to other second language teaching contexts. Cr 3.

EDU 561 Aspects of the English Language

This is a survey course examining the elements of English and their relevance in second language acquisition. The course will analyze the phonetic, morphological, syntactic, and semantic structure of English; the social aspects such as variation, change, and register; and the communicative aspects such as pragmatics, psycholinguistics, and acquisition. Application of these language aspects will be accomplished through problem solving and discussion activities integrating the aspects of English within the second language classroom context. Cr 3.

EDU 562 The Multicultural Classroom

This course examines cross-cultural communication and the effects on thinking and assumptions. Perception, stereotyping, prejudice, ethnocentrism, culture shock, and nonverbal communication are among the topics to be studied. Specific emphasis is on the relevance of cultural diversity in classroom interaction and learning. Cr 3.

EDU 563 ESL Testing and Assessment

This course examines the variety of test types, formats, and procedures for evaluating ESL proficiency in the classroom. Participants will develop appropriate approaches to testing and evaluation as an integral part of the language teaching/learning process. Cr 3.

EDU 564 ESL Curriculum Design and Development

This course focuses on curriculum design and implementation and syllabus construction based on needs assessment of the learner of English as a second language. There will be an examination of language acquisition from the perspective of oral proficiency to literacy instruction and the considerations involved in the design of these materials. There will also be an examination of commercially produced materials and methods by which teachers can prepare materials. Cr 3.

EDU 600 Research Methods and Techniques

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

EDU 601 Naturalistic Inquiry/Qualitative Methods

This course introduces students to an approach to educational research that studies schools as natural settings. Depending largely on qualitative methods, students will learn the assumptions underlying field research and will develop the ability to read qualitative/naturalistic studies critically and to do small site-based research projects. Prerequisite: EDU 600. Cr 3.

EDU 603 Analysis of Teaching

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

EDU 604 Curriculum Development

This curriculum course will provide students with an understanding of what curriculum and curriculum development are. Using a collaborative approach, teachers and administrators will plan the design of a curriculum consistent with personal ideals and a given context. Students will analyze the curriculum in terms of knowledge, skills, learning processes, and affective dimensions. Special emphasis will be given to the processes of curriculum implementation and curriculum evaluation. Prerequisite: teaching experience or permission of instructor. Cr 3.

EDU 605 Testing and Assessment

The goals of this course are to develop students' knowledge of testing and assessment and provide opportunities for students to apply that knowledge. Topics will include methods of assessment (standardized tests and selected response assessments, essays, performance assessment, and student-teacher communication and attitudes), as well as targets of assessment (knowledge, reasoning skills, products, and attitudes). Students will 1) increase their understanding of the purposes of testing and assessment (for example, monitoring student progress, making instructional decisions, evaluating students' achievement, and evaluating programs), 2) demonstrate their understanding of the connections of assessment, curriculum, and teaching and learning standards; and 3) be able to communicate effectively their knowledge of testing and assessment to a variety of audiences. Cr 3.

EDU 606 Learning and Learners

This course explores learning theories, the developmental characteristics of learners, and learning in the context of teaching. Critical issues in learning are explored while reflection on and analysis of the student's own learning base is uti-

lized. The course is designed for anyone involved in the learning process. Cr 3.

EDU 607 Teacher Research in Literacy

This course is designed to enable students to become both knowledgeable consumers of the research of others and generators of new knowledge through their own classroom-based research and inquiry. Students will be presented with various research paradigms and will learn and practice qualitative techniques of data collection and analysis. Each student will select a problem, design a research study, collect and analyze sample data, and summarize findings or revisions needed to improve the study. Prerequisites: EDU 620, EDU 510. Prerequisites for teachers who are non-matriculated students may be waived by the instructor. Cr 3.

EDU 610 Critical Issues in Teaching and Learning.

This course 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 the skill in making decisions about curriculum and pedagogy. Prerequisite: matriculation or permission of the instructor. Cr 3.

EDU 612 Practicum/Seminar

For experienced teachers in the instructional leadership program, the practicum/seminar is a two-semester field-based project and concurrent seminar requiring a culminating activity in which the student utilizes the major learnings from the program in identifying and applying problem-solving strategies to a specific area of concern in a field setting. A written practicum report will be verbally defended. Cr 6. (3 credits each semester)

EDU 615 Middle Level Curriculum and Organization

This course provides students with a basic understanding of middle level education. The course will focus on: 1) the history, development, present status, and future direction of middle level education; 2) the unique physical, social, emotional, and intellectual characteristics of early adolescents as they relate to school programs/practices; and 3) instructional strategies, curriculum organization, and administrative structures of middle level schools. Cr 3.

EDU 617 Teaching in the Middle Level School

This course provides an understanding of the role the teacher plays in the intellectual, social, emotional, and personal development of young adolescents. The course will investigate, try out, and evaluate responsive teaching strategies and explore the design and structure of an advisor/advisee programs/curriculum. Cr 3.

EDU 619 Special Topics in Middle Level Education

This course examines issues in middle level education research and practices. Students will have the opportunity to discuss current topics with leading experts in the field. Cr 3.

EDU 621 Literacy Problems: Assessment and Instruction

This course conceptualizes reading assessment as a process of becoming informed about learners. The course focuses on developing diagnostic insights and corrective strategies for disabled readers of all ages. Current trends from research and practice are explored. Case studies and in-class practice help teachers implement effective procedures in the classroom. Prerequisite: EDU 520 or equivalent. Cr 3.

EDU 622 Designing and Managing Literacy Instruction, PS-3

The focus of the course is the development of language (both oral and written) in children three through eight years of age. Content includes the characteristics of language learners, the conditions that promote emergent literacy, and organization and management of literacy instruction in the primary grades. Prerequisite for matriculated students: EDU 520. Cr 3.

EDU 630 Designing and Managing Literacy Instruction, 4-8

The course identifies and explores the components of effective literacy programs at the upper elementary and middle school levels. Emphasis is on the design and implementation of literature-based instruction, management of self-selected reading and writing. Prerequisite for matriculated students: EDU 520. Cr 3.

EDU 633 Special Applications in Literacy

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

options must be approved in writing by the program coordinator. Cr 1-6.

EDU 634 Seminar in Literacy Research

The course provides an overview of basic principles of assessment and current research trends in literacy theory and practice. Students will review and analyze contemporary research. Prerequisites: EDU 510, 520, 607, 621 or permission of the instructor. Cr 3.

EDU 635 Seminar in Second Language Literacy

This course integrates the knowledge base acquired in core first and second language literacy courses by focusing on the characteristics of a fluent L2 reader and writer. There will be an analysis of first language reading models and their relevance to literacy acquisition in ESL. The impact of variables such as native language proficiency, perception, lexical knowledge, cognition, metacognition, and culture will be examined. Prerequisites: completion of all core literacy and ESL courses, except the practicum, and permission of instructor. Cr 3.

EDU 636 Supervised Practicum in ESL

Application of ESL theory and methodology in the classroom setting is the focus of this course. Instructional experiences are observed and related to the professional literature through follow-up seminars. Emphasis is on the appropriate application of methodology combined with an assessment of the teacher/learner role in the learning process. Prerequisites: Completion of all core literacy and ESL courses, except the seminar, and permission of instructor. Cr 3.

EDU 639 Practicum in Literacy Education

This course requires the application of strategies for planning and implementing literacy 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 observations 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: completion of core courses and instructor permission. Cr 6.

EDU 670 Introduction to Administration

This is the 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. Cr 3.

EDU 671 Organizational Behavior

A systems approach to understanding and predicting human behavior within organizations is studied. 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 Basis 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 677 Seminar in School Management

This course emphasizes the skills needed to survive and succeed during one's first year as a principal. The course, through the use of case studies, simulations, readings and interactions with practicing administrators will focus on students: (1) learning the nuts and bolts needed for daily management, (2) examining current issues facing the principalship, and (3) learning strategies for managing and understanding oneself within the principal's role. Prerequisite: instructor's permission. 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. Cr 3.

EDU 680 Staff Development

This course is designed for students in administration and instructional leadership and examines the theory and practice of staff development in schools and other human service settings. Building on current research on adult development, or-

ganizational analysis, and school improvement, students will develop an understanding about the structure and process of staff development planning, programming, implementation, and evaluation. A final project applying class learnings to a work setting will be required. Cr 3.

EDU 685 Internship and Applied Research Project

This two-semester course combines the 120-hour internship field experience with the development of an applied research project in educational administration. The early focus of the course will be on the internship in a school setting designed jointly by the student, the internship supervisor and a school-based field supervisor. The internship is designed to encourage application of formal coursework to the management issues that face school leaders in the workplace. Out of the internship experience will develop an applied research project in which the student will be expected to take a leadership role in designing, implementing, and assessing a project that addresses an important educational problem in an organizational setting. Each student will be required to produce a written report on the project and to defend it verbally at the conclusion of this course. Cr 6.

EDU 689 Peer and Clinical Supervision

This course focuses upon skills and techniques for observing classroom teaching and providing constructive and collaborative consultation for the improvement of teaching. Self-evaluation and approaches for promoting it are emphasized. Cr 3.

EDU 699 Independent Study

This course provides an opportunity for students to pursue a topic of interest on an independent basis. The specific content and evaluation procedures are arranged with an instructor. Permission of supervising instructor and the department chair is required on forms obtained in the Graduate Education Office. Cr var.

SED 550 Teaching Gifted Students in the Regular Classroom

This course is for teachers who serve gifted/talented students within the structure of the regular classroom. Topics will include adapting the "required" curriculum to meet the needs of students; teaching/facilitating independent/small group activities; using learning centers, task learners with mild handicapping conditions and/or students with academic gifts and talents. Participants will study strategies for adapting, developing, implementing, and assessing learning experiences. Cr 3.

SED 611 Nature and Needs of Learners Who Are Exceptional

This course focuses on the unique characteristics and educational and social/emotional needs of children and youth who display a range of learning and behavioral difficulties including learning disabilities, mild forms of developmental delay, and mild to moderate forms of behavioral and adjustment problems.

Cr 3.

SED 613 Curriculum and Instruction for Learners with Special Needs

This course is for individuals who are providing or who plan to provide educational services to learners with special needs. This may include learners with mild handicapping conditions and/or students with academic gifts and talents. Participants will study strategies for adapting, developing, implementing, and assessing learning experiences.

Cr 3.

SED 615 Classroom and Behavior Management for Learners with Special Needs

This course examines a variety of strategies for promoting positive behavior. Topics include preventing misbehavior through classroom organization strategies, responding to misbehavior in constructive ways, and designing strategies to help children develop appropriate school skills. Students are expected to conduct several classroom application projects.

Cr 3.

SED 639 Communication Disorders in Children

This course is designed for educators working with pre-school and school-age children in regular and special education. The course will consider the typical development sequence of language and speech skills and the physiological process involved in normal speech and language production. The range of communication disorders likely to be seen in children will be discussed. Particular attention will be given to disorders of receptive and expressive language that may result in academic difficulties. Possible etiologies, common symptoms, and classroom modifications that may be suggested for a youngster with a specific communication disorder will be reviewed. Communication differences seen in multi-cultural populations will be considered. The role of the pre-school and classroom teacher in various service delivery models will be presented. Class participants will be encouraged to exchange information about their experiences in working with different service delivery models.

Cr 3.

SED 640 Communicating with Students Who Are Deaf and Hard of Hearing

The course will describe the full range of communication modes currently used with students

who are deaf and hard of hearing in the United States, and the presuppositions behind the various approaches, including: spoken English, American Sign Language, manually coded English, cued speech, fingerspelling, etc. The relationship between communication and language and the role of vision and residual hearing in language acquisition will be studied. Factors associated with the selection of a particular mode of communication over the other modes will be examined.

Cr 3.

SED 643 Including Students Who Are Deaf or Hard of Hearing in Public Schools

This course is for educators who work with students who are deaf and hard of hearing in public schools. The course explains the impact of a hearing loss on a school-age child. Different approaches to the education of deaf and hard of hearing children will be explored and individuals will reflect upon their roles and responsibilities as educators working with students, their families, and the deaf community.

Cr 3.

SED 646 Audiology/Aural Habilitation

This course will offer an overview of audiology and aural habilitation for teachers of children who are deaf or hard of hearing. The anatomy, physiology, and pathologies of the ear will be explained. Students will be taught the physics of sound and principles of pure tone audiometry. Auditory training equipment, including hearing aids and other assistive devices will be introduced. Students will explore the implications of hearing loss on speech acquisition and development.

Cr 3.

SED 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.

SED 654 Assessment in Special Education Part II

In this course, students examine a variety of informal procedures for use in the assessment of the instructional needs of exceptional learners. Students will learn how to develop and conduct interviews, observations, and continuous and periodic assessments of instruction. Record keeping procedures will also be examined. Students are expected to develop several in-depth projects.

Prerequisite: SED 653

Cr 3.

SED 659 Education of Gifted and Talented

This course is for individuals responsible for

initiating, mainstreaming, and/or extending services for gifted/talented students. Topics for study will include: (1) identification procedures, (2) curriculum development and implementation, (3) administration and classroom management, (4) staff development and community involvement, and (5) evaluation of student growth and program effectiveness. Cr 3.

SED 660 Curriculum and Methods for Teaching the Gifted

This course is for individuals responsible for (1) developing or modifying learning experiences for gifted/talented students at the elementary or secondary school level, (2) implementing differentiated learning experiences within the regular classroom or through a special grouping arrangement, and/or (3) creating/selecting instructional materials to support the implementation of differentiated learning experiences. Cr 3.

SED 661 Advanced Curriculum and Methods for Teaching the Gifted

This course is for teachers, consultants, coordinators, and directors who work in programs for gifted/talented who are responsible for developing and implementing a curricular scope and sequence plan for the program, articulating services between grade levels and among content/skill areas within a district, coordinating the use of instructional materials within a program, and assisting others in utilizing, adapting, and creating learning activities for gifted/talented students. Cr 3.

SED 662 Productive Thinking and the Gifted Learner

This course is for individuals responsible for (1) identifying creative potential within students, (2) planning and implementing learning experiences for nurturing creative thinking, (3) selecting or developing instructional materials for enhancing creativity, (4) establishing learning environments conducive to creativity, and/or (5) evaluating program effectiveness and student growth in creativity training. Cr 3.

SED 663 Management in Education of the Gifted

This course is for individuals responsible for coordinating services for gifted and talented students within a district. Topics for study will include program administration, program evaluation, personal interaction skills, and group dynamics. Cr 3.

SED 664 Gifted Students in Special Populations

This course is for individuals responsible for identifying and serving gifted students from special populations. These populations include un-

derachievers, females, culturally diverse and/or economically deprived, rurally isolated, bilingual, artistic, creative, physically challenged, and highly gifted. Cr 3.

SED 665 Institute for Program Planners

This course is for individuals and teams of individuals responsible for planning district-wide programs for gifted and talented students. Participants will develop a procedural written plan of action for guiding the development and the implementation of programs. Planning areas will include: (1) identification, (2) curriculum, (3) administration, (4) staff development, and (5) evaluation. Cr 3.

SED 666 Models in Education of the Gifted

This course is for individuals responsible for choosing, adapting, or designing a model to serve gifted/talented students. Selected models prominent in the field will be reviewed and critiqued. Prerequisite: SED 659 or SED 660 or permission of instructor. Cr 3.

SED 667 Social/Emotional Needs of the Gifted

This course is designed for classroom teachers, program coordinators, parents, and other individuals who interact with gifted and talented students. Topics for examination will include: (1) factors affecting social and emotional development, (2) achievement and underachievement, (3) curriculum and the affective domain, and (4) resources/strategies for responding to the needs of the gifted/talented. Cr 3.

SED 668 Seminar in Education of the Gifted/Talented

This course is for students who have completed at least four courses in education of gifted/talented students. The seminar will focus on critical issues related to the field. Participants will collect and critically analyze information relating to the issues. Cr 1.

SED 669 Technical Assistance Systems

This course is for administrators, consultants, program coordinators, teachers, and other individuals responsible for initiating, maintaining, or extending educational programs. Topics for study include assessing resources and needs, relating with client systems, diagnosing relationships and situations, acquiring resources, choosing and supporting solutions, and stabilizing innovations. Prerequisite: advisor's permission. Cr 3.

SED 670 Secondary Programs for the Gifted and Talented

This course is for administrators, program coordinators, and teachers who are responsible for

planning, implementing, maintaining, and/or extending programs for gifted and talented students at the secondary school level. Cr 3.

SED 679 Consulting for the Resource Teacher

This course is for individuals who are responsible for the planning and the coordination of programs for exceptional learners. The focus of the course will be on utilizing a non-categorical, process-oriented approach to providing services for students. Cr 3.

SED 682 Special Education Law: Conflict and 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. Prerequisite: SED 611 or permission of instructor. Cr 3.

SED 683 Topical Seminar

This is 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.

SED 684 Administration in Special Education

A field-based course designed to offer experience in administering special education programs. The course emphasizes the organization and administration of special education programs. Prerequisite: SED 611 or permission of instructor. Cr 3.

SED 685 Advanced Seminar in Special Education

This is 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. Prerequisite: completion of three core courses or advisor's permission. Cr 3.

SED 687 Technology in Special Education

This course introduces students to the use of technology in the education and rehabilitation of individuals with special needs. A range of technological systems will be examined from "low tech" devices such as simple switches to computers, adaptive devices, and software appropriate for handicapped individuals. A variety of equipment, materials, hardware, and software will be available for demonstration and student use. Methods and techniques for evaluation and determination of appropriate and inappropriate use of technology will be stressed. Cr 3.

SED 688 Internship in Exceptionality

This course is designed to provide experiences in practical and applied aspects of special education administration. Students will be expected to focus on one or two major projects developed in conjunction with the course instructor. Prerequisite: completion of four courses in special education administration. Cr var.

SED 690 Psychology of Adolescents with Disabilities

This course examines the growth and development of disabled adolescents within a social context. Society's historical treatment of disabled people and the effect social attitudes have on development will be addressed. Developmental theory presented through classwork and readings will be supplemented by research and interviews with adolescents and their teachers and families. Cr 3.

SED 692 Transitional Planning and Programming for Secondary Students

The purpose of this course is to introduce participants to the concept of transition from school to work and community living for disabled secondary students. Students will develop skills in interdisciplinary team planning and an awareness of community resources necessary to aid exceptional students in achieving career goals and a satisfactory adjustment to adult life. Cr 3.

SED 693 Prevocational and Vocational Assessment

This class will cover the fundamentals of prevocational and vocational assessment tools, including definitions, purposes, and components. Types of assessment tools to be covered are psychometric testing, work sampling, situational assessment, job analysis, and behavioral observations. Participants will learn to interpret results and assess the implications for secondary level curriculum. Prerequisite: SED 653 or permission of instructor. Cr 3.

SED 694 Vocational Education for Special Needs Students

This course will provide an in-depth study of appropriate vocations for disabled secondary school students. The skills to be taught are job analysis, job development, and job search and placement. Students will examine regional job opportunities and identify potential training sites, work sites, and employer needs. Cr 3.

