

2000

University of Southern Maine Graduate Catalog 2000-2001

University of Southern Maine

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UNIVERSITY OF Southern Maine

GRADUATE CATALOG

usm



University of Southern Maine

Graduate Catalog
2000-2001

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 in employment, education, and all other areas of the University. The University provides reasonable accommodations to qualified individuals with disabilities upon request. Questions and complaints about discrimination in any area of the University should be directed to the campus compliance officer, 7 College Avenue, (207) 780-5094/TTY (207) 780-5646. Inquiries or complaints about discrimination in employment or education may also be referred to the Maine Human Rights Commission. Inquiries or complaints about discrimination in employment may be referred to the U.S. Equal Employment Opportunity Commission. Inquiries about the University's compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, and national origin; Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability; Title IX of the Education Amendments of 1972, which prohibits discrimination on the basis of sex; and the Age Discrimination Act of 1975, which prohibits discrimination on the basis of age, may also be referred to the U.S. Department of Education, Office of Civil Rights (OCR), Boston, MA 02109-0457, telephone (617) 223-9662 (voice) or (617) 223-9695 TTY/ITDD. Generally, an individual may also file a complaint with OCR within 180 days of alleged discrimination.

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

2000-2001

Fall Semester

Classes Begin	8:00 a.m., Tuesday, September 5
October Vacation Begins	After all classes, Saturday, October 7
Classes Resume	8:00 a.m., Wednesday, October 11
Veterans Day (no classes)	Saturday, November 11
Thanksgiving Vacation Begins	After all classes, Tuesday, November 21
Classes Resume	8:00 a.m., Monday, November 27
Last Day of Classes	Friday, December 22

Spring Semester

Classes Begin	8:00 a.m., Tuesday, January 16
Winter Vacation Begins	After all classes, Saturday, February 17
Classes Resume	Monday, February 26
Spring Vacation Begins	After all classes, Saturday, March 24
Classes Resume	Monday, April 2
Last Day of Classes	Friday, May 5
Commencement	Saturday, May 12

University of Maine School of Law

Fall Semester

Orientation and Registration (entering class only)	Thursday and Friday, August 24 and 25
Classes Begin	Monday, August 28
Labor Day (no classes)	Monday, September 4
Columbus Day (no classes)	Monday, October 9
Thanksgiving Recess Begins	5:00 p.m., Wednesday, November 22
Classes Resume	8:00 a.m., Monday, November 27
Last Day of Classes	Thursday, December 7
Examination Period Begins	9:00 a.m., Thursday, December 14
Examination Period Ends	Friday, December 22

Spring Semester

Martin Luther King Jr. Holiday	Monday, January 15
Classes Begin	Tuesday, January 16
Presidents' Day (no classes)	Monday, February 19
Spring Recess Begins	5:00 p.m., Friday, March 9
Classes Resume	8:00 a.m., Monday, March 19
Classes End	Tuesday, May 1
Examination Period Begins	9:00 a.m., Wednesday, May 9
Examination Period Ends	Friday, May 18
Convocation	Saturday, May 26

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 more than 100 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 10,600 students who pursue graduate and undergraduate 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 and Health Professions, Muskie School of Public Service, and the School of Applied Science. 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.

Of the other graduate degrees offered by the University of Southern Maine, some are professional in nature, others are interdisciplinary in emphasis. The entry-level master's degree program in occupational therapy is designed for people who hold a baccalaureate degree in a discipline other than occupational therapy. 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 master of science in statistics is an interdisciplinary program designed to provide preparation for both a research-oriented and practice-oriented career.

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. The master's degree program in health policy and management offers a rigorous, problem-focused curriculum to prepare graduates for leadership roles in a rapidly changing health policy and management environment. The master's degree program in community planning and development is designed to educate professionals capable of shaping changes in the economy, environment, and society of New England and eastern Canada, and to assure the prosperity of communities while sustaining the human and natural environments that distinguish the region. 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 and molecular biology, 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 a number of new graduate programs: social work offered by the College of Arts and Sciences, accounting offered by the School of Business (pending Board of Trustees approval in July), and the University's first Ph.D. program in public policy and management offered by the Muskie School of Public Service. The University also will offer a new program in manufacturing through the School of Applied Science in the fall of 2001.

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

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

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. The office can be reached by phone at 780-4386. 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 Analogy Test). Scores must be for tests taken within five years of application deadlines.
- E. Official TOEFL scores of 550 or higher on the paper-based test or 213 or higher on the computer-based test, 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 on the paper-based test or 213 or higher on the computer-based test 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 August 1, 2000

	Maine Resident	Non-Resident	NEBHE
Graduate	\$186.00/cr.	\$520.00/cr.	\$279.00/cr.

All law students enrolled for less than 12 credits are charged a per credit amount:
\$333.00/cr. \$593.00/cr. \$499.50/cr.

All law students enrolled for 12+ credits are charged a fixed amount per semester:
\$4,995.00 \$8,895.00 \$7,492.50

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.

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

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

Installment Payment Fee A \$20.00 fee is charged 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 \$75.00 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.

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

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

Student Development Fee A mandatory fee of \$3.50 per credit hour is charged students enrolled for courses at Lewiston-Auburn College. This fee supports on-site personal counseling services as well as career counseling services.

Student Health and Counseling Fee A mandatory \$40.00 health fee is charged students registered for six or more credits of instructional activities emanating from the Portland and/or Gorham campus for fall and spring semesters. Such 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. The cost of the health fee after the four-week

open enrollment is \$55.00. For more information about the services covered by the health fee, contact Student Health Services at 780-4211 or 780-5411.

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 \$6.00 per credit charge assessed all students.

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 \$2,438.00 per year.

Commuter Only Meal Plans Commuter meal plans allow students to purchase food at a discount. Information about the plans is available from the USM Card Office and Telecommunications.

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

Room University residence halls are located on the Gorham campus and at 645 Congress Street, Portland. Information about housing is available from Resident Student Services, Room 100, Upton Hall, Gorham (780-5240). Limited parking may be rented for \$100.00 per semester plus the annual cost of a parking decal at Portland Hall.