SED 695 Curriculum and Instruction for Secondary Students with Special Needs

This course is designed for teachers of secondary students with mild to moderate learning handicaps. Participants will examine the major service

delivery components: 1) curriculum development, 2) instructional strategies, and 3) case management. Service delivery models, development of IEPs, and specific instructional techniques for secondary learners will be included. Cr 3.

SED 699 Directed Study

This course is an opportunity to gain, apply, and integrate knowledge and skill in exceptionality by planning and conducting a project. The project must be intellectually sound, have direct applicability to the student, and produce a high quality product. Specific content and methods of evaluation will be determined in conjunction with faculty supervisor. Prerequisite: completion of three courses or advisor's permission. Cr var.

ITE 650 Technology: Its Evolution and Social Impact

This course will concentrate on an anthropological study of industry and technology over the millennia. Emphasis will be placed on the examination of the great technological innovations and inventions that have impacted on civilization throughout history. National and global ramifications of civilization's technological progress will be analyzed. Cr 3.

ITE 651 Curriculum Trends in Industrial/Technology Education

This course is geared toward acquainting the industrial arts/technology education and vocational education teacher with the rapid curriculum changes that are occurring in the profession: the transition from a traditional industry content base to that associated with modern industry and technology. Emphasis will be placed upon the analysis of contemporary technology education curriculum models, career education and occupational training, instructional strategies, delivery systems, and the development of appropri-

ate technology learning activities applicable to the K-12 curriculum. Cr 3.

ITE 653A & 653B Contemporary Problems/Technical Developments in Selected Technologies

This directed studies course focuses on contemporary developments in and problems associated with student-selected areas of material processing, energy/power, and technical communications technologies. The course provides an opportunity to study recent technological developments and to analyze their impacts on society and the environment. Specific topics will be identified through a formal proposal process and will be studied independently. The group will meet on a regular basis to discuss study progress and will present their findings and conclusions in formal oral and written presentations. Both ITE 653A and 653B are required; 3 credits for each course.

ITE 654 Measurement and Evaluation in Industrial/Technology Education

This course focuses on the preparation and use of teacher-made written achievement and performance tests and rating scales and basic statistical procedures and evaluation techniques for the industrial arts/technology education and vocational/occupational (trade and industry) educator. Cr 3.

ITE 655 Practicum/Seminar

The ITE 655 Practicum/Seminar and its major project, the Practicum Report, constitute the culminating project of the program. The Practicum Report documents the student's attempt to synthesize and apply learning from the program through the identification of a problem pertaining to industrial/technology education in a field setting. The written Practicum Report will be verbally defended. Cr 6.

Department of Teacher Education

Chair: Nancy E. Harriman

Associate Professors: Austin, Card, Davis, Kimball, Kissen, Major; *Assistant Professor:* Howick

Extended Teacher Education Program

The task of preparing teachers to meet the needs of learners in the 21st century is a complex and demanding one. The College of Education and Human Development, through its Extended Teacher Education Program (ETEP), offers a teacher preparation program based on the premise that teachers best develop through building on related experiences, beginning at the undergraduate level and continuing on through the graduate level. The faculty is committed to the continuing development of the teacher who:

- Recognizes that teachers are, above all else, learners.
- Exhibits a sense of active inquiry and curiosity through a commitment to lifelong learning.
- Communicates the joy and satisfaction of active inquiry and personal learning.
- Demonstrates knowledge of the framework of the discipline(s) being taught, including the tools of inquiry and interdisciplinary connections.
- Models respect for individual differences and the basic worth of each individual.
- Has a genuine respect for children.
- Uses teaching strategies needed to manage instructional nuances and decisions necessary to promote learning of complex concepts and shape positive learning environments.
- Demonstrates knowledge of human development through teaching commensurate with the needs of the learners, including a special focus on the development of learners at the level of professional interest.
- Appreciates and encourages in others an appreciation of cultural diversity and the global community.
- Proactively establishes professional development activities appropriate for the current level of professional experience.

The undergraduate and graduate levels of the Extended Teacher Education Program are:

1. *Undergraduate:* At the undergraduate level, students may pursue individual courses in teaching and learning or the 18-credit minor in educational studies. The minor offers important content and teaching experiences that help students determine whether to pursue a career in education. The minor is also open to students who do not plan to teach but who simply want to learn more about the field of education.
2. *Graduate:* The post-baccalaureate program consists of two phases: a) The certification year, which is a full-time, year-long program of study and practice in teaching that prepares people to teach at the elementary, middle, and high school levels in the following subjects: English, foreign languages, mathematics, physical and/or life sciences, social studies, and visual arts. The certification year program is a cohesive, integrated program that takes place in Professional Development School sites in southern Maine which range from urban to rural. Coursework and experiences focus on the acquisition and application of learning principles and practices. A pilot program will be offered during 1997-98 for aspiring secondary independent school teachers. This program will prepare interns to educate independent school students inside and outside of the classroom and will include academic, residential, and extracurricular preparation. At program completion, interns may take an additional three credits to become eligible for certification to teach in public schools in Maine. b) The advanced level, which leads to the master of science in education degree, through a two-year program of summer and weekend study. *Note:* All content area requirements for the desired level and subject for teacher certification must be met before beginning the certification year.

Master's Degree Options

Teaching and Learning Upon successful completion of the certification year and the meeting of specific criteria including the submission and acceptance of a teaching portfolio, students will be invited to continue to work toward completion of requirements for the master of science in education degree, with a concentration in teaching and learning. This innovative program extends teacher education beyond initial certification as beginning teachers continue to develop their knowledge, skills, and beliefs. The 18 credits required for completion of this master's degree are scheduled over a two-year period, during the summer and one weekend each month during the academic year, and are designed to be taken by a cohort group of students who will stay together for the duration of the program.

Other Options In addition, students completing the certification year have the option of applying to one of these other master's degree programs in the College of Education and Human Development: educational leadership, literacy education (including ESL), and special education. Students must meet all admission requirements specific to the desired program and will be required to complete degree requirements by a deadline determined by program faculty. Certain courses completed during the certification year of ETEP may be accepted as credit toward completion of requirements for these degrees. In all cases, completion of these programs will require a greater number of credits than the program in teaching and learning, described above.

For more information about the Extended Teacher Education Program and a copy of the ETEP Bulletin, please contact the College of Education and Human Development's Admissions and Advising Office.

School of Law

Dean: Donald N. Zillman

Professors: Cluchey, Delogu, Friedman, Gregory, Khoury, Lang, Mullane, Potter, Rieser, Rogoff, Ward, Wells, Zarr; *Associate Professors:* Lupica, Wriggins; *Adjunct Professors:* Godfrey, Petrucci

The University of Maine School of Law is a small school that offers 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 that provides excellent facilities for classroom and seminar discussion, library research, moot court participation, clinical practice, legal publications, and student activities.

The Law School offers a three-year, full-time program leading to the juris doctor degree. It has no evening division. The Law School has a limited part-time program to accommodate those whose disability, extreme financial hardship, or other similar exigent circumstances prevents them from engaging in full-time study.

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 specialties and represents a diversity of backgrounds and interests. There is a highly favorable student-faculty ratio. 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 approximately 280,000 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 about 90 students per class, of whom nearly 50 percent are women; the number of students in the School is about 270, making it one of the smallest in the country. The student body is remarkably varied in age, professional and academic experience, and background. Students are drawn from a large number of colleges and universities throughout the nation. Classes entering in recent years had a median score on the Law School Admission Test (LSAT) in the 70th percentile, 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; 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 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 Admissions Office, University of Maine School of Law, 246 Deering Avenue, Portland, Maine 04102, (207) 780-4341.

The 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, issues affecting coastal zone management including analysis of the adequacy of federal and state coastal resource laws and regulations to effectively manage coastal development pressures.

The Institute is a component of the University of Maine School of Law. Its policy research and educational projects are supported by grants and contracts from government agencies and private foundations. The Institute's research publication, *Ocean and Coastal Law Journal*, is partially supported by subscribers.

Lewiston-Auburn College

Dean: Betty D. Robinson

Master of Occupational Therapy

Program Description

Lewiston-Auburn College offers an entry level master's in occupational therapy program. The program is for people who hold a baccalaureate degree in a discipline other than occupational therapy. The master's in occupational therapy program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA).

Occupational therapy is a health and rehabilitation profession that uses meaningful occupation as treatment to help people of all ages perform the skills they need to live as independently as possible. Occupational therapists evaluate and treat people with varying degrees of physical and psychological impairment. The specific disability may be the result of a birth defect, illness, injury, or the aging process. Emphasis is placed on activities of daily living related to work, self-care, and leisure.

Graduate entry-level occupational therapy education builds upon the education and experience of the student by providing a sequential course of professional study that stresses active, independent inquiry, critical thinking; strong communication skills (oral, nonverbal, and written); problem solving; and clinical reasoning. Realizing that consumers may receive occupational therapy services in a wide variety of settings, students are exposed to practice in hospitals, agencies, institutions, schools, community centers, and other facilities where potential clients may be effectively served.

Admission

Admission to the master's in occupational therapy program is selective and limited. The program seeks applicants who have a bachelor's degree with a record of academic achievement and who are committed to employing interdisciplinary approaches and materials in the study of occupational therapy. Academic coursework and clinical experiences require that students be available throughout the day and evening. In addition to four semesters of academic coursework, students are required to complete six months of full-time fieldwork.

Application Materials

Students should request an application packet which contains all of the required forms and detailed procedures for their completion. The application, transcripts, and other supplemental materials should be sent to: Director, Occupational Therapy, Lewiston-Auburn College, 51 Westminster Street, Lewiston, Maine 04240.

The following criteria are used in the selection process:

1. Baccalaureate degree from an accredited college or university.
2. A cumulative grade point average (GPA) of 3.0 on a 4.0 scale or a "B" average from the institution granting the degree. If you have a graduate degree, your graduate cumulative GPA will be used.
3. Prerequisite courses: Either as part of your baccalaureate degree or subsequent to receiving it, you must have completed the following courses with a grade of "B-" or better. All of the prerequisites must have been taken within six years prior to the fall semester for which you are applying. If courses were completed with a "B-" or better more than six years ago, you may do one of the following: 1) use upper division courses in the discipline to satisfy the requirement (advanced PSY, SOC, ENG, SBS, HUM, etc.); 2) retake the course; or 3) take a CLEP exam if one is available.

*Math Competency

3 credits

This may be demonstrated by taking either a college level algebra course

(such as MAT 100)

or by taking a statistics course (such as MAT 120D or SBS 328D or equivalent).

*College Level English (at least 3 credits must focus on writing) (USM courses HUM 1351 or HUM 1361 American Studies may be substituted for a writing course)	6 credits
*Intro to Sociology (or an upper level SOC or SBS course)	3 credits
*General Psychology (or an upper level PSY or SBS course)	3 credits
*Human Growth and Development (Lifespan course)	3 credits
Cultural Anthropology	3 credits
Human Anatomy & Physiology I	4 credits or equivalent
Human Anatomy & Physiology II	4 credits or equivalent
Microcomputers	3 credits

(*There are CLEP exams available for these courses.)

4. If you have not already completed the English and math course requirements, please register to take Lewiston-Auburn College's placement exam in reading, writing, and math. The exam will determine whether you need to take any developmental courses in preparation for the college level math and English courses.
5. All applicants must complete a minimum of 20 hours of job shadowing or paid experience in an occupational therapy department.
6. After the application deadline, all applicants who meet the above five requirements will be scheduled for an in-house writing sample.
7. Completion of the application requirements does not guarantee admission into the program. Admission will be based on a comparative evaluation of the applicants' materials as they relate to academic achievement and knowledge of the field of occupational therapy. If two or more applicants are otherwise equally qualified, additional consideration will be given for work experience in a related field (e.g., education, recreation, or other health related profession).
8. Based on the applicant's performance on the first seven criteria, the top candidates will be scheduled for an interview with the director of the occupational therapy program. Interviewing will continue until all of the available slots have been filled. Admission decisions and judgments made by the OT admission committee shall take into account factors such as life experience, level of motivation, and concern for under-represented groups in the program.
9. Upon being accepted into the program, students must submit documentation that they are in good health as evidenced by a physical examination, including specific immunizations, prior to beginning the fall semester. Forms will be sent with acceptance letters.

Application Deadline

For students applying for admission to the MOT program for fall 1998, the deadline will be February 1, 1998. Unconditional acceptance to the MOT pro-

gram will be extended only to students who are competitive and who have submitted documentation that all of their requirements have been completed prior to the February 1 deadline. Students who apply by February 1 but who are in the process of completing their requirements will be considered if competitive. They will, however, receive only conditional acceptances until all their requirements have been completed. Conditional acceptances will be rescinded unless the remainder of the requirements are completed by June 1, 1998.

None of the applications will be reviewed until after the deadline. No preference will be given to students who apply early, although it is crucial that all of your materials be submitted by the deadline. **No exceptions** will be made for incomplete files.

Program Policies

In addition to the general policies described in the Academic Policies chapter, specific policies of this program are as follows.

Time Limit Unless granted special permission, the program's academic work is designed to be completed within four semesters of being admitted to the program. To ensure continuity of application of academic concepts, all fieldwork **MUST** be completed within 24 months following completion of academic preparation.

Grade Policy All courses in the occupational therapy curriculum must be completed with a minimum of "C" in order to carry graduate credit. If a student receives a grade below "C," the student must repeat the course in the next semester that it is offered. Given that occupational therapy courses are only offered once a year, it will be necessary for the student to receive permission from the program director in order to take other courses in the curriculum prior to repeating the course. A student is only permitted to repeat **one** course. If a student gets a grade below "C" in a second course, he/she will be dismissed from the program by the program director.

Students must maintain a cumulative grade point average of 3.0 in each semester in order to progress in the program. A student whose grade point average falls below a 3.0 in the first, second, or third semester will be placed on probation and will have **one** semester to bring the grade point average up to at least a 3.0. Students who fail to do this will be dismissed by the program director. A student may not be placed on probation more than once.

Any student whose cumulative GPA is below 3.0 in their final semester will be dismissed by the program director and will not be permitted to graduate nor will he/she be permitted to re-apply to the program.

The master's in occupational therapy program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA's phone number is (301) 652-AOTA. Graduates of the program may be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination.

Program Requirements

Students in the master's in occupational therapy program will complete 70 graduate credits consisting of 4 semesters of full-time coursework, 6 additional months of full-time fieldwork and a capstone project. As part of the 70 credits, students are required to select one 3-credit elective from courses offered through USM in an area of interest. Students should discuss their choice of elective with the occupational therapy program director prior to registering. The elective may be taken any time prior to completion of their other academic work.

Students are required to choose and complete **two** Level I Fieldwork experiences in psychosocial, physical dysfunction, or developmental disabilities. The fieldwork is completed concurrent with the semester in which the relevant coursework is taken.

OTH 501 Introduction to Occupational Therapy

Introduces the student to the profession of occupational therapy by studying the history and philosophy of occupational therapy. Theories that guide practice are investigated. Students learn about the roles and functions of OT practitioners, different settings and practice environments, and the position of the profession within the overall health care system.

Cr 3.

OTH 502 Medical Terminology

A concise, introductory course in medical terminology that gives basic principles for understanding the language, including an overview of terms from many areas of medicine. Enables the student to develop a larger vocabulary by building on a knowledge of word structure, roots, prefixes, and suffixes. Includes OT uniform terminology, abbreviations, and terms that are practical and commonly found in the day to day work of allied health personnel. The course will also provide an introduction to note writing and documentation using the SOAP format which serves as a guide to thinking through problems as well as documenting client care.

Cr 1.

OTH 503 Communication for Health Professionals

Provides an understanding of human behavior; therapeutic use of self; and development of interpersonal communication and group dynamics while considering the implications of cultural diversity and disability.

Cr 4.

OTH 504 Applied Research and Statistics I

This course introduces the student to the spectrum of investigative strategies which can be used to answer questions and queries of concern to occupational therapists. A conceptual framework for evaluating occupational therapy knowledge, practice, and theory will be used throughout the course to examine current research and to master basic research skills. Students will practice basic research skills through selected assignments and exercises. Scholarly criticism will be encouraged through article analysis and evaluation of peer projects.

Cr 3.

OTH 505 Occupational Therapy Psychosocial Theory and Practice

Emphasis is on occupational therapy theory, evaluation, planning, and treatment techniques commonly used with individuals who have psychosocial impairments across the lifespan. The etiology, symptoms, and course of each condition are reviewed as well as the analysis of performance components affected by each. Prerequisites: OTH 501, OTH 502, OTH 503, OTH 504.

Cr 4.

OTH 506 Occupational Therapy Media I

In this course, students develop an understanding of the use of occupation to promote occupational performance. Includes aspects of activity analysis and problem solving. Media are analyzed from multiple perspectives with a focus on understanding the importance of culture, gender and developmental level on occupational choices. Prerequisites: OTH 501, OTH 502, OTH 503, OTH 504.

Cr 4.

OTH 507 Legal Issues and Ethics in Occupational Therapy

Students will explore and identify their own value system and examine its impact on their eventual practice. Students will begin to set criteria for determining their own competence. This course covers the AOTA standards and ethics policies and their effect on the therapist's conduct and patient treatment. The functions of local and national professional organizations are discussed, as well as the state and national requirements for credentialing. Includes discussion of the current health policy in the U.S., and legal and ethical issues related to documentation and reimbursement. Prerequisites: OTH 501, OTH 502, OTH 503, OTH 504.

Cr 3.

OTH 508 Perception, Cognition and Sensation in Human Occupation: Evaluation and Treatment

This course is designed to explore the roles of perception, cognition, and the senses in daily life skills. Human occupation throughout the lifespan will be looked at in the context of what thinking, perceiving, and feeling skills are necessary for health and well-being. Evaluation techniques for the different areas will be studied, as well as clinical applications for treatment. Daily living activities/occupation are emphasized in clinical application. Consideration for treatment environment is given: acute care, sub-acute, rehabilitation, outpatient, home care, and consultation. Learning around different diagnoses which affect cognition, perception, and sensation is included. Prerequisites: OTH 501, OTH 502, OTH 503, OTH 504.

Cr 3.

OTH 509 Level I Fieldwork (Psychosocial)

This course may be taken to satisfy one of the two required Level I Fieldwork experiences. Students are placed in clinical settings where they can begin to apply the occupational therapy concepts and techniques relevant to psychosocial practice under close supervision. Corequisites: OTH 505, OTH 506, OTH 507, OTH 508. Cr 1.

OTH 510 Level I Fieldwork (Physical Dysfunction)

This course may be taken to satisfy one of the

two required Level I Fieldwork experiences. Students are placed in clinical settings under close supervision where they can begin to apply the occupational therapy concepts and techniques relevant to practice with clients who have physical impairments. Corequisites: OTH 505, OTH 506, OTH 507, OTH 508. Cr 1.