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

Gorham, Double	\$2,612.00/year
Gorham, Regular Single	\$3,108.00/year
Gorham, Large Single	\$3,482.00/year
Gorham, 9-Month Single	\$3,260.00/year
Gorham, 9-Month Large Single	\$3,634.00/year
Gorham, 9-Month Double	\$2,764.00/year
Portland, Yankee Clipper Wing Double	\$3,028.00/year
Portland, A-Wing Double	\$2,818.00/year
Portland, B-Wing Single	\$3,350.00/year
Portland, 2nd Main Double	\$3,028.00/year
Portland, 2nd Main Single	\$3,412.00/year
Portland, 1-Person Suite	\$3,504.00/year
Portland, 2-Person Suite	\$3,436.00/year
Portland, 3- and 4-Person Suites	\$3,008.00/year
Portland, Family Suite	\$5,156.00/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 \$30.00 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. Graduate programs requiring a \$200.00 deposit include occupational therapy, extended teacher education program, and the nursing option for non-nurses with baccalaureate degrees. 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 student I.D. number should be shown on the check.

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

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

- **Installment Payment** The University offers a variety of payment plans. Additional information about these plans and enrollment deadlines 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.

- **When Payment is Due** Each semester, the University establishes specific dates payment is due and notifies students of these dates on bills, through University publications, and on the Student Billing Web site at www.usm.maine.edu/buso.

- **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. **Students who drop after the second week receive no refund.** Drops do not require an instructor's signature. They may be processed at the Registrar's Office, Enrollment Services Center, Lewiston-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 90 days 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 second week	100%
Withdrawal prior to end of fifth week	50%
Withdrawal prior to end of eighth week	25%
Withdrawal after the eighth week	0%

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.

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.

***New England
Regional Program***

Graduate Programs

Adult Education	MA, VT
American and New England Studies	CT, MA, NH, RI, VT
Applied Immunology	CT, NH
Community Planning and Development	CT, NH, VT
Health Policy	CT, NH, RI, VT
Independent School Teacher Education	CT, MA, VT
Manufacturing Engineering	CT, NH, VT
Occupational Therapy	CT, MA, NH, RI, VT
School Psychology	NH

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. If you have Internet access, you can also file your FAFSA on the Web at <http://www.fafsa.ed.gov>. Questions on Web filing can be directed to 1-800-801-0576.

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.

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 the Student Financial Aid Office.

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

Federal Unsubsidized Stafford Loans is a program under the Federal Family Education Loan Program that provides access to borrowing for students who do not qualify for need-based assistance. The student is responsible for the interest as it accrues. 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 Programs Tuition, mandatory fees, and on-campus room and board will be waived for qualified and eligible North American Indians residing in Maine. Eligibility is extended to 1) the person whose name is included on the current census of either the Passamaquoddy or Penobscot Tribes; and 2) the person who has resided in Maine for at least one year and whose name, or the name of at least one of their grandparents, was included on the census of a North American Tribe OR held a band number of the Maliseet or Micmac Tribes with direct blood lineage.

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 Scholarships A limited number of scholarships is available. The awards are based on academic achievement and promise, special talents, po-

tential 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 individual graduate programs..

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, dedicated to supporting student learning and success, provides programs and services to support students in the out-of-classroom aspects of the educational experience. These activities, ranging from intercollegiate sports to resume preparation, join the academic process in expanding the university experience for all students. These programs and services are described in this section. More detailed information about student programs and services appears in the USM student handbook, the *Navigator*, available in the Portland and Gorham Student Life offices.

USM Police Department

The USM Police Department is responsible for keeping the peace, preventing crime, and delivering a variety of services including security and crowd control, crime investigation, 24-hour police coverage, management of parking and transportation, escort services and educational programs. The offices are located on the Gorham campus in Upton Hall, in Portland Hall, and at 46 Bedford Street on the Portland campus (780-5211 or emergency numbers 911 or 780-5000).

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 and computer lab make this a truly pleasant option for the student with a full schedule who wants to experience urban campus life. For more information, call 874-3384. 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 Services

The Office of Portland Student Life and Commuter Student Services 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 Woodbury Campus Center. Call 780-4090.

Woodbury Campus Center

The Woodbury Campus Center in Portland 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 info, the Center for Community and Leadership, an information center, clothing and jewelry vendors, the Bookstore, the 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, or form a study group. For more information call 780-4090.

The Sullivan Gym

The Sullivan Gym is a multi-purpose facility designed with fitness and recreation interests in mind. The main gym has three courts lined for basketball, indoor tennis, badminton, and volleyball. It also offers indoor jogging. There are squash, wallyball, and racquetball courts, and a multi-purpose room with a wood floor for aerobics, dance, yoga, martial arts, and more. The Fitness Center offers Universal power circuit stations, Bodymaster free weight equipment, Quinton treadmills,

Lifecycles, stairmasters, Exercycles, and a Concept II rower. 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.

Students who participate in squash or racquetball are expected to supply their own equipment. Courts can be reserved a day in advance by calling the Equipment Room (780-4169). For more information, please call 780-4173.

University Health and Counseling 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 Counseling Services is held in confidence. No information is released to University officials, faculty members, parents, friends, or outside agencies except upon written request of the student.

Student Health Fee

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) and 12 free counseling sessions in Counseling Services. 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. After 12 sessions in Counseling Services, there is a \$10 per visit charge. An optional 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.

Student Health Services

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 at 780-4211, the Gorham center at 780-5411, or TTY 780-5646. The immunization hotline is 780-4504.

Counseling Services

The staff of psychologists, licensed counselors, and graduate interns at Counseling Services offers short-term counseling to undergraduate and graduate students. 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 Sullivan Gym on the Portland campus.

Portland Campus Recreation offers a wide range of programs specifically focused toward busy commuters that include: aerobics, yoga, martial arts, family fun days, racquetball clinics, theater trips, personal fitness consultations, and relaxation workshops. Outdoor recreation clinics and trips include camping, canoeing, cross country skiing, and sea kayaking. For more information, call 780-4630,

or stop by the office in 104 Sullivan Gym.

The Gorham Recreational Sports Program offers many recreational activities, regardless of skill level or previous experience. Team sports include flag football, volleyball, basketball, ultimate Frisbee, 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 competition, 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 for students of all skill levels. Completion of the new ice arena has made ice hockey, broomball, and free skating available. For more information call 780-5649 or stop by the office located in 102 Hill Gym.

Off-Campus Housing

The University maintains lists of available rooms, roommates, and apartments to assist students who wish to live off-campus. The lists are available at Gorham Student Life, 100 Upton Hall, on the Gorham campus (call 780-5240), and Portland Student Life, Woodbury Campus Center, on the Portland campus (call 780-4090).

Child Care Services

University Child Care Services complements the mission of Student Development by serving 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.), evening care until 7:00 p.m. on a limited basis in Portland, 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. Lengthy waiting lists are common. However, part-time space is sometimes available to students without a long wait. 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. They provide assistance with career decision making, interest testing, a part-time job service, a computerized career exploration service, and workshops to help students design resumés and learn how to interview with employers. They also maintain a Career Technology Center to assist students with on-line job searches and research. They are a participating institution in the Maine Recruiting Consortium—a job fair program for graduating seniors that draws employers from across the Northeast.

The Cooperative Education Program helps place students in short-term positions with career-related businesses. In most cases, students who are eligible to 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, on the Portland campus in Payson Smith Hall, and on the Lewiston-Auburn campus. Please call 780-4220 for more information.

Office of Community Standards

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 Community Standards 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 and Resource Program

The Women's Center and Resource Program provides advocacy, leadership, and educational programming for women attending USM. The center offers a safe, comfortable, and relaxing space for women to meet each other, engage in discussion, and explore the numerous resources, programs, activities, and groups available. The Resource Program provides outreach to the diversity of women at USM in the form of programming, consultation, trainings, and leadership development. The Center also is the home of an extensive lending library of books and articles about a variety of issues as well as women's history, feminist philosophy, fiction by women, and much more. The Women's Center and Resource Program works collaboratively with student groups, University departments, and the wider Maine community to address the wide range of issues important to women, focusing on the personal, academic, career, economic, and leadership development of women. For more information call the center at 780-4996.

Safe Zone Program

The USM Safe Zone Program conveys an inclusive message to the USM community, particularly lesbian, gay, bisexual, and transgendered people. Members of the campus community volunteer and are trained to participate in the Safe Zone Program. After training, participants display the Safe Zone symbol (a pink triangle intersected with a black triangle and surrounded by a green circle) which identifies them as individuals who will be non-judgmental, understanding, and trustworthy should anyone need help, advice, or attention. This program is emblematic of the University's commitment to providing a safe and supportive environment for all students, faculty, and staff. For more information, call 228-8235.

Office of Campus Pluralism, Diversity, and Equal Opportunity

The office works with all units of the University to foster a welcoming and inclusive working, learning, and living environment. The office collaborates with student and employee groups to develop programs, assists in the recruitment and retention of a diverse staff and student body, works with academic programs to provide instructional support, and sponsors diversity awareness opportunities. The office also oversees University compliance with affirmative action, sexual harassment, disability, and other civil rights statutes and policies. Call 780-5094.

Office of Multicultural Student Programs and Native American Student Affairs

This office is dedicated to fostering interaction, cooperation, and communication among all members of the University community. The office strives to enhance awareness and appreciation of the many diverse cultures at USM through programming, dialogue, and cultural events.

The office also houses the North American Indian Tuition Waiver/Scholarship Program. The office engages in Native American student development, and provides academic support to assist Native American students in attaining their career and personal goals. The office is located in the Portland Student Life area of the Woodbury Campus Center. Call 780-5798.

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.

HIV/AIDS Policy

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

Alcohol and Substance Abuse Policy

The University of Southern Maine views alcohol and substance abuse as a serious problem both nationally and on-campus and wishes to do everything possible to address it. In compliance with the Drug Free Schools and Communities Act and the Drug Free Workplace Act passed by Congress, the University publishes annu-

ally 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.

University Health and Counseling Services provides access to substance abuse services for students at USM. Through the assessment process, the student and counselor work together to determine the most appropriate level of care. Available services include individual substance abuse counseling, group therapy, and educational groups. The counselor and student may also decide together that referral to a support group or a more intensive level of treatment in the community would be the best option. For more information or to schedule an appointment, please call University Health and Counseling Services on the Gorham campus at 780-5411, and on the Portland campus at 780-4050.

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, reporting of crimes, lost and found, or to report suspicious persons or maintenance/safety problems, call the USM Police Department at 780-5211, or in case of emergency, 911 or 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, call the USM Police Department (24 hours a day) at 780-5211 or in an emergency at 911 or 780-5000. You can call your Resident Assistant or Resident/Area Director, 780-5240 (if you live in the Gorham residence halls) or 874-3383 (Portland Hall), University Health Services, 780-4050, or Sexual Assault Response Services at 774-3613 or the USM manager of Sexual Assault Programs at 780-4501.

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 Southern Maine 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 poten-

nal 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 the Office of Campus Pluralism, Diversity, and Equal Opportunity at 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

The University of Southern Maine expressly prohibits and will not tolerate any sexual assault or sexual misconduct as defined by USM policy. These behaviors all constitute violations of the Student Conduct Code and will be met with appropriate sanctions, up to and including dismissal. Many are also violations of Maine law and may be prosecuted criminally.

For a complete copy of the University of Southern Maine Sexual Assault Policy, you may contact the Office of Community Standards 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 the manager of Sexual Assault Programs, USM Police, 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 (in the modular unit next to the 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

Services: Manager of Sexual Assault Programs who investigates reports of sexual assault, 780-4501, and the USM Police, our 24-hour 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: 911 or 780-5000.**

Office of Community Standards

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

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

Sexual Assault Response Services

(Cumberland and York Counties)	774-3613/1-800-313-9900
Bath-Brunswick Rape Crisis Hotline	1-800-822-5999
Lewiston-Auburn Sexual Assault Crisis Center	795-2211
Augusta Area Rape Crisis Center	626-0660

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.
- H Honors performance in a pass-fail course.
- I Incomplete: a temporary grade given when the student, because of extraordinary circumstances, has failed to complete 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 as "I*." 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 as "M*." 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.
- DG 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. Other types of transcripts are: Unofficial—Issued Directly to Student; Placement Transcript provided for the student's placement folder.