OTH 511 Level I Fieldwork (Developmental Disabilities)

This course may be taken to satisfy one of the two required Level I Fieldwork experiences. Students are placed in clinical settings under close supervision where they can begin to apply the occupational therapy concepts and techniques relevant to working with clients who have developmental disabilities. Corequisites: OTH 505, OTH 506, OTH 507, OTH 508. Cr 1.

OTH 512 Applied Research and Statistics II

This course provides the opportunity for students to apply research concepts to the investigation of an occupational therapy question, need, or evaluation of occupational therapy practice. Students will conduct a research project, critically analyze current research and evaluation, and analyze the work of their colleagues. Course sessions and assignments will be devoted to guiding students through the research process. Cr 3.

OTH 601 Applied Neurophysiology and Anatomy

The structure and function of the human nervous system is covered. The etiology, symptoms, evaluation and treatment of conditions of a neurological nature are reviewed and the analysis of human performance components affected by each are covered. Includes occupational therapy theory and process used in working with individuals with these disabling conditions. Prerequisites: OTH 505, OTH 506, OTH 507, OTH 508. Cr 4.

OTH 602 Applied Kinesiology and Exercise Physiology

Normal body movement based on neurophysiological and biomechanical principles of joint and muscle action correlated with analysis of body in motion, physiological effects of activity, and adaptation to physical dysfunction. The etiology, symptoms, evaluation, and treatment of disabling conditions of a biomechanical nature, or those that require rehabilitation after trauma or the disease process, and the analysis of human performance components affected by each are covered. Includes occupational therapy theory and process used in working with individuals with these disabling conditions. Prerequisites: OTH 505, OTH 506, OTH 507, OTH 508. Cr 4.

OTH 603 Occupational Therapy Media II

Continued development of skills in the use of modalities and media as a basic approach to occupational therapy practice as applied to clients with physical dysfunction. Includes concepts of activity analysis and problem solving. Prerequisites: OTH 505, OTH 506, OTH 507, OTH 508. Cr 4.

OTH 604 Occupational Therapy Developmental Theory and Practice

Emphasis is placed on the developmental process to form a base of knowledge for enhancing occupational performance across the lifespan. Medical conditions and developmental disabilities existing from birth and early childhood are described and identified. Occupational therapy and related developmental theory provide the framework for instruction in assessment, planning, and treatment of individuals with developmental and learning impairments. Prerequisites: OTH 601, OTH 602, OTH 603. Cr 4.

OTH 605 Occupational Therapy Media III

This course provides an introduction to non-traditional media and contemporary rehabilitation technology used by persons with disabilities to promote occupational performance. Students will become familiar with legal and ethical mandates and funding sources, the nature of assistive technology and role of occupational therapy in the multidisciplinary team. Students will learn to evaluate, collaboratively select, and use client appropriate assistive technology. Prerequisites: OTH 601, OTH 602, OTH 603. Cr 4.

OTH 606 Occupational Therapy Management Skills

Emphasis is on the development of administrative skills in various health organizational settings. Abilities in program development, supervision and leadership, staffing, departmental development, and Continuous Quality Improvement will be covered. Prerequisites: OTH 601, OTH 602, OTH 603. Cr 3.

OTH 612 Capstone Project Seminar I

Students will meet with their advisor to refine and begin working on their topic for their research paper, portfolio, or graduate project. Cr 1.

OTH 613 Capstone Project Seminar II

Students will meet with their advisor to prepare for submission of their capstone project. All materials must be submitted and accepted prior to the end of the fourth semester. Cr 1.

OTH 620 Level II Fieldwork

One of two, three-month, full-time placements required at a variety of health care agencies and facilities affiliated with the University. Students

practice the skills of an entry-level occupational therapist under the supervision of a registered occupational therapist. For those students who qualify, this affiliation may be completed in a psychiatric setting during the summer between the students' first and second year. Permission of the program director is required. All other students participate in this affiliation following completion of all program course requirements.

Cr 6.

OTH 621 Level II Fieldwork

The second of two, three-month, full-time placements required at a variety of health care agencies and facilities affiliated with the University. Students practice the skills of an entry level occupational therapist under the supervision of a registered occupational therapist. Prerequisite: Completion of all program course requirements.

Cr 6.

College of Nursing

Dean: Patricia A. Geary

Associate Dean: Janet Z. Burson

Graduate Program Chair: Phyllis F. Healy

Master of Science in Nursing

Professors: Geary, MacPherson; *Associate Professors:* Hastings-Tolsma, Healy, Johnson, Peake-Godin, Skoner, Smith, Thompson, Vines; *Assistant Professors:* Keith, Moody

Program Description

The master of science program is designed to prepare nurses for advanced practice in family/community health, adult health, and mental health nursing in a variety of settings and locations. For those not interested in a clinical concentration, advanced preparation in nursing management is available. Coursework builds on the baccalaureate degree in nursing and is based on theory and research in nursing and related disciplines. The program provides the foundation for continued professional development and for doctoral study. Students are prepared to provide leadership and initiate collaborative relationships with others for the purposes of improving nursing and health care and influencing health policy. Faculty anticipate rapid changes in the field of nursing and are committed to offering programs which will prepare graduates to practice in diverse settings in the health care systems of the future.

Master's students in *adult health* and *family/community* nursing gain skills and knowledge that build on their clinical experience and on their generalist undergraduate preparation. Graduate students in adult health and family/community health extend their clinical expertise in working with individuals and high risk populations. Students in these concentrations gain skills in clinical decision making and differential diagnosis, in case management and consultation, in client teaching, in community assessments and interventions, and in program design, implementation, and evaluation. Upon graduation with a concentration in one of these advanced practice areas, students may choose to sit for certification as a family or adult nurse practitioner or to become certified as a Clinical Nurse Specialist in community health nursing with completion of requisite post-master's hours.

In the *adult psychiatric/mental health* concentration, students gain advanced skills in interventions with individuals, families, and groups. With requisite clinical experience, graduates are prepared to sit for certification as clinical nurse specialists in adult psychiatric mental health nursing. In Maine, this allows nurses to be reimbursed for services. In addition, graduates will possess advanced physical assessment skills which allow for better case finding, referral, and case management of mentally ill adults. These skills are consistent with emerging trends and recommendations in the field of psychiatric/mental health nursing.

The *nursing management* concentration prepares nurses to represent and advocate for nursing practice by offering advanced study of the organizational, fiscal, and political context within which nursing is practiced. Theoretical courses in nursing and related disciplines support the development of management skills. The management practicum provides an opportunity for students to experience the role of nursing manager and to participate in actual problem-solving and other management activities. Graduates from the management concentration are prepared to manage in the cost sensitive environments of today, while being able to advocate for complex ethical dimensions of patient care. At completion of the program of study, the student receives a certificate in health policy and management from the Muskie School of Public Service.

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 preparation, scholastic achievement, professional experience, interest, motivation, and references are predictive of successful graduate study.

Each student applying for full admission must meet the following requirements:

1. A baccalaureate degree with a major in nursing from a degree program accredited by the National League for Nursing.
2. A minimum undergraduate cumulative grade point average of 3.0 on a 4.0 scale, or a B average.
3. A course in introductory statistics which includes descriptive and inferential statistics.
4. A course in total health assessment, except for those interested in the management concentration.
5. A score of 45 points or above on the Miller Analogy Test, or combined aptitude scores of 1000 (V.Q.)/1500 (V.Q.A.) or above on the Graduate Record Examination taken within the past 5 years.

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

Application Material

In addition to the materials described in the Admissions chapter, applicants for this program must submit:

1. Two letters of reference reflecting professional practice and academic achievement.
2. Evidence (photocopy) of current licensure as a registered professional nurse in Maine.

Application Deadline

The application deadline is March 1.

Health Requirements

Students must comply with the University's immunization requirements. In addition, students must comply with College of Nursing health policy requirements and any additional requirements of those health care agencies to which they are assigned for clinical practice.

PPD

Lab test (titer) providing immunity to:

Rubella

Rubeola

Chicken Pox

Tetanus & Diphtheria

Hepatitis Vaccine (3 doses)

Hepatitis titer

Student health records must be on file in the College of Nursing prior to entry into clinical courses.

R.N. to Master of Science Degree Option for Registered Nurses

The R.N. to master of science option at the University of Southern Maine College of Nursing has been created specifically for registered nurses whose career goals will be enhanced through graduate study. The program facilitates and supports educational mobility and strengthens the leadership abilities of nurses who already have a foundation of professional experience. When required undergraduate courses have been completed, students in this program proceed directly into the master's program, bypassing the baccalaureate degree.

This option is designed so that students may complete the required junior and senior undergraduate nursing courses in one full-time year, beginning in May and ending the following May. Part-time study is also possible. The R.N. is offered both courses in new areas of content and assessment of prior learning in areas of previously attained knowledge and skill.

The R.N. to master's option is built upon prerequisites to the nursing major

that include courses in the physical and behavioral sciences, humanities, fine arts, and core courses required of all undergraduate students at USM.

Credits-by-Examination

Credits-by-examination may be earned in both undergraduate nursing and non-nursing courses. Non-nursing undergraduate courses open to credit by examination include English composition, general psychology and sociology, growth and development, human anatomy and physiology, and pathophysiology. Prior learning assessment examinations can earn up to 33 credits for non-nursing required courses. Call Kathie Blinick, director of Prior Learning Assessment, 780-4067, for an appointment or information.

Courses within the B.S. program that must be taken

NUR 304	RN Transition	5 credits
NUR 209/210	Total Health Assessment	4 credits
*NUR 314	RN Credit Options	30 credits
*BIO 345	Pathophysiology	3 credits
NUR 356	Concepts in Community Health	3 credits
NUR 417	RN Lab	4 credits

*Courses available for credit-by-examination. Up to 37 nursing credits can be earned by passing prior learning assessment examinations.

Sequencing of Courses

Some courses and credits-by-examination have prerequisites which must be completed prior to enrollment or taking the challenge exam. Some prerequisites may transfer into USM from another accredited institution; others may be taken at USM.

Upon completion of the undergraduate courses the R.N. to master of science student enrolls in graduate courses. All graduate courses are required and earn a total of 38 or 54 credits.

Admission Requirements

Admission to the R.N. to master of science option for registered nurses is on a competitive basis. Each student applying for full admission must meet the following requirements:

1. An associate degree in nursing or a diploma from a program accredited by the National League for Nursing.
2. Evidence (photocopy) of current licensure as a registered professional nurse in Maine.
3. Two letters of reference reflecting professional practice and academic achievement.
4. A score of 45 points or above on the Miller Analogy Test, or combined aptitude scores of 1000 (V.Q.)/1500 (V.Q.A.) or above on the Graduate Record Examination taken within the past 5 years.
5. Transcripts from a diploma school or an associate degree program. A 3.0 GPA (B average) is required.

Post-master's Certificate of Advanced Study in Psychiatric/Mental Health Nursing, Adult Health Nursing, or Family/Community Health Nursing

The post-master's certificate is designed to meet the educational needs of the master's prepared registered nurse interested in obtaining preparation for advanced practice. Students enrolled in this program join the master's students enrolled in the respective concentrations.

Program Requirements in Mental Health

*Clinical Concentration Courses	18
Advanced Mental Health Nursing I, II, III	
Psychopharmacology	3
Elective (mental health related)	3
Total credits	24

Program Requirements in Adult Health or Family/Community Health

Advanced Pharmacology	3
Advanced Patho/Health Assessment	6
*Clinical Concentration Courses	
Advanced Family/Community Health I,II,III	18
or	
Advanced Adult Health I,II,III	<u>18</u>
Total credits	27
*Clinical courses are sequential and cannot be taken concurrently	

Admission Requirements

Students applying for admission must meet the following requirements:

1. M.S. degree in nursing (official transcripts) from an NLN accredited program.
2. Two letters of reference reflecting current professional practice.
3. Personal letter describing past clinical experience, current goals, and program expectations.
4. Evidence (photocopy) of current licensure as a registered professional nurse in Maine.
5. Admission deadline is March 1.

Option for Non-Nurses with Baccalaureate Degrees

This option, initiated in 1990 as a pilot project, allows students who hold a baccalaureate degree in another field to earn a master's degree in nursing in 3 years. Students taking this option build their undergraduate and graduate nursing courses upon previous academic and life experiences.

During their first year students complete upper-division undergraduate courses with regularly enrolled baccalaureate nursing students. In the fall of the second year, students begin graduate non-clinical nursing courses with regularly enrolled master's students. Upon completion of the second year of coursework, students must sit for the State Board Examination (NCLEX-RN) and become licensed as a registered nurse. Failure to pass the NCLEX-RN licensure examination prior to the second graduate clinical practicum will stop progression in the program. Upon completion of all graduate courses, an M.S. in nursing is conferred.

Employment Opportunities

Graduates of this program are prepared to work in a variety of health care settings, including public health and community health agencies, hospitals, long-term care facilities, ambulatory settings, health promotion centers, and educational institutions.

Admission to the Option

Admission is competitive and limited. This accelerated program requires full-time enrollment in the planned sequence of study. Some scholarship monies are available. Individual consideration will be given to each applicant based upon the total profile presented. Deadline for submitting completed applications is December 1. If space allows, late applications will be considered until April 1.

Requirements

1. A baccalaureate degree from an accredited college or university.
2. A minimum undergraduate cumulative grade point average of 3.0 on a 4.0 scale, or a B average.
3. A score of 45 or above on the Miller Analogy Test or combined aptitude scores of 1000 (V.Q.)/1500 (V.Q.A.) or above on the Graduate Record Examination taken within the last five years.
4. Two letters of reference.
5. A personal interview may be required.

Prerequisite Course Requirements

1. Completion of a course in pathophysiology with a grade of C or above.
2. Completion of a course in introductory statistics (applied statistics is recommended), including descriptive and inferential statistics, with a grade of C or above (must be taken prior to NUR 604 Nursing Research).
3. Completion of a course in Anatomy and Physiology is highly recommended.
4. The Graduate Admissions Committee will review each individual's undergraduate coursework and make individual prerequisite requirements if any one or more areas are significantly under represented. (For instance, an individual whose major includes no social sciences may be required to take sociology/psychology courses.)

Prerequisites

Pathophysiology (BIO 345 offered spring semester and Summer Session)
Statistics (prior to NUR 604)

SUMMER I		Credits
NUR209/210	Total Health Assessment/Lab	4
NUR 288	Transition to Professional Nursing	2
NUR 302	Pharmacology	<u>3</u>
		Total credits 9
FALL I		
NUR 288	Transition to Professional Nursing	1
NUR 315	Child Health Nursing	2
NUR 316	Child Health Nursing Lab	2
NUR 320	Introduction to Adult Health Nursing	3
NUR 321	Introduction to Adult Health Nursing Lab	2
NUR 324	Older Adult Health Nursing	2
NUR 325	Older Adult Health Nursing Lab	2
NUR 330	Concepts in Mental Health Nursing	2
NUR 331	Mental Health Nursing Lab	<u>2</u>
		Total credits 18
SPRING I		
NUR 311	Reproductive and Sexual Health Nursing	2
NUR 312	Reproductive & Sex Health Nursing Lab	2
NUR 402	Adult Health Nursing	3
NUR 341	Community Nursing Lab	2
NUR 356	Concepts in Community Health	3
NUR 404	Adult Health Nursing Lab	<u>4</u>
		Total credits 16
FALL II		
NUR 601	Advanced Pharmacology	3
NUR 602	Advanced Pathophysiology/Health Assessment	6
NUR 607	Advanced Roles in Nursing	<u>3</u>
		Total credits 12
SPRING II		
NUR 603	Nursing Theory	3
NUR 608	Applied Theory of Small Groups	3
NUR 654	Advanced Family/Community I	6
or		
NUR 664	Advanced Adult Health I	6
or		
NUR 674	Advanced Mental Health I	<u>6</u>
		Total credits 12
FALL III		
NUR 604	Nursing Research	3
AMS 535	Intro to Epidemiological Research	3
or		
NUR 699	Advan. Psychopharmacology	3

NUR655	Advanced Family/Community II	6
	or	
NUR665	Advanced Adult Health II	6
	or	
NUR675	Advanced Mental Health II	6
	Total credits	12
SPRING III		
NUR 656	Advanced Family/Community III	6
	or	
NUR666	Advanced Adult Health III	6
	or	
NUR676	Advanced Mental Health III	6
NUR606	Health Policy, Ethics, and Change	3
NUR 684	Community Health and Medical Care	3
	Total credits	12

Note: Six graduate elective credits are required. It is recommended that they be taken as summer courses.

*Thesis credits may be substituted for 6 elective credits.

Total Program Credits:
 Graduate Program = 54 Credits
 Undergraduate Program = 43 Credits
 Total Credits = 97

Master's Degree for Certified Family and Adult Nurse Practitioners

The master's degree program for certified adult and family nurse practitioners is designed to meet the educational needs of certified adult and family nurse practitioners who do not hold either a baccalaureate or master's degree in nursing. Program length varies according to the academic credentials of the individual entering the program. Those practitioners without a baccalaureate degree must complete additional undergraduate coursework required in the RN to MS option.

Program Requirements

<i>Fall I</i>		
NUR 601	Advanced Pharmacology	3
NUR 603	Nursing Theory & Knowledge	3
NUR 607	Advanced Roles in Nursing	3
	Total credits	9
<i>Spring I</i>		
NUR 604	Nursing Research	3
NUR 608	Applied Theory Small Groups	3
HPM 674	Com. Health & Medical Care	3
	Total credits	9
<i>Fall II</i>		
NUR 606	Health Policy, Ethics & Change	3
NUR 6xx	Clinical Practicum	3
AMS 535	Intro to Epidemiological Res.	3
	Total credits	9
*NUR 6xx	Graduate Elective I	3
*NUR 6xx	Graduate Elective II	3
	Total credits	6

Note: RN to MS students must complete additional undergraduate coursework.

Completion of the 3 credit (9 hours) clinical practicum prepares the student for the required post-master's hours they must complete before sitting for the CNS exam.

*Elective courses may be taken as summer courses.

Program Policies

In addition to the general policies described in the Academic Policies chapter, specific policies for the graduate program in nursing are as follows.

Admission Credit This credit, which has been earned at USM, must be approved by the graduate faculty prior to admission and is subject to the condition that a grade of B- or better was received for the coursework. A maximum of six credit hours may be approved for admission credit. Exceptions to the maximum must be approved by the program faculty.

Transfer Credit This credit must be approved at the time of admission and request for approval included as part of the admissions application. Up to a total of nine credit hours may be approved as transfer credit provided these credits were earned no more than five years prior to matriculation. Additional credit may be approved in unusual circumstances.

Program Grade Policies In the undergraduate portion of their program, students in the RN-MS program and students in the MS option for non-nurses must achieve a minimum of a B- in all NUR designated undergraduate courses. If such students earn below a B-, they may retake the course one time; however, they will be placed on probation and may not progress to graduate courses. Failure to correct probationary status after one semester will result in dismissal from the University. A grade of less than C- in a required undergraduate course will result in dismissal from the University.