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
D–	0.67 grade points per credit hour
F	0.00 grade points per credit hour

Grades less than C– 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 advisors 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. A noncredit course, GRS 601, is available for students who have completed all coursework and are working on their thesis or capstone project. Enrollment in this course, which carries a fee, entitles the student to continued access to USM computer, library, and recreational facilities. For some programs, enrollment in this course is discretionary, in others it is mandatory. For further information, students should consult their program director or academic counselor. 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 less than 9 degree credits.

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.

Matriculation in a Second Program

Occasionally students seek to pursue a second program, either after graduating from their first program, or prior to completing the first program. In either case, the student must apply for admission to the new program. All courses, grades, and quality points taken at the graduate level occur on one transcript. The new program will determine which courses will count toward graduation.

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 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: John R. Wright

The School of Applied Science offers the master of science degree in computer science, and the master of science degree in applied immunology and molecular biology in collaboration with the Maine Medical Center and the Foundation for Blood Research. The master of science in manufacturing plans to admit its next class in fall 2001. Graduate courses are also offered in epidemiology. The University of Southern Maine jointly delivers the master of science in electrical engineering and the master of science in computer engineering with the University of Maine.

Master of Science in Computer Science

Chair: Bruce MacLeod

Professors: Heath, Welty; *Associate Professors:* Boothe, Briggs, MacLeod; *Adjunct Faculty:* El-Taha

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. Students are advised that many of these courses have additional undergraduate prerequisites. If a student takes a course here, she or he should be certain that her or his background preparation for the course is adequate, either by taking the undergraduate prerequisites or by individual study.

COS	152/153	Differential and Integral Calculus with Mathematica
COS	250/255	Computer Organization with Lab
COS	280	Discrete Mathematics
COS	285	Data Structures
COS	360	Programming Languages
3. Official scores for the Graduate Record Examination (GRE).

Admission to the master's program is competitive and based on an evaluation of the application materials by the Computer Science Graduate Admissions Committee. Students whose first language is not English are required to submit TOEFL scores. Applicants whose TOEFL scores are less than 600 on the paper-based TOEFL or 250 on the computer-based TOEFL must demonstrate the language skills requisite for graduate study before they can be admitted.

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.

Continuous Enrollment Every semester a student must either register for a course or for GRS 601 to maintain continuous enrollment. Students who do not maintain continuous enrollment will be dropped from the program and will have to reapply for admission to continue with the degree. Students who anticipate being unable to take classes may apply for a fixed-term leave of absence.

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

All master's candidates must complete a minimum of 30 total credits, which must include a 6-credit master's project, COS 698, and 12 credits of graduate-level computer science courses, excluding COS 598. At most two courses from other departments may be used toward the graduate degree, and these must be approved in advance by the Computer Science Department. At most three credits of COS 598 can be used toward the graduate degree.

If a student does not have the equivalent of a specific course from the following list in her or his previous studies, she or he must take it and may use it toward fulfillment of the degree requirements. Courses taken previously to meet other degree requirements cannot be used in the service of the graduate degree.

MAT 380 Probability and Statistics (MAT 281 and MAT 282 together may substitute)

COS 450 Operating Systems

Either one of:

COS 385 Design of Computing Algorithms or

COS 480 Theory of Computation

The master's project may take either one of the following two forms:

1. Academic thesis: the student works on research under the supervision of a thesis committee composed of faculty members.

2. Practicum: the student works on an application of computer science to a problem at his or her place of employment under the supervision of representatives of the faculty and the employer.

Both types require a project proposal that must be approved by a committee of at least three members, the committee that is subsequently responsible for supervising the project. Both require a written final, summary document describing the results of the project. This document must be approved by the supervising committee and published according to Departmental specifications.

To ensure that the degree candidate's studies are focused and lead to a deeper knowledge in an area, she or he must choose an emphasis in computer systems, software development, or an area designed by the student. For details of student designed emphases, see Departmental guidelines.

Either emphasis requires the items noted above. The specific requirements of each are as follows:

1. Master of science degree in computer science with emphasis in computer systems.

a. Complete four of the following courses:

COS 355 Computer Architecture

COS 385 Design of Computing Algorithms

COS 450 Operating Systems

COS 460/540 Computer Networks

COS 465/542 Distributed Operating Systems

COS 543 Distributed Systems: A Second Course

COS 545 Wireless Data Communication

COS 552 Advanced Computer Networks

- COS 555 Advanced Computer Architecture
- COS 562 Performance Analysis
- COS 566 Simulation and Analytical Modeling
- b. Complete a six-credit master's project, COS 698, addressing a computer systems topic or problem.
- 2. Master of science degree in computer science with emphasis in software development.
 - a. Complete four of the following courses:
 - COS 365 Object Oriented Design
 - COS 368 Graphical User Interface Design
 - COS 372 Software Engineering
 - COS 385 Design of Computing Algorithms
 - COS 452 Computer Graphics
 - COS 457 Database Systems
 - COS 469 Introduction to Compiler Construction
 - COS 558 Database Management
 - COS 565 Software Design and Development
 - COS 574 Advanced Computer Graphics
 - COS 576 Advanced Object Oriented Design
 - COS 587 Introduction to Parallel Computation
 - b. Complete a six-credit master's project, COS 698, addressing a software development topic or problem.

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

COS 540 Computer Networks

An introduction to computer networks. Computer network architecture is described. Other topics include digital data communication, local area networks, wide area networks, internetworks, and the Internet. Specific technologies, including Ethernet and ATM, and protocols, including TCP/IP, will be considered in detail. Prerequisite: graduate standing.

Cr 3.

COS 542 Distributed Systems

An introduction to the design and operation of distributed systems. Topics include client-server models, interprocess communications, RPC, replication and consistency, online transaction processing, error and fault recovery, encryption, and security. Examples will be taken from extant distributed systems. Students will design and implement a distributed system. Prerequisites: COS 450 and COS 460, or their equivalents, or permission of instructor.

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 545 Wireless Data Communication

A seminar-based course that surveys the rapidly

evolving field of wireless data networks. Wireless technologies, systems, and services are investigated with emphasis on existing systems and standards. Topics cover mobile data and wireless LANs. Prerequisite: COS 460, an equivalent course, or substantial experience with computer network architecture.

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

After an overview of modern database management systems (DBMS) which discusses the significance of the relational model, the course examines selected research topics from the current literature. Topics in the past have included logic and databases, database design methodologies, and object-oriented systems. Prerequisite: COS 457 or graduate standing.

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 576 Advanced Object Oriented Design

Considers issues that arise in the design and development of object oriented software systems. Top-

ics include object oriented design patterns, software development environments, components, frameworks, and computing with objects in a distributed environment. Programming projects are a key part of the course. Prerequisite: COS 365 or permission of the instructor. 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 enumerable 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 designing efficient algorithms. 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 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 598 Internship

Students apply their learning to a specific problem in a practical context under faculty and managerial supervision. See Departmental guidelines for more details. Prerequisites: full graduate standing and prior approval of proposal by instructor and Department chair. Cr 1-3.

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 and Molecular Biology

Chair: Ah-Kau Ng (on sabbatical 2000-2001)

Acting Chair: W. Douglas Thompson

Professors: Ng, Thompson; *Assistant Professors:* Duboise, Pelsue; *Adjunct Professors:* Ault, J. Haddow, Hillman, Lovett, Nishayama, Rhodes, Ritchie; *Adjunct Associate Professors:* Chandler, Doherty, Knight, Mahoney, Moody, Smith, Weber, Yentsch; *Adjunct Assistant Professors:* Beckett, Craig, Himmelfarb, Jones, Sears, Siekman, Vary, Weisberg, Whitaker; *Adjunct Instructors:* Breggia, P. Haddow, Palomaki; *Visiting Assistant Professor:* Sonnenfeld

Applied Medical Sciences

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

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 and molecular biology 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 and molecular biology master's 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 and Molecular Biology 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 fall 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: 4 credits of molecular biology, 24 credits of required core courses, 6 credits of thesis research, 3 credits of Journal Club/Seminar, and 7 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	560	Virology	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	530	Molecular Biology	3 credits
AIM	531	Molecular Biology Laboratory	3 credits
AIM	690	Journal Club/Seminar	3 credits
AIM	698	Thesis	6 credits

Electives (for degree students only) will be available in the form of advanced seminars or tutorials in many areas including:

AIM	630	Medical Immunology
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	660	Protein Phenotyping
AIM	661	Purification of Antigens and Antibodies
AIM	662	Reproductive Immunology
AIM	664	Chromatography

AIM	665	Tissue Culture Techniques
AIM	666	Laboratory Management
AIM	672	Advanced Techniques in Molecular Biology
AIM	680	Molecular Basis of Disease
AIM	681	Molecular Parasitology

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

Health insurance is required for students enrolled in laboratory courses.

Laboratory Fees

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

AIM 530 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 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 560 Virology

This is a graduate-level survey of animal virology that is also suitable for advanced undergraduate biology and biochemistry students. Structure, replication, molecular biology, pathogenesis, epidemiology, and medical importance of major virus groups are discussed. Molecular genetic manipulation of viral genomes for gene therapy and vaccine development is also a major focus of the course. Experimental approaches that have provided significant insights into the biology of animal viruses are emphasized.

Cr 3.

AIM 599/BIO 431 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 mo-

lecular 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 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 672 Advanced Techniques in Molecular Biology

This course builds on AIM 671 by developing specialized projects utilizing advanced molecular techniques such as mutation analysis, genome screening, and gene expression. Cr var.

AIM 680 Molecular Basis of Disease

This course focuses on biochemical and genetic nature of human disease. It will cover the strategies of gene mapping and identification, molecular

pathology, functional genomics, and gene therapy of human heritable diseases. Cr 3.

AIM 681 Molecular Parasitology

Eukaryotic parasites are major causes of human morbidity and mortality. Design of suitable treatment methods or effective preventive measures such as vaccines are challenges that are only beginning to be addressed through increasing understanding of the molecular biology and biochemistry of these organisms. Molecular studies of parasite biology and of parasite-host interactions have provided fundamental molecular biological and immunological insights with broad relevance. This course explores critical molecular genetic, developmental, and immunological aspects of parasite biology and of parasite-host interactions with an emphasis on selected parasites that are of particular medical importance. Parasites emphasized include those that have been targeted for increased research and control efforts by the World Health Organization. These include the agents of malaria, schistosomiasis, African trypanosomiasis, leishmaniasis, Chagas disease, lymphatic filariasis, and onchocerciasis. Examination of primary research literature will be emphasized. Cr 3.

AIM 690 Journal Club/Seminar

The Journal Club is intended to keep the participants 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

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 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 spe-

cific 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.

College of Arts and Sciences

Master of Arts in American and New England Studies

Director: Ardis Cameron

Professors: Conforti, Maiman; *Associate Professors:* Cameron, Cassidy, Edney, Hamilton, Ryden

Program Description

New England, as the publisher of *Yankee* magazine recently quipped, looks more like New England today than it did 30 years ago. Such observations reflect a new self-consciousness about regional identity in general, and about New England in particular. Popular interest in regionalism also underscores new scholarly attention to the role of cultural institutions, practices, and performances in helping to shape both national and regional identities. Mythic New England embodies some of the most familiar American images and the region has historically held a special place in the American imaginary landscape. Steeped in tradition and the kinds of pastoral images celebrated by *Yankee* magazine, New England was also the nation's most urban and Roman Catholic region in the post-Civil War period. It was multicultural from the beginning.

The American and New England Studies program is committed to studying regionalism in the context of contemporary thought and scholarship. It 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. Exploring as well as destabilizing "official" New England, the program offers students a wide range of interdisciplinary approaches and methodologies—including folklore, literary studies, visual culture, landscape and cultural geography, the built environment, archaeology, cultural criticism, environmental studies, and ethnography—but stresses the historicity of such practices, and of the culture and society they set out to explore.

The program seeks:

- to offer college graduates a challenging interdisciplinary program focusing on the study of New England and the "new" regionalism;
- to emphasize the critical role of the arts, humanities, and social sciences in understanding New England and in interpreting its history and culture to the public;
- to prepare students for a variety of opportunities that require critical thinking, scholarly analysis, research skills, and the ability to communicate effectively;
- 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;
- to act as a cultural and educational resource for the region.