In the graduate portion of their program, all students must achieve a minimum of a B- grade for all required graduate courses. If students earn below a B-, they may retake the course one time. If the course in which a grade below a B- has been earned has a practice component, progression in the theory/practice course sequence stops until a grade of B- or better has been achieved in the course which is repeated. A grade below a C- in the clinical component of a course will result in dismissal from the University. In any semester in which the cumulative GPA falls below 3.0 (B average) the student will be placed on probation. Failure to correct probationary status after one semester will result in dismissal from the University. An incomplete grade in a practicum course must be satisfied prior to progression to the next sequential course unless an arrangement involving the student and the faculty of both courses has been agreed to in writing. A 3.0 GPA is necessary for graduation. Students may only count 3 credits of C in an elective toward graduation. A cumulative GPA below 2.0 will result in dismissal from the University.

Continuous Enrollment Continuous enrollment requires that every graduate students must earn at least 6 credits toward his or her degree every calendar year from the time of the first registration until completion of all requirements for the graduate degree.

Students working on their thesis must enroll each semester until the thesis has been completed, but may take less than six credits per calendar year.

Time Limit All requirements for the degree must be completed within six years from the date of first matriculation.

Professional Licensure Students are required to maintain current registered professional nursing licensure.

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 Studies and Research, University of Southern Maine, 96 Falmouth St., Portland, Maine 04103, (207) 780-4386.

The College of Nursing is accredited by the National League for Nursing. For additional information contact: the National League for Nursing Accreditation Commission, 350 Hudson Street, New York, NY 10014, (212) 989-9393.

Program Requirements

The M.S. program in nursing is four academic semesters in length for students taking an average of nine (9) or ten (10) credits per semester. Both full-time and part-time study are available. A total of 38-54 credit hours are required for completion of the master's degree program in nursing.

Advanced Nursing Practice
Adult Health
Family/Community Health
Adult/Psychiatric/Mental Health
Sample Full-Time Program Sequence

FALL I

Credits		
NUR 601	Advanced Pharmacology	3
NUR602	Advanced Pathophys/Health Assessment	6
NUR607	Advanced Roles in Nursing	<u>3</u>
	Total credits	12

SPRING I

NUR603	Nursing Theory	3
NUR608	Applied Theory of Small Groups	3
NUR654	Advanced Family/Community Health Nursing I	6
	or	
NUR 664	Advanced Adult Health Nursing I	6
	or	
NUR 674	Advanced Mental Health Nursing I	<u>6</u>
	Total credits	12

FALL II

AMS535	Intro to Epidemiological Research	3
	or	
NUR 699	Advan. Psychopharmacology	3
NUR 604	Nursing Research	3
NUR655	Advanced Family/Community Health Nursing II	6
	or	
NUR665	Advanced Adult Health Nursing II	6
	or	
NUR675	Advanced Mental Health Nursing II	<u>6</u>
	Total credits	12

SPRING II

NUR606	Health Policy, Ethics & Change	3
NUR 684	Community Health & Medical Care	3
NUR 656	Advanced Family/Community Health Nursing III	6
	or	
NUR666	Advanced Adult Health Nursing III	6
	or	
NUR 676	Advanced Mental Health Nursing III	<u>6</u>
	Total credits	12
	Total Graduate Program Credits	54

Note: Six graduate elective credits are required. It is recommended that they be taken as summer courses.

Thesis credits may be substituted for 6 elective credits.

Nursing Management
Sample Full-Time Program Sequence

FALL I

NUR603	Nursing Theory and Knowledge	3
NUR606	Health Policy, Ethics, and Change	3
HPM670	The Amer. Health Care System	<u>3</u>
	Total credits	9

SPRING I

NUR604	Nursing Research	3
NUR685	Fundamentals of Health Care Budgeting	1
NUR686	Applied Principles of Health Care Budgeting	1
	Elective	3

HPM674	Community Health & Medical Care	3
	Total credits	11
FALL II		
NUR641	Nursing Management Practicum I	6
	or	
HPM673	Fundamentals of Health Care Management*	3
	Total credits	9
SPRING II		
NUR642	Nursing Management Practicum II	6
HPM677	Managed Care	3
	Total credits	9

*12 credits of management core are required, 9 credits must be completed prior to the second management practicum.

Note: Thesis may be substituted for elective. Thesis requirement = 6 credits

Total Graduate Program Credit Requirements = 38

(With thesis = 41)

The programs of the College of Nursing are subject to change at any time without notice in advance.

Nursing Electives

NUR 510 Women's Health: Theoretical and Empirical Perspectives

The concept of women's health, as we know it today, is shaped not only by biology and physiology but also by cultural constructions. These constructions include the health professions, the women's health movement, and the phenomenon of consumerism. This course will raise questions about the objectivity of science, the paradigms used to study and explain women's health, the medicalization of women's lives, and the shared bodily experiences of women. We will also look at women's health from the different locations of class, race, age, and sexual preference. Cr 3.

NUR 515 Theoretical and Cultural Perspectives on Menopause

Perspectives on menopause in the United States are shaped not only by biology but by cultural constructions as well. These constructions include gendered science, education of health professionals, the international menopause industry, mass media, and the women's health movement. This course will raise theoretical questions about paradigms used to explain menopause, research methods, and clinical practice models. This course is offered via the Internet (a synchronous computer long distance model). 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. Particular attention is paid to the ethical concerns of the nurse. Cr 3.

NUR 525 Living with Death and Grieving: Loss, Change, Growth Throughout the Cycle

This course will provide the student with an understanding of dying, death, and bereavement from historical, cultural, societal, ethical, interpersonal, and personal perspectives. Learning to cope effectively with multiple losses across the life cycle, which can lead to change and growth, will be a major focus throughout the course. In addition to lectures and films, group discussion will examine philosophic, theoretical, and pragmatic issues underlying choices and decisions in clinical and professional practice. Strategies for appropriate intervention will be developed utilizing empirical findings and conceptual frameworks developed in the course. Cr 3.

NUR 577 Historical Foundations of Nursing

By exploring the trends and the contexts of the times in which key events occurred, this course provides an overview of the historical foundations of nursing. Nursing history will be viewed from both the vantage point of the contributions of nursing leaders and from the perspective of the average working nurse. Theoretical issues and research methods essential for historical inquiry, including the use of primary source documents, are emphasized. Cr 3.

NUR 590 Therapeutic Touch: Theory and Practice

This course is designed to introduce nurses and other health professionals to the theory and practice of the Krieger-Kunz method of therapeutic touch, a research and theory-based nursing intervention. Students will be introduced to Martha

Rogers' nursing theory, in which human beings are conceptualized as energy fields. Through readings, demonstrations, and guided practice, students will become aware of human field energy as it extends beyond the visible boundaries of the physical body, and learn to use therapeutic touch to assess human energy fields and to promote relaxation. Integrating therapeutic touch into clinical practice to reduce pain and accelerate healing will be discussed. Cr 3.

NUR 593 Community-Based Primary Prevention with Vulnerable Populations

This interdisciplinary community-based elective provides students with the opportunity to work with inner-city youth developing, implementing, and evaluating an HIV and substance abuse prevention program. Students will develop mentoring relationships with at-risk youth and their families. Students will learn to apply activity-based therapeutics aimed at enhancing self-esteem, developing a positive peer culture, and empowering youth with skills in communication and decision making. Students will lead small group discussions about issues related to HIV, alcohol, tobacco, and other drugs. Students taking NUR 593 will apply program evaluation methods to analyze program effects and establish a plan for program improvement. Both empirical and naturalistic research methods will be employed. Cr 3.

NUR 696 Research Topics

Courses on different types of research methods such as survey, historical, and field research are offered. Students taking one of these courses will have the opportunity to examine a particular research method in-depth and to use this method in the conduct of a research exercise. Courses meet the requirement of a research elective. Cr 3.

Nursing Courses

NUR 601 Advanced Pharmacotherapeutics

This course builds upon undergraduate understanding of pharmacological principles and agents by preparing students to evaluate and prescribe medications for common acute and chronic health problems. Students will examine the regulatory aspects of drug administration and prescription from the perspective of advanced nursing practice. The development of clinical decision-making skills essential to safe and effective pharmacological intervention will be the focus of the course. Current concepts in pharmacological therapies as part of the treatment of commonly encountered health problems will be stressed. Cr 3.

NUR 602 Advanced Pathophysiology/Health Assessment

This course builds upon and extends undergraduate knowledge of pathophysiology and health assessment. It provides students an opportunity to develop physical assessment skills needed for advanced practice in adult health, family/community health, and psychiatric/mental health nursing. Abnormal assessment findings are related to underlying pathophysiology. Cr 6.

NUR 603 Nursing Theory and Knowledge Development

This course explores contemporary issues in theory development and the social production of knowledge in nursing. Students examine the social and historical context of knowledge development in nursing with an emphasis on the relationship between theory, research, and practice in nursing. Cr 3.

NUR 604 Nursing Research

The research process in nursing is explored with emphasis on the nature of inquiry in a practice discipline. An overview of conventional and alternative paradigm approaches to research is provided. Students critically examine contemporary questions of ethics and social responsibility in research. Prerequisite: NUR 603. Cr 3.

NUR 606 Health Policy, Ethics, and Change

Sociopolitical, economic, and ethical frameworks are used to analyze public policies with an emphasis on a policy's impact on vulnerable populations. The implications of policy on health care restructuring and nursing roles are addressed. Attention is given to the role of the master's prepared nurse influencing, creating, and operationalizing policy. Cr 3.

NUR 607 Advanced Roles in Nursing

This course focuses on advanced practice nursing roles in the context of a changing health care environment. Role, skills, domains, and competencies will be explored. Emphasis will be placed on developing strategies for negotiating systems and creating work environments supportive of practice while addressing issues of quality. Cr 3.

NUR 608 Applied Theory of Family and Small Groups

This course focuses on the theoretical and practical aspects of working in and with small groups and families. It affords students the opportunity to gain insight into themselves as individuals and as participants in their family of origin and in small groups. Cr 3.

NUR 641 Nursing Management I

The course provides for synthesis and application of knowledge gained in the nursing and management core. The focus of this course will be on assessment and need identification in an organization, resulting in appropriate intervention strategies to impact the delivery of patient care in health care organizations. Economic and political factors affecting the organization and delivery of health care will also be analyzed. Guided experiences will be arranged in appropriate management settings.

Cr 6.

NUR 642 Nursing Management II

The focus of this course is on models of innovation and change in the health care system. Implementation and evaluation of intervention strategies for the delivery of quality patient care within an organizational setting are emphasized. Prerequisite: NUR 641.

Cr 6.

NUR 654 Advanced Nursing Practice in Family/Community Health I

This is the first in a sequence of three clinical courses designed to prepare advanced practitioners of adults. The emphases are on assessment and intervention strategies with adults who are in need of acute episodic care and health maintenance. Students develop physical and psychosocial assessment and intervention skills specific to the adult population. Decision-making abilities and role development are emphasized. Lecture, seminar and case study analysis constitute teaching methods for the course. Concomitant clinical component required.

Cr 6.

NUR 655 Advanced Nursing Practice in Family/Community Health II

This course builds on the foundation provided by the core courses and NUR 654, and introduces the student to the advanced practice nurse role in primary care of children and women of childbearing age within a family context. Therapeutic interventions are focused on both individual client and family. Concomitant clinical component required. Prerequisite: NUR 654.

Cr 6.

NUR 656 Advanced Nursing Practice in Family/Community Health III

This is the final in a sequence of three courses designed to prepare advanced practice nurses to provide primary care to individuals and families in the context of community. The emphases are on assessment, intervention, and management strategies of adults and elders experiencing long-term health problems. Particular focus will be on case management and direct care for selected groups and interdisciplinary/collaborative aspects of the advanced practice role. Concomitant clinical component required. Prerequisites: NUR 654, 655.

Cr 6.

NUR 664 Advanced Adult Health I: Assessment and Intervention

This is the first in a sequence of three clinical courses designed to prepare advanced practitioners of adults. The emphases are on assessment and intervention strategies with adults who are in need of acute episodic care and health maintenance. Students develop physical and psychosocial assessment and intervention skills specific to the adult population in primary care. Decision-making abilities and role development are emphasized. Lecture, seminar, and case study analysis constitute teaching methods for the course. Concomitant clinical component required.

Cr 6.

NUR 665 Advanced Adult Health II

A continuation of assessment and intervention strategies in the adult population related to health and social issues with added emphasis on adolescents and older adults. Students will expand their skills to include assessment of and intervention for clients with complex and chronic problems. Particular focus will be on interdisciplinary/collaborative aspects of the advanced practice role. Concomitant clinical component required. Prerequisite: NUR 664.

Cr 6.

NUR 666 Advanced Adult Health III

This is the final course in a sequence of three courses designed to prepare advanced practice nurses to provide primary care to adults and elders within the context of family and community. Emphases are on case management and direct care throughout the adult life span for people experiencing complex acute and chronic health problems. The course includes a focus on program development and evaluation. Weekly seminars will examine clinical topics of relevance to the practicum. Concomitant clinical experience required. Prerequisites: NUR 664, 665.

Cr 6.

NUR 674 Advanced Mental Health Nursing I

This course examines the theoretical, research, and practical application of clinical interventions appropriate for the advanced nurse in mental health nursing working with individuals. Specific emphasis is on clinical interviewing, assessment, and treatment using both brief psychotherapy and psychodynamic approaches. Concomitant clinical component required.

Cr 6.

NUR 675 Advanced Mental Health Nursing II: Theory and Practice (Family)

This course provides the theoretical and research foundations for the advanced practice of mental health nursing with families. Major family therapy frameworks used in clinical practice are explored. The structure and dynamics of traditional and variant family forms will be analyzed utilizing selected conceptual frameworks. Con-

comitant clinical component required. Prerequisite: NUR 674. Cr 6.

NUR 676 Advanced Mental Health Nursing III

This course provides the theoretical and research foundations for the advanced practice of mental health nursing in groups. Major group therapy frameworks are explored and analyzed within the context of contemporary political and economic forces affecting health care and in terms of their potential effectiveness with vulnerable populations. Concomitant clinical component required. Prerequisites: NUR 674, 675. Cr 6.

NUR 680 Advanced Psychopharmacology

This course will review the application of pharmacotherapeutic principles to psychiatric disorders. Each major class of medication will be covered: antidepressants, mood stabilizers, antipsychotic medications, and anxiolytics. The indications, contraindications, side effects and severe adverse reactions, and drug interactions will be reviewed in detail. The application of psychopharmacology to clinical case studies and practice will also be emphasized. Cr 3.

NUR 684/HPM 674 Community Health & Medical Care

This course investigates the relationship between the health care system and health. Areas of study include definitions and indicators of health and its relationship to medical care; epidemiology, the determinants of health, prevention; public health and vulnerable populations. The course investigates ways that society's health and social institutions can be integrated for maximal impact on the health status of individuals and populations. Cr 3.

NUR 692 Thesis

Completion of thesis under the guidance of a faculty thesis committee. Cr 5.

NUR 694 Thesis Continuation

Students who have completed all thesis credits but have not completed the thesis and continue to need faculty advisement must register for this course each semester until completion of the thesis. Cr 1.

NUR 695 Directed Study

A student will select a faculty member to guide readings to a chosen topic. A research paper may be required. Credit allocation up to 3 credits is negotiated with faculty. Cr var.

Edmund S. Muskie School of Public Service

Director: Richard E. Barringer

Coordinator of Student Affairs: Carlene R. Goldman

Professors: Barringer, Clary, Colgan, Delogu, Lapping, Zillman; *Associate Professors:* Bemotavicz, Cahill, Coburn, Goettel, Hitchcock, LaPlante;

Assistant Professors: Bolda, Hartley, Kilbreth, Lambert, Lynn

The Edmund S. Muskie School of Public Service is a non-partisan education, research, and public service organization dedicated to producing leaders, knowledge, and new ways to use knowledge; and to bettering the life of our people and our nation. The School combines the significant research capabilities of four nationally recognized applied research centers with the graduate programs in public policy and management, health policy and management, and community planning and development.

The School has grown in both size and reputation since it was founded in 1990—faculty and staff now number over 175, and research awards in 1996 amounted to over \$12 million. The Muskie School is nationally distinguished for its scholarship and the quality of its graduates, and sought after as a source of knowledge on issues of local, regional, state, and national importance.

What makes the School successful is its practical, innovative approach to issues; its active efforts to span traditional boundaries among university, government, and nonprofit organizations; and its success in bridging University departments and disciplines in the search for creative solutions.

The School actively seeks to assure a diverse and representative faculty and student body consistent with its public service, educational, and professional responsibilities. The School has a special commitment to Maine's historical minorities—Franco-Americans and Native Americans.

Muskie School Research Institutes

The research institutes of the Muskie School are dedicated to improving public policy and management through research and program evaluation, policy analysis, technical assistance, and training. In addition, the research institutes provide faculty and students with rich, "real-life" research and public service experience which expands and informs classroom learning within the School.

The School has four formal research institutes: the Institute for Child and Family Policy; the Institute for Disability Policy; the Institute for Health Policy; and the Institute for Public Sector Innovation. The institutes conduct funded projects for federal departments, state agencies in Maine and other states, local agencies, and private foundations. The School's research institutes are committed to bringing the research and public service resources and capacity of the University to bear on problems of critical importance to Maine and the region. Collaborative partnerships with community and state agencies and organizations have served as vehicles for innovative policy and program development.

The School's public service and research institutes are also national in scope. Since 1984, the Muskie School's Institute for Child and Family Policy has been designated and funded by the U.S. Department of Health and Human Services as a National Child Welfare Resource Center for Management and Administration. The Institute for Health Policy houses a national rural health research center and maintains a formal affiliation with the National Academy for State Health Policy, based in Portland, Maine.

The institutes employ a staff of over 100 research associates and assistants from a wide variety of academic, public management, and direct service backgrounds, including sociology, health and social policy, business, finance, psychology, social work, public health law, public administration, and mental health. Some hold faculty appointments with the Muskie School and/or other schools within the University of Southern Maine. Many graduate students are employed as research assistants.

Academic Programs

The Muskie School offers master's degrees in public policy and management (with joint degrees with the School of Law), health policy and management, and community planning and development. These programs educate students for leadership roles in government and the private and nonprofit sectors through interdisciplinary, problem-focused education. A combination of classroom and applied field experiences imparts a broad understanding of the challenges of democratic governance, and develops competencies in policy planning and analysis, and organizational and management skills.

Admission

Admission is granted to those students with a baccalaureate degree from an accredited college or university who demonstrate evidence of commitment to leadership in public service or in health policy and management, and the ability to perform graduate studies successfully. Ability to master a diversity of skills and subjects, to handle complex analytical tasks, and to think creatively is essential.

Applications are submitted to the USM Office of Graduate Studies. Applications for admission are considered in the spring of each year for the fall semester.

Credit toward completion of degree requirements owing to previously completed graduate study or prior learning experience may be granted in certain cases.