Through courses, lectures, conferences, and internships, 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 methodologies. 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 tracks that does not include a thesis or project. A third option is also available in Public Culture and History. Students take 27 hours in ANES, 6 hours of appropriate courses in non-profit administration, and a 3-hour internship at a major cultural institution. Students who elect the non-thesis/project tracks 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 and New England Studies	3
ANES 690	Project	6
	or	
ANES 695	Thesis	6
		15

Elective Courses		
Five courses chosen from ANES offerings		15
		30

Required Courses	36-Hour Program	Credit Hours
ANES 600	Creating New England, I	3
ANES 610	Creating New England, II	3
		6

Elective Courses		
Ten courses chosen from ANES offerings		30
		36

Required Courses	Public Culture and History	Credit Hours
ANES 600	Creating New England, I	3
ANES 610	Creating New England, II	3
ANES 687	Internship	3
		9

Elective Courses

Seven courses chosen from ANES offerings

Two courses chosen from Public Policy and Management

21

6

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 612 Documenting New England:

Oral History

This course is an introduction to the practice, politics, and history of documentary field studies. It will focus on oral history and ethnography as both a method and as a particular genre of culture writing and representation. In class, students will explore various strategies and practices of ethnography, including travel writing, local color, anthropology, exploration literature, documentary history, and post-colonial interventions, and grapple with contemporary issues that confront modern practices of "field work," such as cultural authority, displacement, marginalization, modes of cultural interpretation, stranger talk, insiders/outside, "wrong" stories and "true," etc. In the field, students will work with informants to record and interpret the cultures and histories of a particular place and people. 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 natu-

ral 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 New England

This course explores the historic role of ethnicity in the formation of New England social life and cultural identity. Using a variety of texts and approaches, students will examine immigrant community life (including foodways, housing, leisure, and work), constructions of "race" and "whiteness," and the relationship between ethnicity and regional identity. 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 "imaged" 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 court rooms, 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 rescript and reshape the gendered landscape of public culture and the social spheres that define it. Cr 3.

ANES 647 The Structure of Everyday Life

This course explores the material, social, and mental terrain of ordinary people 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 Ameri-

can 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 657 Topics: Language and Print Culture in America

Early in the 19th century, the British literary critic Sydney Smith snobbishly asked, "Who reads an American book?" This course will attempt to answer this question, looking at what various groups of Americans have been publishing and reading over time for purposes of education, edification, and entertainment, as well as the larger linguistic context in which those books have been produced. We will focus on questions of both the history of American English and the history of the book in America, with a particular focus on New England. Topics to be covered may include: the development and social meaning of American regional dialects; the cultural politics of a specifically American version of the English language; the establishment of New England as a center of linguistic and cultural authority through the publication of dictionaries, textbooks, and literary works; the rise of literacy in America; the history of mass-market publishing and reading, including consideration of popular literary genres and their audiences. Cr 3.

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

This course will look at the production and exploration 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, Gender, and Regional Difference

This course will compare the experiences of women in the South, West, and New England, as well as the role of regional difference in making and remaking notions of womanhood and manhood and in establishing categories of sexual behavior and deviancy. Race and class differences both within and between the South, the West, and New England will be examined as well as the emergence of regional "types," such as "The New England Woman," "White Trash," and the cowboy. Cr 3.

ANES 668 Writers of Northern New England

This course focuses on literature about the subregion 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 museums, 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 687 Internship

Open to qualified students with exceptional records in the program. Internships are by application to the ANES Curriculum Committee. Participating organizations include: Portland Museum of Art, Old York Historical Society, Pejepscot Historical Society, and Maine Historical Society. Internships may be taken for credit 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 695 Thesis

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

Master's in Social Work

Director: Cathryne Schmitz

Professors: Faherty, Wagner; *Associate Professors:* Deprez, Lazar, Rich, Schmitz;

Assistant Professors: Healy, Johnson

Program Description

The emphasis of the master's in social work program is on preparing graduate-level social workers for careers in a variety of settings. The curriculum includes content related to providing students with a broad base of case management, direct service, administrative, and supervisory skills. The specific focus is on agency-based practice. Students are trained to understand the complexities of client needs and agency processes and to develop strategies that facilitate better collaboration between clients and the agencies that serve them. This program also trains students to develop the necessary knowledge and skills to make institutional and organizational change happen. Issues of oppression and social justice are of particular import in preparing graduates for working with diverse populations.

The first year of graduate study is a foundation year in which students are taught a generalist perspective. Required courses encompass five areas: practice, human behavior and the social environment, social policy, social work research, and a field practicum. In the second year of graduate study, students will select a micro or macro practice track and take three elective courses. A micro practice emphasis might focus on individuals, families, or small groups; a macro practice emphasis might focus on community organization, administration, or research in agency settings. In addition to coursework, students will be required to complete two years of agency-based field practice requiring the student to be in placement three days per week.

In accordance with the Council on Social Work Education, the program will apply for candidacy during its first year. This allows graduates of the program to be eligible to apply for licensure as a social worker in the state of Maine.

Admissions

Acceptance for graduate study to this program is on a competitive basis. Applicants are required to have completed a baccalaureate degree in any discipline and present evidence of probable success in graduate work. Prospective candidates may be interviewed before acceptance to the program. Evidence of readiness for graduate study will be based on:

1. Official scores from the GRE or Miller Analogies tests;
2. GPA in undergraduate study and in the student's major;
3. GPA of 3.0 or better in any previous graduate work in social work;
4. Personal essay of interest in social work;
5. Letters of reference reflecting practice experience or academic achievement.

In addition, applicants are required to demonstrate completion of courses in human biology and statistics at the undergraduate level. Evidence of at least 9 credits of undergraduate coursework in the social sciences is also required. Students must have taken one introductory course in psychology and one introductory course in sociology. If these have not been completed at the time of application, students can still be accepted to the program conditionally upon the completion of these required undergraduate courses prior to beginning graduate studies.

Students applying for advanced standing should have completed their undergraduate study within seven years of application.

Application Materials

In addition to the materials described in the Admission section of this catalog, applicants for this program must submit:

1. Three letters of reference. At least one reference should be from a faculty advisor or instructor and one from a practice or work supervisor;

2. A personal essay describing the applicant's reasons for applying to the MSW program, prior experiences leading to this decision, and expectations of what this course of study will accomplish.

At the time of application students must also select to be admitted to a two-year or four-year program of study. Students must stay in the program of study that they select. If a student needs to change from a two- or four-year program, he or she must apply to the Academic Review Committee. This process can be initiated by contacting the student's advisor.

Students who have not yet completed undergraduate study will be accepted conditionally upon the successful completion of their undergraduate degree.

Health Requirements

Students must comply with the University's immunization requirements and provide documentation of health insurance prior to beginning the field practicum.

Application Deadline

Students are only accepted to the full- or part-time programs in the fall semester. All materials must be submitted to the Office of Graduate Studies and Research by January 15, 2001. Applications received after this date will be reviewed on a space-available basis. Applications for the fall of 2001 are only for the first year of graduate study in the two-year or four-year program. Applications for advanced standing or the second year of graduate study will be accepted in January of 2002.

Program Policies

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

Grade Policy Students are expected to maintain a cumulative grade point average of 3.0. Students receiving a grade of C+ or less in a graduate course will be placed on academic review. Students receiving a C+ or less in a second course will result in dismissal from the program.

Non-Matriculated Status Students who choose not to apply for the full- or part-time program may take up to six credits at a non-matriculated status. Only select social work courses may be taken without being accepted to the full- or part-time program.

Transfer Credits Students may transfer up to 6 credits taken as a non-matriculated student. Courses must be taken from a program that is accredited by the Council on Social Work Education. Students who have completed their first year of graduate study at another program accredited by the Council on Social Work Education may transfer up to 30 credits. To transfer credits, students must have received a grade of B or better.

Program Requirements

To complete the program a minimum of 60 credits are required. Graduates from accredited baccalaureate social work programs who are granted advanced standing will complete 39 credits and may be waived from first-year social work courses. Students accepted for advanced standing will be required to take 9 hours of academic credit prior to starting the second year of graduate study. Please contact the Department of Social Work at (207) 780-4120 for course descriptions.

Master of Science in Statistics

Director: Sat Gupta

Professors: El-Taha, Guay, B. Gupta, S. Gupta; *Associate Professor:* Valdés; *Assistant Professors:* Allman, Fishkind; *Adjunct Professor:* Thompson

The Department of Mathematics and Statistics offers a master's degree in statistics as an extension of its undergraduate program in mathematics and statistics. The interdisciplinary program is designed to provide preparation for both a research-oriented and a practice-oriented career. Emphasis is placed on acquiring research, consulting, and teaching skills that are applicable to academia, the behavioral and social sciences, business and industry, and health sciences.

Program Description

The program is offered in a 4+1 format where currently enrolled undergraduate students in mathematics and other disciplines at USM can earn both an undergraduate degree and the M.S. degree in statistics in five years. Candidates intending to earn both the undergraduate and the graduate degrees in five years should take MAT 281 Probability and MAT 282 Statistical Inference in the sophomore year, should begin taking upper-level undergraduate courses in relevant concentrations in the junior year, and should begin taking graduate-level courses in the senior year. These students will receive graduate standing only after completing all requirements for the undergraduate degree. Candidates holding baccalaureate degrees from accredited institutions may join the program directly at the master's level. Students in the program will have an opportunity to take courses from several other departments at USM either as elective courses or as part of a concentration. They will also be able to earn up to two credits by way of internship with local industries. The program will provide guidance in locating internship opportunities.

The program offers the following areas of concentration:

1. Applied Statistics,
2. Applied Mathematics/Operations Research, and
3. Biostatistics.

Graduates of the program can find employment in businesses, industries, or government agencies that rely heavily on collection, analysis, and interpretation of data. Insurance companies, marketing research firms, biotechnology companies, and government regulatory and research agencies are primary sources of employment. Students may also choose to pursue a Ph.D. after completing the master's degree.

Admission

Current undergraduate students at USM can apply for admission into the program at any time after attaining junior standing by writing to the director of the graduate program. These students should submit copies of all undergraduate/graduate transcripts, current resumé, a personal statement, and two letters of recommendation. Such students must have an overall GPA of at least 2.75 and must have completed all the prerequisite math courses or their equivalents with a grade of B- or better. The prerequisite courses are MAT 152 Calculus A, MAT 281 Probability, and MAT 282 Statistical Inference. Students who have not completed MAT 281/ MAT 282 or their equivalents can be offered conditional admission provided they have good working knowledge of statistical methods. However, such students must complete STA 579 Probability Models in order to get regular admission into the program.

Candidates holding baccalaureate degrees from accredited institutions should apply directly to the Office of Graduate Studies and Research. Candidates must have a graduating GPA of at least 3.0 and must have completed USM undergraduate courses MAT 152, MAT 281, and MAT 282 or their equivalents. These students should submit official copies of all undergraduate/graduate transcripts, current resumé, a personal statement, GRE scores, and three letters of recommendation.

Application Deadlines

The program has a rolling admission policy. However, deadlines for candidates seeking financial support are April 15 for the fall semester and October 15 for the spring semester.

Program Requirements

Total number of credits required for the M.S. degree in statistics are 30, at least 15 of which are to be earned through statistics courses and at least 15 through courses in one of the concentrations. STA 580 Statistical Inference is a required course for all degree candidates. Six of the required statistics credits can be earned through courses listed under the undergraduate concentration in statistics and the rest must be earned through courses with STA prefix (not counting the master's thesis/project). Three of the 15 credits in the area of concentration can be earned by taking a pre-approved upper-level undergraduate course in that concentration and the rest are to be earned through graduate courses in that concentration. The 9 credits earned through undergraduate courses can be used for both the undergraduate and the graduate degrees. All courses to be used for the graduate degree must be completed within six years of the date of graduation with a grade of B- or better and with a cumulative GPA of 3.0 or better.

Students may earn six graduate credits by way of a master's thesis/project. No more than three credits towards the master's degree can be earned by way of independent studies. With the approval of the graduate committee, a student may earn up to a maximum of six credits towards the master's degree for graduate coursework completed at other institutions or in other graduate programs at USM.