Application Deadline

The application deadline is April 1 for the fall semester (September).

Application Material

Applications are due by April 1 and include:

1. An official USM graduate application, including a written statement of interest in a career in public service, health policy and management, or community planning and development.
2. Official scores of the Graduate Record Examination.
3. Official transcripts of all undergraduate and other graduate education.
4. Three letters of recommendation.

Program Policies

In addition to the general policies described in the Academic Policies chapter, specific policies of these programs are as follows.

Time Limit

All students must complete requirements for the degree within six years.

Full-Time Students

Full-time students will be able to complete the program in two years or less. They should take as many core courses as possible in the first year, remaining sensitive to the possible need to fit in an occasional track/concentration course and/or elective course scheduled only in alternate years. Track selection must be complete prior to the end of the first year. In the second year, full-time students should first make certain all core and track requirements are fulfilled; they are then free to exercise concentration and elective options for the remaining credits, finishing with the capstone course.

Part-Time Students

Students planning to graduate in May of the third year should plan to take 14 to 18 credits the first and second years (two courses in the fall, two in the spring, and one or two in the summer session), for a total of 33 credits the first two years, and 12 credits the third year. It is suggested that the three-year, part-time student take all core courses in the first year and a combination of core, track, and elective courses in the second and third years. Again, sensitivity to alternate year course sequencing is advised.

Special Students

Public service professionals, advanced undergraduates, and community residents may require instructor permission to enroll in Muskie courses as a special student. Because special student status is dependent on space availability, those interested are urged to contact instructors as early as possible. Special students may take up to 12 credit hours in either the PPM, HPM, or CPD degree prior to matriculation. Taking classes as a special student does not guarantee admission to the PPM, HPM, or CPD program.

Transfer Credit

Students who have completed coursework in another graduate program may petition the PPM, HPM, or CPD Academic Standing Committee for transfer credit. Upon approval of the Academic Standing Committee, students may receive up to nine transfer credits for graduate courses taken at other institutions to be counted toward the total credits required for the master's degree. Requests for transfer credit normally are made at the time of admission or during the first semester of matriculation.

Transfer credit may be approved for required courses, track choices, electives, or some combination thereof. In all cases, an official graduate transcript from the institution where the courses were taken must be on file with the coordinator of Student Affairs.

In the event the student desires transfer credit to *replace* a required course or track choice, evidence of equivalence to the PPM, HPM, or CPD course must be demonstrated. At a minimum, a course syllabus must be submitted to the Academic Standing Committee.

In the event the student desires that transfer credit be *used in place* of PPM, HPM, or CPD electives, a description of the course or course syllabi must be submitted to the Academic Standing Committee.

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 in which a grade lower than B was received.

Extramural Credit

Students who are matriculated in the PPM, HPM, or CPD master's program and would like to take a course at another University of Maine campus or other University, or who would like to include a course from another department at USM that is not currently cross listed, must obtain permission from the Academic Standing Committee. The procedure is the same as for transfer credit requests.

Waiver Request

A student may request a waiver from a program requirement by showing adequate mastery of the subject matter. Evidence may include the undergraduate transcript or a transcript of other graduate work, successful completion of an examination or other academic exercise prepared by the course instructor, submission of samples of work, or through other means acceptable to the Academic Standing Committee. The Academic Standing Committee may solicit input from the course instructor as to the advisability of the substitution and may request supplemental information. Approval of a course waiver does not reduce the 47-unit requirement for graduation; students may take additional electives to meet the 47 required credits.

To expedite the process, a student contemplating a request for permission to substitute a course should meet with the chair of their program's Academic Standing Committee for more information about the required information to be submitted to the committee, given the basis for the request.

Certificates of
Graduate Study

Certificates of graduate study may be taken as an additional 6 credits of coursework to augment the master's degree, or as a 12 to 15 credit certificate program that does not require matriculation in a degree program. Certificate programs include courses selected from the master's programs' curricula. Certificate students may transfer their coursework into a degree program if they decide to pursue a master's degree.

The certificate of graduate study in community planning and development provides a unique combination of land use planning and economic development skills which permits students to understand basic elements of managing community growth, the forces that shape community growth, and how to influence those forces responsibly and effectively.

The certificate of graduate study in health policy and management provides the opportunity to learn about the broad social context of health service or health service policy and to develop both policy analysis and management skills appropriate to the field.

The certificate of graduate study in nonprofit management gives professionals and volunteers in the nonprofit sector a foundation of organizational knowledge and managerial skills and techniques necessary to respond to the challenges of this important and changing sector of society, including grant writing, strategic planning, and information technology.

Certificate of Graduate Study in Community Planning and Development

The professional field of community planning and development concerns itself with the continuing attempt by society to strike a reasoned and happy balance among community growth, environmental quality, and human welfare. It involves the development of economic growth strategies, the formulation of capital budgets and infrastructure programs, the analysis of existing and proposed land use policies, the preparation of comprehensive community plans, and the evaluation of private development proposals to manage change in the built and natural environments.

Persons with advanced training in community planning and development work in municipal town planning offices, on planning board staffs, for regional planning councils and state agencies, for local and regional development organizations, and for nonprofit organizations concerned with issues of community and environmental growth and preservation.

Persons contemplating a career in local or state government or nonprofit organizations, and who are particularly interested in the fields of land use, economic development, and environmental policy are invited to discuss their goals with the coordinator of the certificate in community planning and development. Those who already practice in the field and wish to enhance their skills and understanding of the issues are likewise welcome.

The certificate in community planning and development has two major objectives: to provide students with a grounding in land use and environmental planning, economic development, law and policy analysis, infrastructure programming, and growth management; and to develop an understanding of economic, social, legal, ethical, and political contexts within which decisions about land use, economic growth, and environmental protection are made. These objectives are met through course readings, class lectures and discussions, case analyses, and problem-solving exercises in various community-based settings.

The certificate requires the completion of fifteen credit hours of coursework, including a three-credit capstone project (or independent study).

At least one course must be selected from each of the Groups A, B, and C; the remaining six credits may be selected from either A or B.

Group A			
PPM	660	Land Use Policy and Planning I	
PPM	661	Land Use Policy and Planning II	
PPM	666	Seminar in Environmental Policy and Planning	
LAW	635	Land Use and Community Development	

Group B

PPM	643	Fiscal Techniques for Community Development
PPM	650	Regional Economics
PPM	651	Government-Business Relations
PPM	652	Community Economic Development
PPM	659	Topics in Economic Development

Group C

PPM	695	Independent Study
PPM	699	Capstone Project

Certificate of Graduate Study in Health Policy and Management

The certificate in health policy and management provides health professionals from diverse backgrounds a solid foundation of knowledge and skills in health policy analysis, planning, health care financing, and the fundamentals of health care management. Building on the Institute's master's program in health policy and management, the certificate offers a specialized, four-course, 12-credit curriculum emphasizing the organization, financing, and management of health care systems. The certificate program includes a diverse faculty drawn from the Muskie School as well as senior health care policy makers and managers. Enrollment in the certificate program is limited, to ensure active participation and interaction among faculty and program participants.

Required courses for completion of the program include:

HPM	670	The American Healthcare System
HPM	671	Economic Issues in Health Care
HPM	672	Politics of Health Policy
HPM	673	Fundamentals of Health Care Management

Certificate of Graduate Study in Nonprofit Management

The certificate program in nonprofit management provides those who work in or with nonprofit organizations with the knowledge and skills to respond to the challenges of this important and rapidly changing sector of society.

Students gain valuable expertise in critical areas such as managing human and financial resources, using technology to further organizational goals, and successfully mastering the system of performance contracting being introduced in Maine. Other topics examined include grant writing, fundraising, volunteer recruitment and management, board development, and interagency collaboration.

Students select four courses (12 credits) from among the following six courses offered at the Muskie School of Public Service, one of which may be an independent field research or directed readings course.

Many certificate courses are offered through the Education Network of Maine at locations throughout the state. Students may request to transfer certificate courses to the School's master's degree program in public policy and management upon matriculation.

Select four of the following six courses:

PPM	632	Human Resource Management in the Public and Nonprofit Sectors
PPM	633	Strategic Planning in the Public and Nonprofit Sectors
PPM	635	Managing in the Nonprofit Sector
PPM	636	Management Information Systems in the Public and Nonprofit Sectors
PPM	639	Topics in Public and Nonprofit Management
PPM	645	Grant Writing and Financial Management in the Nonprofit Organization.

Joint Degrees Program

Law and Public Policy

The joint degrees program in law and public policy offers the juris doctor degree (J.D.) through the University of Maine School of Law and the master of arts (M.A.) through the University of Southern Maine's Muskie School. The program allows students to earn both the J.D. and M.A. simultaneously by designating a certain number of crossover courses that satisfy the graduation requirements of each degree. Students may thus complete both degrees in four years instead of the five that would ordinarily be required.

The number of credits required to complete both degrees independently is 136: 89 for the J.D. and 47 for the M.A. A student may, with prior approval, transfer up to nine credits from each program to the other, thus reducing the number of required credits. Each student is expected to develop an academic plan with respect to law and public policy crossover courses, articulating the rationale for the selection of these courses. Students will be assisted in their planning by faculty advisors and the Joint Degrees Committee.

Master of Arts in Public Policy and Management

Since 1984, the public policy and management (PPM) program has offered a master of arts degree in public policy and management for both full- and part-time students. The program received national accreditation in 1994 from the National Association of Schools of Public Affairs and Administration (NASPAA), Washington, D.C.

Applicants with prior public service experience will significantly broaden their skills and abilities, enabling them to assume increased responsibilities. Students without public experience will find the combination of formal training and practical experience ideal preparation for public service.

A master of arts degree in public policy and management prepares individuals for careers in government, nonprofit organizations, and the private sector. Over time some graduates will become local and state policy leaders in such fields as planning, social and health services, court administration, education, business regulation, and legislation. They will work as agency directors, town and city managers, and policy analysts. Others will work in management and consulting firms, regional planning offices, institutions of basic and higher education, and some will be elected officials.

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

The program provides each student with a strong multidisciplinary foundation of skills and knowledge and the opportunity to apply them to contemporary issues of public concern.

Program Requirements

A total of 47 credits is required to earn the master's degree in public policy and management. A core curriculum of 24 credits assures an understanding of basic principles of political science, management, economics, law, public finance, and the use of microcomputers and statistics.

Following the core courses, students elect one of two tracks of study: *policy analysis and planning* or *public management*. Each track requires a combination of required and elective courses totaling 12 credits.

Students who specialize in policy analysis and planning examine the role of analysis and planning in public policy making, and are taught the methods typically employed by analysts and planners. The curriculum provides students with numerous opportunities to apply developing skills to real decision-making situations.

The track in public management allows the student to focus on either organizational or financial aspects of public management. Organizational management provides the student a greater understanding of how organizations and people work in the public sector, and the skills to improve the management of public and nonprofit organizations. Financial management builds skills in accounting, economics, and the financial management of public agencies and governments. Special attention is offered to the financial management problems confronting local governments.

After the core and track courses, students have six credits of electives to be used in any manner. Typically, a student will either take additional courses in a track, or courses toward a certificate of graduate study.

The Core Curriculum

At the center of the curriculum is a core of study in policy analysis and public management, providing a foundation of knowledge and skills for effective performance in public policy and management.

The core of study includes a year-long course which integrates politics, management, and policy making, as well as courses which approach the study of public policy from the perspectives of economics, law, and ethics, and courses in the theory and techniques of computing, statistics, research design, and public budgeting and finance.

PPM 610	Politics, Management, and Policy Making	6 credits
PPM 611	Economics for Public Policy	3 credits
PPM 613	Law and Public Policy	3 credits
PPM 615	Managing the Human Organization	3 credits
PPM 601/602	Applied Statistics for Management & Policy and Research Design	6 credits
PPM 640	Public Budgeting and Finance	3 credits

Tracks of Study

After completion of the core courses, students select a twelve-credit track of study in either policy analysis and planning or public management. The tracks are designed to provide more depth of knowledge in one of the two primary curriculum areas. Each track requires one or two courses, with the additional six credits selected from a range of designated courses which may change over time as student interests and program initiatives vary.

Policy Analysis and Planning Track

Required Course

PPM 620 Introduction to Policy Analysis and Planning I

Select an additional six credits:

PPM 603 Advanced Research Methods

PPM 604 Evaluation Methods

PPM 622 Applied Policy Analysis

PPM 623 Risk and Public Policy

PPM 629 Policy Analysis Practicum

PPM 633 Strategic Planning in the Public and Nonprofit Sector

PPM 670 Issues in Health Policy and Management

Public Management Track

Organizational

Required Course

PPM 630 Organizational Dynamics

Select an additional six credits

PPM 604 Evaluation Methods

PPM 632 Human Resource Management

PPM 633 Strategic Planning in the Public and Nonprofit Sector

PPM 641 Public Financial Management

Select an additional three credits

PPM 622 Applied Policy Analysis

PPM 634 Managing the American City

PPM 635 Managing in the Nonprofit Sector

PPM 636 Community Leadership School

PPM 639 Topics in Public Management

PPM 651 Government Business Relations

Financial

Select one of the three

PPM 641 Public Financial Management

PPM 642 Seminar in Financial Analysis

PPM 643 Fiscal Analysis for Community Development

Select an additional six credits

PPM 603 Advanced Research Methods

PPM 630 Organizational Dynamics

PPM 641 Public Financial Management

PPM 642 Seminar in Financial Analysis

PPM 643 Fiscal Analysis for Community Development

Select an additional three credits

PPM 634 Managing the American City

PPM 649 Applied Research in Finance

PPM 650 Regional Economics

PPM 652 Community Economic Development

LAW 616 State and Local Government Law

Beyond the core and track requirements, students take six credits of electives of their choice which may include further courses from the tracks, the beginnings of a certificate, or other combination of courses.

Field Experience

A two-credit field experience is required for preservice students with little or no prior experience in public or nonprofit organizations. Faculty and staff work with managers and policy makers throughout the region to develop meaningful opportunities. Incoming students will be screened by the Admissions Committee as to whether a field experience is required. If the Admissions Committee recommends that a field experience is not required, the student and the Academic Standing Committee will be notified and the student will be given the opportunity to formally petition for a waiver of the field experience requirement from Academic Standing. In no case shall field experience be waived except by approval of a petition submitted by a student to the Academic Standing Committee. *A waiver of the field experience requirement does not reduce the number of credits otherwise required to receive the degree.*

Capstone Project

A three-credit capstone project is required for all students. The capstone project experience is intended to integrate learnings from all program courses, and should be taken in the final semester, just prior to graduation.

PPM 550 Media and Public Policy

Introduces the relationship between the press and policy, focusing on state and national issues ranging from the Augusta Mental Health Institute crisis to the Gulf War and current events as they develop. The course is designed to help policymakers deal effectively with the media. Open to PPM students and senior undergraduate students.

Cr 3.

PPM 551 Public Policy Dispute Resolution

An introduction to alternative dispute resolution (ADR) techniques with specific application to environmental, land use planning, and resource management issues, emphasizing facilitation, negotiation, and mediation. Process techniques for both bargaining and public involvement settings, such as stakeholder analysis, active listen-

ing, and joint model-building will be explored. The course combines many in-class simulations to skill building with rigorous theoretical background. For practicing professionals and graduate students in public administration, planning, program and resource management, as well as advanced undergraduates (with permission from instructor).

Cr 3.

PPM 560 Topics in Public Policy

Selected topics in public policy intended to provide an overview of important contemporary issues.

Cr 3.

PPM 561 Natural Resource Economics

Introduces students to environmental problems and their economic impacts. It assesses the economic importance of both environmental degra-

dation and environmental quality, the economic causes of many environmental problems, and the design of economic incentives and policies to slow, halt, or reverse degradation and pollution. The course also focuses upon tools of analysis and exploration of alternative economic frameworks for understanding environmental issues and problems. Cr 3.

PPM 601 Applied Statistics for Management and Policy

Introduces students to a variety of analytical approaches to studying management and policy questions. The course concentrates on the acquisition of skills that will enable the student to choose and apply statistical methodology appropriately, and to evaluate critically work done by others. Topics include tabular and visual displays of data; data analysis including central tendency, dispersion, measures of association and linear regression; and the use of a statistics software package. Cr 3.

PPM 602 Research Design

Focuses on social research as it applies to policy and organizational analysis. Emphasis is on the employment of the scientific method. Basic dimensions of social science inquiry are covered: philosophy of science, research ethics, processes of theory construction, hypothesis testing, validity and reliability issues of measurement, and methods of data collection. Includes survey of applied social research techniques. Course materials are specifically designed to illustrate the particular research problem faced by policy analysts and public/nonprofit managers. Prerequisite: PPM 601. Cr 3.

PPM 603 Advanced Research Methods

Extends the student's understanding of quantitative data analysis and research methods. Expands statistical skills in the areas of multiple regression, significance testing, analysis of variance, and selected other multivariate techniques. Introduces students to a range of data acquisition methods, including on-line searching and database construction and maintenance. Prerequisite: PPM 601 or equivalent introductory statistics course. Cr 3.

PPM 604 Evaluation Methods

Introduces students to the methods and techniques used to assess effectiveness and monitor the performance of programs, whether provided directly by government agency or under contract. Specific attention is given to problem formulation, determination of evaluation or assessment plan, conducting the research, and presenting results for the intended audiences. Information gathering through surveys and interviews as well

as statistical analysis of data are emphasized. Evaluating research done by others and the RFP process of obtaining evaluators is covered. Prerequisites: PPM 601 and 602. Cr 3.

PPM 605 Seminar in Quantitative Methods

Provides an in-depth examination of multivariate statistical techniques used in public policy research. Topics include regression, principal components analysis, factor analysis, canonical correlation, discriminant analysis, and time series analysis. Prerequisites: PPM 601, 602, and 603 or permission of the instructor. Cr 3.

PPM 610 Politics, Management, and Policy Making (I & II)

Examines the relationship between the political process, policy-making, and public management. Topics include policy formulation, adoption, implementation, and evaluation. Specific attention is given to the ways that key political variables (public opinion, elections, parties, interest groups, and leadership styles) influence public policy; the role of policy analysis in government; contemporary issues of public policy; and how public bureaucracies implement policy through planning, organizing, and other administrative processes. The course is team-taught and is offered as two three-unit modules. (Year-long course.) Cr 6.

PPM 611 Economics and Public Policy

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.

PPM 613 Law and Public Policy

Introduces the student to legal analysis and emphasizes the role of the law in the choices faced by public policy makers. Students will examine materials ranging from constitutional provisions to statutes, regulations, and case decisions. The course will consider social values and custom; how these factors limit and shape the law and then directly or indirectly shape the options of policy makers. The course provides an introduction to the fundamentals of legal research and

insight into judicial and administrative processes. There is some exposure to substantive law particularly in the areas of jurisprudence, constitutional law, procedure, and administrative law.

Cr 3.

PPM 615 Managing the Human Organization

An examination of issues and approaches in the management of the human organization. Topics include classic and modern theories of management; understanding individual, interpersonal, and group behavior; leadership and power; organizational structure and culture; and managing change. Throughout the course special attention is given to issues affecting management in the public sector and to the ethical aspects of management.

Cr 3.

PPM 620 Introduction to Policy Analysis and Planning I

An introduction to the role of policy analysis in the development of public policy designed for students entering the policy analysis and planning track. Students are introduced to historical and scientific methods of policy analysis through the use of case studies. Prerequisites: PPM 601 and 602.

Cr 3.

PPM 621 Introduction to Policy Analysis and Planning II

An exploration of planning methods, theory, and techniques, with particular emphasis on long range and strategic planning and accountability measures in policy formation. Goal formation, problem identification, evaluation of alternatives, forecasting, and evaluation are discussed. Critical analysis is conducted of plans from a variety of government and nonprofit agencies.

Cr 3.

PPM 622 Applied Policy Analysis

Designed as an integrative course that will reinforce other analysis courses. Introduces students formally to the application of policy analysis to public sector problems and issues. The course will be case-based, with substantive material introduced to provide more detail and food for discussion for the cases. Prerequisite: PPM 610.

Cr 3.

PPM 623 Risk and Public Policy

Introduces students to varied models for the conceptualization and management of risk. Emphasis is given to analytic frameworks and findings on how individuals and communities respond to risk information bearing on health. Ethical issues and responsibilities in risk management will also be considered. Draws on multiple perspectives, including medical, social, environmental, and political sciences.

Cr 3.

PPM 624 Gender, Race, Politics and Public Policy

A gender-informed approach to racial analysis, practice, and activism. Purpose of seminar is to develop a framework for relating gender to other systems of inequality and to apply this framework to a critical rethinking of policy and planning in spheres such as employment, the environment, housing, and community development.

Cr 3.

PPM 629 Policy Analysis Practicum

Provides an intensive, one-semester, client-directed experience in which students work as a team under the direction of faculty on problems and issues of current concern.

Cr 3.

PPM 630 Organizational Dynamics

Examines the basic processes that determine how organizations set goals, structure themselves, measure performance, adapt to their environment, manage change and internal conflict, and make decisions. Emphasis is given to techniques of analysis that can be used to understand and manage these various organizational functions. Prerequisite: PPM 610.

Cr 3.

PPM 632 Human Resource Management

Introduces basic conceptual frameworks, techniques of analysis, and contemporary issues in human resource management in the public and nonprofit sectors. Topics include: motivation, satisfaction, and the worker; fairness and representation in the workplace; systems approaches to work analysis; labor and productivity measurement; analyzing work and identifying competence; recruitment, screening, and selection; performance appraisal; strategies of human productivity improvement; programmatic alternatives for human resource management; and integrating human resource management into the organization.

Cr 3.

PPM 633 Strategic Planning in the Public and Nonprofit Sector

Examines how public organizations can utilize strategic planning in responding to environmental change and the future. Approaches to and techniques of strategic planning are covered, including goal-setting, environmental scanning, resource audits, and the formulation of strategy and its implementation. Examples are drawn from Maine state and local government and the nonprofit sector.

Cr 3.

PPM 634 Managing the American City

Explores essential themes which will provide the students with a theoretical understanding of the fundamental issues involved in managing our complex and diverse urban environments. Spe-

cial emphasis will be placed on examining emerging management issues that have sparked a new demand for excellence and innovation in city governments. While the city of Portland will serve as a useful reference point, the course will also explore the difficult management issues involved in our larger central cities. Cr 3.

PPM 635 Managing in the Nonprofit Sector

An examination of the managerial dimensions of nonprofit organizations. Major foci include the nonprofit environment, organizational roles and processes, interagency relationships, and problems of change and adaptability. Specific attention is given to current issues in nonprofit management such as strategic planning, board/staff relationships, computerization of the workplace, fund raising, and volunteer development. Cr 3.

PPM 636 Management Information Systems in the Public and Nonprofit Sectors

Designed to give those who work in the public and nonprofit sectors the knowledge and skills they need to understand the underlying principles and theories of management information systems and the roles which they play in public and nonprofit organizations. Students will participate in the design, implementation, and evaluation of information systems in their organizations, and become conversant with key issues and problems in contemporary public policy and law relative to information policy and telecommunications. Cr 3.

PPM 637 Intergovernmental Relations

This course analyzes the revolutionary changes taking place in traditional relationships among the federal, state, and local levels of government. Topics include: how traditional intergovernmental approaches are changing and what those changes mean for the future of government; what innovative policies and methods federal, state, and local governments are using to make policy and deliver services in an era of declining resources; and how governments are using mandates to enforce policy decisions at other levels of government. Special attention will be given to Maine state and local governments as well as national trends and perspectives. Cr 3.

PPM 639 Topics in Public Management

Selected topics in public management determined from time to time. Cr 3.

PPM 640 Public Budgeting and Finance

Provides students with both a theoretical and practical introduction to the debates, tradeoffs and implications of budgeting for public services and securing financing for their provision. Examines

essential public finance theory as it relates to revenue raising and resource allocation decision making by the public sector. Specific topics include market failure and government economic intervention, public revenue sources, characteristics of high quality revenue systems, budget review and analysis, and budget development and presentation using Quattro. Prerequisite: PPM 601. Cr 3.

PPM 641 Public Financial Management

Examines the finance function in public organizations as it operates during the fiscal year and in the longer range setting. Topics include government fund accounting, internal resource analysis and management, including cash management, risk management, purchasing and capacity management, capital planning and programming, and debt financing and management. Prerequisite: PPM 640 or EDU 683. Cr 3.

PPM 642 Seminar in Financial Analysis

Examines a selected number of public financial management topics in depth. Students enrolled in the course participate in a research project with significant public policy or management implications. The central course coverage focuses on the financial analysis of governments, including the evaluation and management of financial condition. Other topics will vary slightly each semester. The course is offered to correspond to the research focus selected. Prerequisite: PPM 641. Cr 3.

PPM 643 Fiscal Analysis for Community Development

Introduces students to the methods and techniques of evaluating, monitoring, and managing the short and longer term fiscal effects of community change. Designed for planners, local government managers, and elected officials, this course emphasizes the application of fiscal tools to decision-making and planning problems. Specific topics include fiscal impacts of growth, assessing financial condition, infrastructure finance, and debt analysis. Cr 3.

PPM 645 Grant Writing and Financial Management in the Nonprofit Organization

Emphasis is on the technical, organizational, and political elements of grant writing as applied to state, federal, and foundation funding sources. Other issues include legal dimensions of federal and state tax policy, basic accounting practices, and fiscal components of strategic planning. Cr 3.

PPM 649 Applied Research in Finance

Provides an intensive client-directed experience in which students work individually or in groups investigating an important finance policy issue or exploring a municipal financial management concern. Prerequisite: PPM 640. Cr 3.

PPM 650 State and Regional Economic Development

This course surveys basic regional economic concepts, economic impact analysis, and economic modeling. Students work extensively with economic data for Maine and other states. Cr 3.

PPM 651 Government-Business Relations

This course covers government regulation of business (including basic elements of competition policy, the regulation of transportation and utilities, and environmental regulation) and basic elements of economic development policies (financing, business development assistance, location subsidies, etc.). Cr 3.

PPM 652 Community Economic Development

Provides an understanding of community economic development, its origins and principles. Cr 3.

PPM 656 Topics in Maine Growth and Development

Designed to add to our knowledge and understanding of the Maine economy, its historical evolution, its contribution to the well-being of Maine people, and its current and future requirements. These matters will be explored through readings in Maine history, demography, education, transportation, energy and natural resources, and resource and growth management. Research techniques in the social sciences will be explored through examination and discussion of current public policy analysis. Cr 3.

PPM 660 Land Use Policy and Planning I

Introduces students to the methods and techniques of planning small-area and community land use plans. Critical issues in planning practice are explored, including political, social, environmental, and ethical concerns. Rural and small town planning, state and regional roles, affordable housing, and transportation are considered. Community resource and problem inventories, population and employment forecasting, land consumption, community improvement programming, fiscal impact analysis, environmental capacity analysis, and state-mandated growth management programming are examined. Plan-making exercises are required. Cr 3.

PPM 661 Land Use Policy and Planning II

The course concentrates on procedures and practices employed in the implementation of land use plans, programs, and policies. Zoning, subdivision regulations, site plan review procedures, and official mapping will be covered. Conventional Euclidean and flexible post-Euclidean approaches to zoning are considered. The use of

non-regulatory methods of implementation such as tax incentives and disincentives are explored. Capital budgeting and programming, bonded debt, special assessment districts, and tax increment financing are included, as are federal, state, and local direct subsidies. Team exercises are assigned. Cr 3.

PPM 666 Environmental Policy and Planning

A seminar on environmental issues in Maine, New England, and the nation. Topics may include air quality, water quality, toxic and hazardous waste management, solid waste management, wildlife habitat, landscape degradation. Federal, state, and local roles in reconciling natural resource threats, economic growth, property rights, and the public interest will be explored. Cr 3.

PPM 667 Comprehensive Community Planning

Introduce students to the purpose, design, and preparation of comprehensive planning for cities and towns. Class sessions will focus on various elements of comprehensive community planning, including inventory and analysis of community opinion, socio-economics, housing, public facilities, natural resources, and plan implementation tools. Students will learn about data sources for comprehensive planning and methods of policy analysis. The utility and limitations of comprehensive planning for growth management purposes will be given special emphasis. Cr 3.

PPM 668 Historic Preservation through Growth Management

Explores the policy foundations for preservation of historic, scenic, and natural resources. Considers elements of preservation planning for rural and urban areas. Provides experience in identification and evaluation of historic, cultural, and natural resources in the comprehensive planning process. Case studies utilized. Cr 3.

PPM 691 Public Speaking

Integrates the mechanics of effective speech writing and delivery. The goal of the class is to give students experience in preparing and delivering speeches; to provide historical and current background on the nature of oral and written communication; to provide exposure to important speeches and orators; and to provide instruction for preparing and delivering speeches. Cr 1.

PPM 692 Working Effectively in Small Groups

This course explores basic concepts and strategies for enhancing personal effectiveness in working groups, whatever their purpose. In addition to discussing effective communication strategies and group dynamics, the course will introduce students to the Myers-Briggs Type Indicator. The MBTI, a widely used and respected psychological instrument based on the theories of Carl Jung, characterizes 16 personality types which differ in styles of gathering information, making decisions, and responding to the world. The course seeks to heighten awareness of critical group processes, and to develop practical personal skills.

Cr 1.

PPM 695 Independent Study

Cr 3.

PPM 696 Field Experience

Students without a substantial and relevant work experience in public service are required to complete an internship during the course of

their studies. Determination of whether an internship will be required will be made upon admission to the program. The internship will be designated to expose the student to the formulation and implementation of public policy in a work setting. It will usually be with a public or nonprofit agency, although internships with private agencies involved in a public policy issue may be accepted.

Cr 2.

PPM 699 Capstone Project

The Capstone Project is each student's opportunity to integrate materials learned in the core, track, and concentration courses into a single project. The form of the Capstone Project will be determined by the student's program of study and interests. It is designed in consultation with a PPM faculty member, with the Capstone Coordinator (the PPM faculty member responsible for overseeing Capstone Projects), and if appropriate, with practitioners from outside of the University.

Cr 3.

Master of Science in Health Policy and Management

The master of science in health policy and management program offers a problem-focused, experiential curriculum designed to prepare students for a rapidly changing health policy and management environment that is characterized by a shift from inpatient to outpatient care, a rapidly changing reimbursement environment, and the decentralization of management and decision making amidst mergers and the formation of networks and consortia. The program emphasizes a core of data management and analytic skills, communication skills, and solid knowledge in all aspects of the health care delivery system, supplemented by learning experiences designed to enhance skills in problem solving and adapting to change.

The master's degree in health policy and management is offered to both full- and part-time students. Applicants with experience in health services delivery, management and/or policy will find that the program broadens their skills and equips them to meet the challenges posed by the ever-changing health care environment. Students without such experience will find the field experience and opportunities for hands-on research an excellent preparation for a career in health policy and management.

The School intends to seek accreditation for this new program from the Accrediting Commission on Education for Health Services Administration, the accrediting body of the Association of University Programs in Health Administration.

Program Requirements

Forty-seven credits of coursework are required to complete the master's in health policy and management. In addition to course content, writing and communication skills are emphasized throughout the curriculum. Organizing and presenting material orally to students and faculty is a performance requirement in several courses, as are writing assignments of increasing complexity.

The Core Curriculum

At the center of the curriculum is a required core of study providing a foundation of knowledge and skills for effective performance in health policy and management. The core curriculum, which is required of all HPM students, consists of 21 credits, including courses in statistics, economics, community health, health politics, health care finance, health care management, and the American healthcare system.

AMS	545	Applied Biostatistics	3 credits
PPM	611	Economics and Public Policy	3 credits
HPM	670	The American Healthcare System	3 credits
HPM	672	Politics of Health Policy	3 credits
HPM	673	Health Care Management	3 credits
HPM	574	Community Health and Medical Care	3 credits
HPM	675	Health Care Finance	3 credits

Tracks of Study

Near the completion of core requirements, students must select a track, which is a more focused course of study, in either *health policy analysis* or *health services management*, for 15 additional credits. Two electives, the field experience, and the capstone project, complete the 47 credit curriculum.

Health Policy Analysis Track

Required Courses

PPM	602	Research Design
PPM	620	Introduction to Policy Analysis
HPM	671	Economic Issues in Health Care
Select an additional 6 credits:		
PPM	603	Advanced Research Methods
PPM	604	Evaluation Methods
PPM	622	Applied Policy Analysis
PPM	629	Policy Analysis Practicum
AMS	535	Epidemiologic Research
LAW	618	Health Law
HPM	677	Managed Care
HPM	679	Research Seminar in Health Policy

Health Services Management Track

Required Courses

PPM	630	Organizational Dynamics
HPM	676	Health Care Planning and Marketing
HPM	677	Managed Care
Select an additional 6 credits:		
PPM	632	Human Resource Management
LAW	618	Health Law
PPM	636	Management Information Systems
HPM	680	Seminar in Organizational Problem Solving
MBA	643	Innovation and Change

Electives

Beyond the core and track requirements, students take six credits of electives of their choice which may include further courses from either track, or other courses selected from the following list:

PPM	624	Gender, Race, Politics, and Public Policy
PPM	633	Strategic Planning in the Public and Nonprofit Sector
PPM	635	Managing in the Nonprofit Sector
PPM	639	Topics in Public Management
HRD	552	Long Term Care: Current and Future Issues
Other Courses		
PPM	695	Independent Study
PPM	696	Field Experience
PPM	699	Capstone Project

Field Experience and Capstone Project

Each student is required to demonstrate proficiency in the skills learned in the program in one of two ways. Students with substantial work experience in a

health care setting have the option of a two-credit independent study that focuses on a topic related to their current or recent work experience. For students with limited experience, or for those interested in broadening their experience, a two-credit field experience is required in a participating health care organization under the direction of an approved preceptor. Either of these field experiences is available to students who have earned at least 24 credits in the HPM program.

The Capstone Project is undertaken by students working independently or in a team, under faculty supervision. The Capstone Project requires the student to integrate knowledge and skills acquired in the HPM program, and to demonstrate competence in their application to a specific topic in health policy or management. The project may take many forms, including a policy or management research project, the development of a strategic plan for a health care organization, an organizational or human resource analysis, or a financial study, among others. The precise form will be determined by the student in consultation with his or her capstone advisor.

Research Opportunities

The Muskie School's Institute for Health Policy has become, over the past decade, a nationally recognized and funded center for health policy and services research. All core faculty in the health policy and management program have joint appointments in the Institute for Health Policy. In addition to state-level health policy and services research in Maine (with substantial collaboration with governmental and other organizations throughout the state), the Muskie School has a substantial and growing national research agenda and currently houses two national institutes for rural health research. The Institute also maintains an affiliation with the National Academy for State Health Policy, based in Portland.

The HPM Program will utilize extensive research, demonstration, and technical assistance activities and projects underway within the Institute for Health Policy to provide practical, hands-on research and/or management experience for five to ten HPM students each year. These experiences may include paid graduate or research assistantships working with center faculty and staff, and internship and field experiences. HPM students will also have the opportunity to access the Center's extensive databases for Capstone and other projects.

HPM 670 The American Healthcare System (formerly Issues in Health Policy)

Introduces students to the organization and financing of the American health care system and reviews the critical policy problems and choices in the system. The course examines the structure and financing of the health care system, including reimbursement recent changes and the effects of these changes on the fundamental policy concerns of health care cost, access to care, and quality of care.

Cr 3.

HPM 672 The Politics of Health Policy

Acquaints the student with the following factors influencing health policy: ethical values as expressed through theories of distributive justice; politics, including political parties, congressional committees, and interest groups; and public opinion, as expressed through news media and opinion polls. Also analyzes examples of both state and national health care legislation and the influences exerted upon them by these factors.

Cr 3.

HPM 671 Economic Issues in Health Care

Introduces students to the critical, contemporary issues in health economics and current problems and choices in the financing of health care, including physician and hospital services, mental health, and long-term care. The evolution of the current financing systems, including market and regulatory strategies, is discussed. The course also covers health care reimbursement as a specialized topic in health care finance.

Cr 3.

HPM 673 Fundamentals of Health Care Management

Examines the application of organizational and management theory to health organizations. Focusing on the management process and the problems of achieving results, the course covers a variety of topics including organizational design, human resource management, financing and capital management, leadership and administrative ethics, and strategic planning.

Cr 3.

HPM 674 Community Health and Medical Care

This course investigates the relationship between the health care system and health. Areas of study include definitions and indicators of health and its relationship to medical care; epidemiology; the determinants of health; prevention; public health and vulnerable populations. The course investigates ways that society's health and social institutions can be integrated for maximum impact on the health status of individuals and populations. Cr 3.

HPM 675 Health Care Finance

Examines the processes and methods of accounting and finance for health care institutions. Topics include a brief review of accounting practices including record keeping, inventory control, bad debt and charity care, and depreciation. Cost finding, cost and revenue centers, financial statement analysis, net present value analysis, capital management, debt financing, and hands on experience with Medicare cost reports and other fiscal reporting protocols are also covered. Cr 3.

HPM 676 Health Care Planning and Marketing

This course examines concepts in strategic planning and marketing of health services. Topics include environmental analysis, service area and market definition, medical staff analysis, competitor identification and analysis, market research, medical staff analysis, and product and service specific markets and marketing strategies. Cr 3.

HPM 677 Managed Care

This course combines three closely related issues: managed care, health information systems, and quality assurance. A history of HMOs and other models of managed care is provided, with close investigation of distribution of financial risk, inter-organizational relationships, planning,

development, financing, and legal issues. The data systems necessary for managed care models are discussed, including acquisition, storage, and analysis of data to support patient care, and financial and strategic decision making. One application of health information data is discussed in depth: quality assurance. This part of the course covers definitions of quality, methods of measuring quality, its application to managed care, strategic planning, marketing, evaluation, and research. Cr 3.

HPM 679 Research Seminar in Health Care Policy

Provides students "hands-on" experience in conducting a health policy analysis project. The course is designed to develop students' abilities to think critically about health policy problems and issues and to perform policy research and analysis. The course provides students the opportunity to apply, integrate, and refine analytic skills acquired in core courses and in the health policy sequence. Students work as a group to conduct an analysis of a policy problem/issue. Class sessions are devoted to special topics and assignments, both methodological and substantive, related to the research project. Cr 3.

HPM 680 Seminar in Organizational Problem Solving

This seminar is designed for students in the health services management track, but will be open on a limited basis to other PPM and HPM students. Using prepared case studies, students will learn formal problem-solving models including the traditional, hierarchical approach as well as more current team and collective approaches. The majority of the semester will be devoted to students identifying major problems from their own work experience or their field experience, applying appropriate methods, and presenting their cases to the class. This course may be used as a capstone project by HPM students. Cr 3.

Master of Community Planning and Development

The community planning and development degree offers an opportunity for those with an interest in shaping the future environment and economy of cities and towns to acquire the skills and knowledge needed to be effective members of the planning and economic development professions. In the future, graduates of the program will be able to sit for the examination leading to membership in the American Institute of Certified Planners.

The Muskie School's CPD program is designed to meet the unique challenges of our region. It is neither strictly urban, nor strictly rural in focus, but reflects the wide variety of communities found in Maine, New Hampshire, Vermont, and the Atlantic Provinces. Students will acquire a firm grounding in the past, through courses in planning history, as well as the latest GIS technologies. All students will learn about the interaction between the economy and the environment which makes planning such a challenging profession.

Students will have the opportunity to do hands-on professional work in the field. Some of this will be in class, some in individual projects, and some may be

as a researcher working with such programs as the Casco Bay Estuary Project, a national estuary program effort housed at the Muskie School. Students will leave the CPD program with both the academic and professional experience needed for success.

Program Requirements

The master's degree requires 54 credits. A required core of 39 credits (including capstone and field experience) provides basic skill for planning (such as geographic information systems and budgeting), a theoretical foundation, and an introduction to the unique planning challenges of Maine and the surrounding area. Students select an additional 15 credits of focused course work from among three specializations: *land use and environment, community and economic development, and health planning.*

Core Curriculum

CPD 600	Introduction to Planning Theory and History	3
PPM 610A	Politics, Management and Policy	3
PPM 611	Economics and Public Policy	3
PPM 640	Public Budgeting	3
CPD 618	Introduction to Sustainable Communities	6
PPM 601	Statistics	3
CPD 602	Research for Planners	3
CPD 601	Spatial Analysis	3
PPM 613	Law and Public Policy	3
CPD 612	Conflict Management, Group Process and Leadership	3
CPD 690	Studio/Practicum	3
CPD 698	Field Experience	3

Land Use and Environment Track

Select 6 credits

CPD 660	Comprehensive Planning	3
CPD 661	Zoning and Land Use Ordinances	3
CPD 664	Principles of Design	3

Select 3 credits

CPD 652	Community Development	3
PPM 650	State and Regional Economic Development	3

Select 6 credits

PPM 603	Advanced Research Methods	3
CPD 665	Transportation Planning	3
CPD 669	Historic Preservation	3
CPD 667	Housing and Real Estate	3
PPM 633	Strategic Planning in the Public and Nonprofit Sector	3
PPM 623	Risk and Public Policy	3
PPM 643	Fiscal Analysis in Community Development	3
CPD 668	G.I.S. Laboratory	3
PPM 551	Public Policy Dispute Resolution	3
ANES 638	Landscape, Culture, and Region	3
ANES 641	Environment and Culture	3
ANES 635	Land Use and Growth Policy Law	3
PPM 619	Communications and Public Policy	3
PPM 637	Intergovernmental Relations	3

Community and Economic Development Track

Select 6 credits

CPD 652	Community Economic Development	3
PPM 650	State and Regional Economic Development	3
CPD 667	Housing and Real Estate	3
PPM 666	Environmental Policy	3

CPD 665	Transportation Policy	3
Select 3 credits		
CPD 660	Comprehensive Planning	3
CPD 661	Zoning and Land Use Ordinances	3
Select 6 Credits		
CPD 669	Historic Preservation	3
PPM 651	Government-Business Relations	3
PPM 633	Strategic Planning in the Public and Nonprofit Sector	3
PPM 643	Fiscal Analysis in Community Development	3
PPM 659	Economic Development Practicum	3
MBA 649	Special Topics in Management: Entrepreneurship and Business Formation	3
PPM 551	Public Policy Dispute Resolution	3
PPM 619	Communications and Public Policy	3

Health Planning Track

Required course		
HPM 670	American Health Care System	3
Select 3 credits		
CPD 660	Comprehensive Planning	3
PPM 650	State and Regional Economic Development	3
Select 9 credits		
HPM 672	Politics of Health Policy	3
HPM 674	Community Health and Medical Care	3
HPM 675	Health Care Finance	3
HPM 676	Health Care Planning and Marketing	3
PPM 633	Strategic Planning in the Public and Nonprofit Sector	3
PPM 619	Communication and Public Policy	3

CPD 600 Introduction to Planning Theory and Practice

This course introduces students to basic elements of planning theory and history. Other topics covered include: planning in a diverse society and an introduction to ethical issues facing planners. Cr 3.

CPD 601 Spatial Analysis

This course provides an introduction to the analysis of spatial characteristics of regions and communities, with particular emphasis on the use of geographic information systems (GIS). Cr 3.

CPD 618 Introduction to Sustainable Communities

This course will provide an overview of fundamental forces affecting the design and patterns of human settlement in cities, towns, and villages, as well as an introduction to basic principles of ecology and natural resource management. Emphasis throughout the course will be on the special issues facing planners in Maine and neighboring states and provinces. Cr 6.

CPD 651 Government-Business Relations

This course will examine the government regulation of business (including basic elements

of competition policy, the regulation of transportation and utilities, and environmental regulation) and basic elements of economic development policies (financing, business development assistance, research and development, locational subsidies, etc.). The course also will emphasize understanding public issues from the perspective of both public and private sectors. Cr 3.

CPD 652 Community Economic Development

This course will examine the origins and principles of community economic development, including strategies, the involvement of affected citizens, and development of a framework to evaluate community economic development programs. The course also will provide particular reference to federal community development policies. Cr 3.

CPD 660 Land Use Planning I: Comprehensive Plans

This course will examine the methods and techniques of preparing small-area and community land use plans, with particular emphasis on rural and small town planning incorporating housing, transportation, development, and resource protection. Techniques for preparing community

resource and problem inventories, population and employment forecasts, assessing land consumption trends, and public involvement also will be covered. Cr 3.

CPD 661 Land Use Policy and Planning II: Zoning and Land Use Ordinances

This course will cover the procedures and practices employed in the implementation of land use plans, programs, and policies, including zoning, subdivision regulations, site plan review procedures, and official mapping. The course covers the use of nonregulatory methods of implementation such as tax incentives, capital planning and budgeting, special assessment districts, and tax increment financing. Cr 3.

CPD 664 Principles of Design

This course examines the elements of design affecting decisions about buildings, landscapes, neighborhoods, and communities. Cr 3.

CPD 665 Transportation Planning

The basic elements of transportation planning and engineering and the relationship between transportation planning and land use will be examined throughout this course. Cr 3.

CPD 667 Housing and Real Estate

This course provides an introduction to major economic and social factors affecting the development of real estate for housing and commercial purposes and the interplay between these factors and land use planning. Cr 3.

CPD 668 GIS Laboratory

This course is an examination of advanced techniques in using geographic information systems on a single major project that may be client-directed. Cr 3.

CPD 669 Historic Preservation Through Growth Management

This course examines the policy foundations for preservation of historic, scenic, and natural resources, including elements of preservation planning for rural and urban areas. It also provides students the opportunity to identify and evaluate historic, cultural, and natural resources in the comprehensive planning process. Cr 3.

CPD 690 Studio/Capstone

This course offers something for everyone. Students without prior experience in planning will complete a studio project, a client-oriented planning project designed to provide an opportunity to integrate materials from throughout the curriculum in a team setting. Students with prior planning experience will complete individual capstone research or

planning projects that will provide the same opportunity to integrate material from throughout the curriculum. The capstone element is similar to the existing requirement in PPM. Cr 3.

CPD 698 Field Experience

Internship in planning or development agency. Cr Var.

Cross-Listed Courses

AMS 535 Introduction to Epidemiologic Research

Intended to give students a basic foundation in principles for the conduct and interpretation of population-based studies of the distribution, etiology, and control of disease. Topics will include randomized experiments, non-randomized cohort studies, case-control studies, cross-sectional and ecological studies, causal inference, sources of bias, and measures of effect. Recent publications from the epidemiologic and medical literature will be used to illustrate the concepts. Cr 3.

AMS 545 Applied Biostatistical Analysis

This course is intended to give students a working understanding of the major types of biostatistical analysis used in contemporary epidemiology and in other areas of public health research. Topics will include hypothesis testing, estimation, descriptive statistics, standardization of rates, crosstabulations and stratified analysis, life tables, multiple regression, and logistic regression. The course is designed primarily for students with little formal training in biostatistics, but may also prove valuable to other students who desire a course providing an integrated approach to diverse biostatistical techniques within an applied framework. Students will learn to manipulate datasets, analyze them, and interpret the results using the SAS software package. Cr 3.

AMS 638 Practicum in Epidemiologic Research

Designed to provide students with direct experience in the formulation of epidemiologic hypotheses and the analysis and interpretation of data. Each student will frame a research question that can be addressed using a dataset available on the USM campus or elsewhere. With guidance from faculty, each student will conduct data analyses and write in the format of a journal article. Prerequisites: an introductory course in biostatistics and AMS 535, or equivalent. Cr 4.

EDU 683 School Finance

This course will trace the historic background and development of the present Maine School Finance Act. A detailed examination of the intent and the underlying concepts and relation-

ships of the Act will be provided. The process by which state subsidy is computed, allocated, and distributed to local school systems will be examined. Local budget and expenditure practices will be reviewed in relation to the Act. Emphasis will be placed on helping the student develop a clear conceptual understanding of the overall system by which state aid is provided to Maine school systems. The course has much practical value for school administrators, school board members, and teachers. Cr 3.

HRD 550 Social and Public Policy in Aging

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 552 Long-term Care: Current and Future Issues

This course explores the organization, financing, and delivery of long-term care services. The rapid aging of America's population and increased independent living among persons with physical and developmental disabilities point to the need to expand and improve long-term care services. The overriding question is the extent to which a coordinated system of long-term care can be designed to meet the needs of disabled and chronically ill Americans. The course will examine who receives long-term care, who provides the services, and who pays for long-term care. Research results will be integrated with practical experiences expressed in current literature to provide a comprehensive view of long-term care and its challenges. Cr 3.

LAW 616 State and Local Government

Emphasizes understanding the relationship among federal, state, and local governments. The character of institutions and fiscal policies will be examined as well as the actual mechanics of how they work. Cr 3.

LAW 618 Health Care Law

Provides an overview of the business and regulatory aspects of our health care system. Although the case study method of instruction will be used, this will be done in the context of "building" an integrated delivery system. The objective of the course is to understand the organiza-

tional structure of the health care delivery system and the interrelationship of the providers comprising the system. Cr 3.

LAW 633 Natural Resources Law

Examines the federal and state frameworks affecting the use of public lands and waters, forestry resources, fish and wildlife resources, and energy and mineral resources. Problems of multiple use and sustainability will be considered, as will issues of federalism, public and private rights, and the philosophical and economic implications of various institutional approaches to resource allocation. Cr 3.

LAW 635 Land Use and Growth Policy

This course examines a range of land use problems that demand some type of regulatory (police power) response: rapid growth, growth in fragile land areas, locating difficult to find but essential land use activities, providing affordable housing. Tensions between federal, state, and local governments in the land use decision-making process will be examined, as well as a range of sophisticated land use control strategies, i.e., transferable development rights, contract zoning, planned unit development, carrying capacity zoning. Cr 3.

LAW 637 Environmental Law

Provides a survey of major federal and state environmental control laws and cases interpreting these laws. Concepts of standing, burden of proof, strict liability, nuisance, and tax policy are examined as they relate to environment problems. Cr 3.

LAW 658 Ocean Law

Provides an introduction to the basic principles of ocean law, including international law of the sea and maritime boundary delimitations. Emphasis is on the role of U.S. law and policy in shaping international norms. Federalism in U.S. ocean legislation is also examined. Legal texts explored include the 1982 Law of the Sea Treaty, the Fishery Conservation and Management Act, the Outer Continental Shelf Lands Act, the Coastal Zone Management Act, and the Marine Protection Research and Sanctuaries Act. Class exercises include a maritime boundary simulated negotiation. Cr 3.

LAW 675 Medical-Legal Process

Designed to explore a range of difficult medical, moral, and legal questions that surround such issues as death, right to life, right to treatment, dealing with the incompetent, suicide, and patient rights. Public policy questions dealing with health care delivery systems, organ transplants, and medical malpractice are also examined. Cr 2.

LAW 684 Alternative Dispute Resolution

Undertakes a critical examination of the alternatives to court movement in the United States. Students will survey the range of formal and informal dispute resolution mechanisms now available, as well as their twentieth-century antecedents; sample anthropological literature describing dispute resolution models in small-scale societies and social states; study the philosophical underpinnings of the alternatives to court movement; examine the growing literature in which the advantages and disadvantages of dispute resolution alternatives are debated and discussed; and observe and perhaps participate in a variety of local court alternatives. Cr 2.

LAW 687 Coastal Zone Law

Examines common law principles and legislation affecting public and private rights in the shoreline. Topics explored include the public trust doctrine, littoral rights, the navigational servitude, public use of the beach, land use controls to protect public values in the shoreline, and the taking issue. Course materials were prepared by the instructor. Cr 3.

MBA 650 Economics for Business Managers

Provides students with a broad intellectual grounding in economic theory and history, and equips them with a sophisticated grasp of a wide range of economic issues and policies which define the economic context in which business acts. This grounding will be realized by consideration of the following topics: history of economic thought (including the current status of economic thought), macroeconomics (theory, policy, and performance) and the business cycle, and a his-

torical and comparative approach to understanding U.S. competitiveness. With instructor permission. Cr 3.

NUR 606 Health, Policy, Ethics, and Change

Uses socio-political and ethical frameworks to analyze public policies related to health care delivery and nursing practice. Change theories and their implications in policy development will be applied. Special attention will be given to the role of the master's prepared nurse in influencing and putting into operation policy. Cr 3.

PAA 655 Nonprofit Organization Management (UM)

This course provides an introduction to the nonprofit sector in the U.S., its structure, values, role in the economic system, roles in the delivery-of-service systems, and selected public policy issues that affect organizations in it. Students will be exposed to an overview of the management functions in some of the diverse types of organizations that comprise the sector. The course is designed to provide students with understanding, appreciation, and a sense of "order" about the complex world of the third sector. Although some management tools and techniques will be introduced, this is not a "how to" course. Students will examine the basic principles and assumptions of the nonprofit sector, its role among and between the private and public sectors of the U.S. economy, the context of managing nonprofit organizations, economics of the nonprofit sector, governance and policymaking, marketing, resource development, and the role of philanthropy in our society. Prerequisite: PAA 600 or permission of instructor. Cr 3.

Center for Teaching

Established in 1993, the Center for Teaching provides professional development opportunities and resources for faculty who strive for teaching excellence. Center programs are developed by a director working with an advisory board and draw on the expertise of faculty at USM. In addition, the Center publishes a newsletter with ideas for enhancing effectiveness.

Office of Sponsored Programs

Post-Award Services

The University Office of Sponsored Programs (UOSP) is responsible for encouraging externally funded initiatives in support of program-related activities of academic, research, and administrative units; and serves as the major resource to faculty and staff who wish to pursue such projects. The Office maintains information on and promotes an awareness of funding opportunities, assists in refining project ideas and matching them with a potential sponsor's priorities and requirements, and helps in the preparation of financial and administrative sections of grant applications.

Grantsmanship Center

The University Office of Sponsored Programs also maintains a collection of foundation annual reports and a variety of supplementary materials useful to grant seekers. The materials consist of: Annual Register of Grant Support; Directory of Research Grants; Foundation Directory; Federal Grants & Contracts Weekly; Grant Advisor; Federal Assistance Monitor; and various federal government publications. UOSP also maintains a subscription to an online search engine called IRIS that can be invaluable in accessing funding sources—please call if you would like information on using IRIS.

The collection is located in the Law School Building, Room 628 on the Portland campus (telephone: 780-4411, fax 780-4417, e-mail: lrollins@usm.maine.edu). A small satellite collection is located in 301 Bailey Hall on the Gorham campus. The Gorham collection is a collaborative effort with the College of Education and Human Development under the direction of Professor Libby Cohen (telephone: 780-5044, fax 780-5315, e-mail: lcohen@usm.maine.edu). The hours for the Gorham collection are posted outside the door, or by appointment.

Pre-Award Services

The UOSP also provides fiscal management assistance and administrative support to principal investigators and project directors after an award is received. This includes review and approval of all award documents, preparation and submission of financial reports, requests for reimbursement, budget revisions, amendments, etc. These post-award services are a collaborative effort on the part of the UOSP staff, the investigators, and the directors. These services begin with receipt of an award and continue through the termination date, ending with a final program report prepared by the investigators or directors, and a final financial report prepared by the UOSP staff.

World Affairs Council of Maine

Program Director: Theo Dunfey; *Administrative Director:* Barbara Ganly

Located on the USM Portland campus, the World Affairs Council of Maine is an independent nonprofit, non-partisan organization which offers free membership to all students. The Council provides opportunities to learn about international affairs from distinguished speakers and to interact with business leaders, the professional community, and others interested in what's going on in the world. Student internships and volunteer involvement are also offered. For further information and to register for membership, call 780-4551.

University Extension and Public Service

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

The Division contains the following departments: Center for Extended Academic Programs, which consists of Winter Session, Weekend College, English as a Second Language Program, Off-Campus Programs Office, Instructional Technologies, National Student Exchange, and Senior College; the Summer Session Office; the Office of International Programs; the Center for Continuing Education; the Institute for Family-Owned Business; the Lifeline Center for Fitness, Recreation, and Rehabilitation; and Conferences and Meeting Planning Services.

Administration of the University of Southern Maine

Administrative Organization as of July 1, 1997

President: Richard L. Pattenau, 705 Law Building, Portland, tel: 780-4480
Provost and Vice President for Academic Affairs: Mark B. Lapping, 711 Law Building, Portland, tel: 780-4485

Chief Financial Officer: Samuel G. Andrews, 723 Law Building, Portland, tel: 780-4484

Vice President for Enrollment Management: Rosa S. Redonnett, 732 Law Building, Portland, tel: 780-4035

Vice President for Student Development: Judith S. Ryan, 732 Law Building, Portland, tel: 780-4035

Vice President for University Advancement: John R. Maestas, 721 Law Building, Portland, tel: 780-4708

Executive Assistant to the President: Robert J. Goettel, 709 Law Building, Portland, tel: 780-4482

Administrative Offices Serving Students

Academic Support, Division of
John W. Bay, Executive Director

Admissions
Deborah P. Jordan, Director

Applied Science, School of
Brian C. Hodgkin, Dean

ARAMARK
Brian Wiacek, Director

Arts & Sciences, College of
Dave D. Davis, Interim Dean

Athletics
Al Bean, Director

Bookstores
Cynthia S. Quinn, Director

Business, School of
John M. Burt, Dean

Career Services and Cooperative Education
Lawrence Bliss, Director

Child Care Services
Helene Gerstein-Sky, Director

Community Outreach
Nolan M. Thompson, Coordinator

Commuter Life and Recreation
Helen Gorgas, Director

Continuing Education, Center for
Susan S. Nevins, Director

Counseling Services
Ira Hymoff, Director

Education and Human Development, College of
Richard E. Barnes, Dean

Educational Media Services
Ronald W. Levere, Director

Enrollment Services Center
Susan R. Campbell, Director

Extended Academic Programs, Center for
Terry B. Foster, Director

Facilities Management
David J. Early, Director

Financial Aid, Student
Keith DuBois, Director

Graduate Studies and Research
Richard Maiman, Associate Provost

International Programs, Office of
Domenica T. Cipollone, Director

Law, University of Maine School of
Donald N. Zillman, Dean

Lewiston-Auburn College
Betty D. Robinson, Dean

Libraries
Stephen C. Bloom, University Librarian

*Multicultural Programming
and Native American Student Affairs*
Rebecca Sockbeson, Coordinator

Muskie School of Public Service

Nursing, College of
Patricia A. Geary, Dean

Pluralism and Equal Opportunity

Sue Ellen Bordwell, Executive Director

Police and Safety

Coin P. Hauk, Director

Registrar's Office

John F. Keysor, Registrar

Resident Student Services

Joseph M. Austin, Director

Student Billing

Virginia Johnson, Bursar

Student Judicial Affairs

Carl N. Hill, Director

Student Leadership and Involvement

Craig Hutchinson, Director

Summer Session

John G. LaBrie, Director

Telecommunications

Dennis Dunham, Director

Testing and Assessment, Office of

Judith L. Johnson, Director

University Extension and Public Service

William G. Mortensen, Executive Director

University Health Services

Jane Coolidge Young, Director

University Ombudsperson

Kathleen H. Bouchard

Women's Center

Andrea Thompson McCall, Director

Graduate Faculty

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) Professor of Business Administration; University of Connecticut, B.A., 1967; Polytechnic Institute of New York, M.S., 1969, Ph.D., 1980

Artz, Nancy (1989) Assistant Professor of Business Administration; Pennsylvania State University, B.S., 1979; J.L. Kellogg Graduate School of Management, Northwestern University, M.M., 1982, Ph.D., 1989

Atkinson, Robert (1987) Associate Professor of Education; Long Island University, B.A., 1967; State University of New York, M.A., 1969; University of New Hampshire, M.A., 1981; University of Pennsylvania, Ph.D., 1985

Austin, Nancy (1987) Associate Professor of Education; State University of New York at Buffalo, P.S., 1968; Columbia University, M.A., 1974, Ed.D., 1984

Barnes, Richard E. (1989) Dean and Associate Professor of Education; Carleton College, B.A., 1964; Harvard University, M.A.T., 1969, Ed.D., 1979

Barringer, Richard E. (1988) Professor of Public Policy and Management; Harvard University, A.B., 1959; University of Massachusetts, M.A., 1963; Massachusetts Institute of Technology, Ph.D., 1968

Beaudry, Jeffrey (1996) Assistant Professor of Education; University of Washington, B.A., 1973; University of Illinois at the Medical Center, M.H.P.E., 1981; University of Illinois at Chicago, Ph.D., 1987

Bernotavicz, Freda (1985) Research Associate, Muskie School, and Adjunct Associate Professor of Public Policy and Management; Nottingham University, England, B.A., 1962;

Syracuse University, M.S., 1966

Bolda, Elise J. (1995) Research Associate, Muskie School, and Assistant Professor of Health Policy and Management; University of Vermont, B.A., 1974; University of North Carolina at Chapel Hill, M.S.P.H., 1986, Ph.D., 1995

Boothe, Robert (1993) Assistant Professor of Computer Science; University of California at San Diego, B.S., 1985; U.C. Berkeley, M.S., 1989, Ph.D., 1993

Brady, E. Michael (1984) Professor of Adult Education and Senior Research Associate, Muskie School; St. Mary's Seminary and University, A.B., 1971; University of Connecticut, M.S.W., 1977; St. Mary's Seminary and University, M.Div., 1980; University of Connecticut, Ph.D., 1982

Briggs, David A. (1984) Associate Professor of Computer Science; Swarthmore College, B.A., 1975; University of Massachusetts at Amherst, M.S., 1984, Ph.D., 1988

Broyles, India L. (1986) Associate Professor of Education; Georgia College, B.S., 1968; M.Ed., 1975; University of Georgia, Ed.D., 1983

Cameron, Ardis (1988) Director and Associate Professor of American and New England Studies; Miami University, B.A., 1970; Stetson University, M.A., 1973; Boston College, Ph.D., 1987

Capelluti, Joseph (1988) Professor of Education; University of Southern Maine, B.S., 1970; University of Southern Maine, M.S., 1972; Virginia Polytechnic Institute & State University, Ed.D., 1975

Card, Richard H. (1994) Associate Professor of Education; Bowdoin College, B.A., 1970; University of Maine, M.S.Ed., 1975; George Peabody College of Vanderbilt University, Ed.D., 1985

Cassidy, Donna M. (1987) Associate Professor of Art and American and New England Studies;

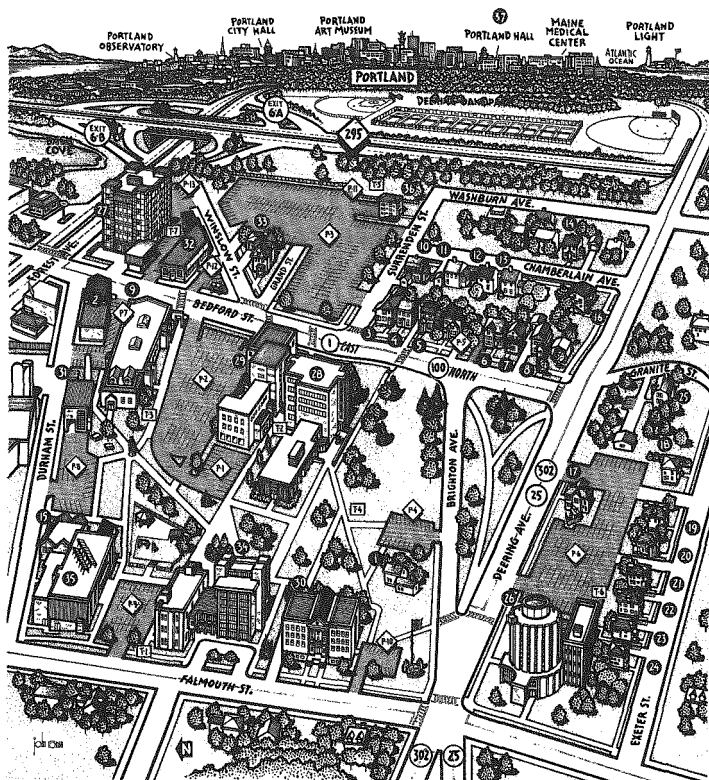
- University of Lowell, B.A., 1979; Boston University, M.A., 1982, Ph.D., 1988
- Clarey, Richard J.** (1979) Associate Professor of Management and Director, Center for Business and Economic Research; Bowdoin College, B.A., 1961; Dartmouth College, M.B.A., 1963; Cornell University, Ph.D., 1968
- Clary, Bruce B.** (1987) Professor of Public Policy and Management and Senior Research Associate, Muskie School; University of California, B.A., 1968; University of Southern California, M.A., 1970, Ph.D., 1974
- Cluchey, David P.** (1977) Professor of Law; Yale University, B.A., 1968; State University of New York, M.A., 1970; Harvard University, J.D., 1973
- Coburn, Andrew F.** (1981) Associate Director, Muskie School and Associate 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) Professor of Special Education; University of Connecticut, B.A., 1967; Russell Sage College, M.S., 1971; Boston University, Ed.D., 1977
- Colgan, Charles** (1989) Associate Professor of Public Policy and Management; Colby College, B.A., 1971; University of Maine, Ph.D., 1992
- Conforti, Joseph A.** (1987) Professor of American and New England Studies; Springfield College, B.S., 1967; Brown University, A.M., 1972, Ph.D., 1975
- Curry, James A.** (1985) Associate Professor of Education; Whitworth College, B.A., 1969; University of Georgia, M.Ed., 1973, Ed.D., 1985
- Davis, Carol Lynn** (1982) Associate Professor of Education; University of Maine, B.A., 1968, M.S., 1977, Ph.D., 1983
- Delogu, Orlando E.** (1966) Professor of Law and Public Policy; University of Utah, B.S., 1960; University of Wisconsin, M.S., 1963, J.D., 1966
- Dubois, S. Monroe** (1997) Assistant Professor of Applied Immunology, University of Texas at Austin, B.A., 1973; University of Texas at Austin, M.A., 1977; Yale University, Ph.D., 1994
- Eastman, Joel W.** (1970) Professor of History; University of Maine, B.A., 1962; M.A., 1965; University of Florida, Ph.D., 1973
- Edney, Matthew H.** (1995) Associate Professor of American and New England Studies and Anthropology/Geography, University of London, B.Sc., 1983; University of Wisconsin, M.S., 1985, Ph.D., 1990
- El-Taha, Muhammad A.** (1987) Associate Professor of Mathematics; Haigazian College (Lebanon), B.S., 1978; American University of Beirut, M.S., 1980; North Carolina State University, Ph.D., 1986
- Fall, Marijane E.** (1995) Associate Professor of Counselor Education; Nasson College, B.S., 1963; University of Southern Maine, M.Ed., 1986; University of Maine, Ed.D., 1991
- Fenner, Stephen A.** (1991) Assistant Professor of Computer Science; Harvard University, B.A., 1983; University of Chicago, M.S., 1988, Ph.D., 1991
- Flagg, Robert C.** (1987) Associate Professor of Mathematics; University of Maine, M.A., 1979; State University of New York at Buffalo, M.A., 1982, Ph.D., 1984
- Friedman, James** (1980) Professor, School of Law; Brown University, A.B., 1971; University of Chicago, J.D., 1974
- Geary, Patricia A.** (1993) Dean, College of Nursing and Professor of Nursing; Boston University, B.S., 1967, M.S., 1970; Northeastern University, C.A.G.S., 1974; Harvard University, Ed.D., 1983
- Gitlow, Lynn** (1995) Assistant Professor of Occupational Therapy; Beaver College, B.A., 1974; Thomas Jefferson University, Graduate Certificate in Occupational Therapy, 1987; University of Maine, M.Ed., 1993
- Goettel, Robert J.** (1981) Special Assistant to the President and Adjunct Associate Professor of Public Policy and Management; State University of New York at Fredonia, New York, B.A., 1955; Columbia University, M.A., 1963, Ed.D., 1970
- Goldsberry, Lee** (1987) Associate Professor of Education; Purdue University, B.A., 1969; Governors State University, M.A., 1975; University of Illinois, Ed.D., 1980
- Grange, Joseph** (1970) Professor of Philosophy; St. Joseph's College, B.A., 1961; Fordham University, M.A., 1965, Ph.D., 1970
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- Keith, Anne B.** (1990) Assistant Professor of Nursing; Radcliffe College, B.A., 1962; Harvard University, M.S., 1971, M.P.H., 1983, D.P.H., 1991
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- Major, Cherie** (1982) Associate Professor, College of Education; University of Wyoming, B.A., 1973, M.A., 1977; Utah State University, Ed.D., 1983
- Manny, Carter** (1986) Associate Professor of Business Law; Harvard University, A.B., 1971; Boston University, J.D., 1975
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- Moody, Kimberly A.** (1994) Assistant Professor of Nursing; University of Southern Maine, B.S.N., 1982; Boston University, M.S.N.; University of Washington, Ph.D., 1994
- Mullane, Michael W.** (1987) Associate Professor of Law and Director, Cumberland Legal Aid Clinic, School of Law; University of Notre Dame, B.A., 1964, J.D., 1972
- Munger, Jeanne L.** (1994) Assistant Professor of Marketing; Ohio State University, B.S., 1979, M.B.A., 1982, Ph.D., 1992
- Murphy, Stephen T.** (1995) Professor of Counselor Education; Holy Cross College, B.A., 1966; State University of New York at Buffalo, Ph.D., 1973
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- Rogoff, Martin A.** (1972) Professor, School of Law; Cornell University, B.A., 1962; University of California, Berkeley, M.A., 1963; Yale University, LL.B., 1966
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- Vess, Susan M.** (1988) Associate Professor of School Psychology; Loretto Heigh College, B.A., 1970; University of Illinois, A.M., 1972, Ph.D., 1977
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- Wanderer, Nancy** (1997) Director of Legal Writing; Wellesley College, B.A., 1969; George Washington University, M.A., 1978; University of Maine, J.D., 1990
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- Wells, William** (1986) Director of Law Library, Professor of Law, and Associate Provost for Technology, Information Systems, and Libraries; Eastern Oregon College, B.S., 1972; University of Puget Sound, J.D., 1977; University of Washington, M.L.L., 1979
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- Whitmore, Allan R.** (1969) Associate Professor of History; University of Maine, B.A., 1962; Northwestern University, M.A., 1964, Ph.D., 1970
- Wood, Margo** (1980) Professor of Education; Vassar College, B.A., 1961; University of Southern Maine, M.S., 1979; Boston University, Ed.D., 1986
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- Zaner, John A.** (1974) Associate Professor of Technology; Millersville State College, B.S., 1969, M.Ed., 1972; Pennsylvania State University, Ed.D., 1977
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- Zillman, Donald N.** (1990) Dean of the School of Law and Godfrey Professor of Law; University of Wisconsin, B.S., 1966, J.D., 1969; University of Virginia, LL.M., 1973

Portland Campus



1. Alumni House
2. 25 Bedford St.
3. 92 Bedford Street
4. 94 Bedford Street
5. 102 Bedford Street
6. 118 Bedford Street
7. 120 Bedford Street
8. 126 Bedford Street
9. Campus Center
10. 1 Chamberlain Avenue
11. 7 Chamberlain Avenue
12. 11 Chamberlain Avenue
13. 15 Chamberlain Avenue
14. 38 Chamberlain Avenue
15. Child Care
16. 209 Deering Avenue
17. 228 Deering Avenue
18. 39 Exeter Street
19. 45 Exeter Street
20. 47 Exeter Street
21. 49/51 Exeter Street
22. 55/57 Exeter Street
23. 59/61 Exeter Street
24. 65 Exeter Street
25. 11 Granite Street
26. Law Building
27. Library
28. Luther Bonney Hall

29. Masterton Hall
30. Payson Smith Hall
31. Physical Plant
32. Police and Safety Office
33. Powers House
34. Science Building
35. James Sullivan Gymnasium
36. 13-15 Surrenden Street
37. Portland Hall

Parking

- *P1. Faculty/Staff
- *P2. Student Commuter
- *P3. Student/Commuter/
Resident/Faculty/
Staff/Meters
- P4. Faculty/Staff
- P5. Faculty/Staff
- *P6. Faculty/Staff/Meters
- P7. Faculty/Staff
- *P8. Faculty/Staff
- *P9. Faculty/Staff
- *P10. Meters
- P11. Meters
- P12. Student Commuter/
Resident/Faculty/Staff
- *P13. Faculty/Staff/Meters

*P14. Student/Commuter/
Resident/
Faculty/Staff
(not illustrated on map,
location is on Marginal Way)

*Handicap Parking

Emergency Telephone Key

- T1. Science Building
- T2. Masterton Hall
- T3. Campus Center
- T4. Payson Smith/Luther
Bonney Hall
- T5. Surrenden Street
- T6. Law Building
- T7. Library Building

Directions to the Portland Campus

From either the north or south, take the Maine Turnpike to Exit 6A. Follow I-295 to Exit 6B (Forest Avenue North). Turn left at the second traffic light onto Falmouth Street. The campus is on the left.

Gorham Campus



- | | |
|----------------------------------|--------------------------------------|
| 1. Academy Building | P22. Student Commuter |
| 2. Anderson Hall | P23. Student Resident/Faculty/Staff |
| 3. Art Gallery | P24. Student Resident |
| 4. Bailey Hall | P25. Faculty/Staff |
| 5. Kenneth Brooks Student Center | P26. Student Resident |
| 5. 7 College Ave. | *P27. Faculty/Staff/Student Resident |
| 7. 19 College Ave. | P26. Student Resident |
| 6. 51 College Ave. | P29. Faculty/Staff |
| 9. Corthell Hall | *P30. Student Commuter/Faculty/Staff |
| 10. Dickey-Wood Hall | P31. Faculty/Staff |
| 11. Warren Hill Gymnasium | P32. Faculty/Staff |
| 12. Mechanical Maintenance Shop | P33. Faculty/Staff |
| 13. McLellan House | *P34. Student Resident |
| 14. John Mitchell House | |
| 15. Physical Plant | |
| 16. President's House | |
| 17. Robie-Andrews Hall | |
| 15. Russell Hall | |
| 19. Upton-Hastings Hall | |
| 20. Woodward Hall | |

Emergency Telephone Key

- | | |
|------|----------------------|
| T21. | P-22 School Street |
| 122. | Bailey Bus Stop |
| T23. | P-16 Bailey Hall |
| T24. | John Mitchell Center |
| T25. | Warren Hill Gym |
| T26. | P-23 Parking Lot |
| T27. | 19 College Avenue |
| T28. | P-34 Towers |

*Handicap Parking

Parking

- P15. Faculty/Staff
 *P16. Student Commuter
 P17. Faculty/Staff
 *P18. Meters
 *P19. Student Commuter
 P20. Faculty/Staff

Directions to the Gorham Campus

From either the north or south, take the Maine Turnpike to Exit 8. Follow Route 25 west to Gorham. At Gorham center (approximately 9 miles) turn right onto Route 114. Take the first left onto College Avenue. The entrance to the campus is a short distance on the right.

Directions to the Lewiston Auburn Campus

From either north or south, take the Maine Turnpike to Exit 13. Coming from the south, take a left at the stop sign; if you are coming from the north go straight. Follow the signs for Lisbon Falls and Brunswick. Proceed to the second stop light and turn left onto Westminster Street. Lewiston-Auburn College is the cedar-shingled building at the of the hill on the right.

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