List of Courses

Applied Statistics Courses

STA/OPR	562	Stochastic Modeling in Operations Research
STA/MAT/OPR	563	System Modeling and Simulation
STA/OPR	564	Queuing Networks
STA	574	Statistical Computer Packages
STA	575	Graduate Internship
STA	579	Probability Models
STA	580	Statistical Inference
STA	581	Statistical Quality Control
STA	582	Time Series Modeling
STA	583	Sampling Methods
STA	584	Advanced Design and Analysis of Experiments
STA	585	Regression Analysis or
AMS	677	Regression Models in the Health Sciences
STA	586	Nonparametric Methods
STA	587	Applied Multivariate Analysis
STA	588	Introduction to Biostatistics or
STA	589	Survival Analysis
AMS	545	Applied Biostatistical Analysis
STA	590	Master's Project/Thesis
STA	599	Independent Study

Applied Mathematics/Operations Research Courses

MAT/OPR	561	Deterministic Models in Operations Research
STA/OPR	562	Stochastic Modeling in Operations Research
STA/MAT/OPR	563	System Modeling and Simulation or
COS	562	Performance Analysis
STA/OPR	564	Queuing Networks
MAT	570	Theory of Matrices
MAT	571	Graph Theory
MAT	572	Numerical Analysis
MAT/OPR	575	Graduate Internship
MAT/OPR	590	Master's Project/Thesis
MAT/OPR	599	Independent Study

Biostatistics Courses

AMS	535	Introduction to Epidemiological Research
AMS	545	Applied Biostatistical Analysis or
STA	588	Introduction to Biostatistics
AMS	638	Practicum in Epidemiologic Research
AMS	677	Regression Models in the Health Sciences
STA	574	Statistical Computer Packages
STA	575	Graduate Internship
STA	589	Survival Analysis

Graduate Certificate in Statistics

The Department also offers a graduate certificate in statistics for those candidates who are not interested in a full master's degree in statistics, but need only a working knowledge of statistical methodologies. Interested candidates should write to the graduate program director and should submit a current resumé, copies of all undergraduate/graduate transcripts, and at least one letter of recommendation. Applicants must hold a baccalaureate degree from an accredited institution with a cumulative GPA of at least 2.75, and must have completed MAT 152, MAT 281, and MAT 282 or their equivalents. To earn the graduate certificate, a candidate will need to earn a minimum of 15 graduate credits through courses with STA prefix. All these courses should be completed with a grade of B- or better. Courses taken for the certificate can also be used towards the master's degree in statistics.

MAT/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, and group projects on practical problems from business and industry. Prerequisite: MAT 152 or MAT 295 or permission of instructor.

Cr 3.

STA/OPR 562 Stochastic Modeling in Operations Research

Formulation and analysis of stochastic models in operations research, Markov chains, birth-death models, Markov decision models, reliability models, inventory models, applications to real world problems, and group projects on practical problems from business and industry. Prerequisite: MAT 281 or MAT 380 or permission of instructor.

Cr 3.

STA/MAT/OPR 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, and group projects on practical problems from business and industry. Prerequisite: MAT 281 or MAT 380 or permission of instructor.

Cr 3.

STA/OPR 564 Queuing Networks

Queuing and stochastic service systems, birth-death processes, Markovian queues, open and closed Jackson networks, priority queues, imbedded Markov chain models, optimal control and design, stochastic scheduling, applications to computer and communication networks, manufacturing, business, and engineering will be considered, and projects on practical problems from business and industry. Prerequisite: MAT 281 or MAT 380 or permission of instructor.

Cr 3.

MAT 570 Theory of Matrices

The course will begin with a brief review of vector

spaces and matrices and some related concepts such as determinants, rank, nonsingularity, change of bases, and applications. It will also cover elementary canonical forms, Hermitian and symmetric matrices, and norms for vectors and matrices. Prerequisite: MAT 295.

Cr 3.

MAT 571 Graph Theory

This course considers various properties of graphs and diagraphs and includes applications to optimization questions and networks. Prerequisite: MAT 290 or permission of instructor.

Cr 3.

MAT 572 Numerical Analysis

The course examines numerical solutions of linear systems, eigenvalue location, roots for systems of equations, polynomial interpolation, numerical integration, and numerical solution of differential equations. Prerequisites: MAT 152, MAT 153, and MAT 295.

Cr 3.

STA 574 Statistical Computer Packages

The course will introduce two of the commonly used statistical packages such as SAS, MINITAB, SPSS, and S-Plus. Prerequisite: MAT 212 or MAT 282 or permission of instructor.

Cr 3.

STA 575 Graduate Internship

The course is ideal for students who have had no work experience with statistical data analysis or mathematical modeling. Such students can try to locate paid or unpaid internship opportunities that might be available on-campus or off-campus. The students will submit to the graduate committee a formal written report on the internship experience. Prerequisite: graduate standing.

Cr var.

STA 579 Probability Models

A calculus-based probability course covering various discrete and continuous probability models, central limit theorem and its applications, and order statistics. This course cannot be used toward the master's degree in statistics. Prerequisite: MAT 152.

Cr 3.

STA 580 Statistical Inference

Sampling distributions such as Chi-square, t and F,

order statistics, parametric point estimation covering methods of moments, maximum likelihood, and Bayesian techniques, concept of sufficiency and completeness, parametric interval estimation covering pivotal quantity method, parametric hypothesis testing covering GLR and UMP tests, and analysis of real and simulated data. Prerequisites: MAT 153 and MAT 282. Cr 3.

STA 581 Statistical Quality Control

Methods and philosophy of statistical process control, control charts for variables, control charts for attributes, CUSUM and EWMA control charts, some other statistical process control techniques, process capability analysis, and certain process design and improvements with experimental design. Prerequisite: MAT 282. Cr 3.

STA 582 Time Series Modeling

Overview of the basic concepts of trend and seasonality, ARMA and ARIMA models, parameter estimation with asymptotic properties, forecasting techniques, spectral analysis, bivariate time series, and some special topics. Prerequisite: MAT 282. Cr 3.

STA 583 Sampling Methods

Simple random, stratified, systematic, cluster, and multi-stage sampling, PPS sampling, optimum sample size, use of auxiliary variables in sample surveys, ratio and regression estimates, double sampling, sources of error in surveys and ways of removing them, and methods of collecting data. Prerequisite: MAT 282. Cr 3.

STA 584 Advanced Design and Analysis of Experiments

Factorial experiments, fractional replications in factorial experiments, BIB and PBIB designs, and response surface methodology. Prerequisite: MAT 484 or equivalent. Cr 3.

STA 585 Regression Analysis

Certain concepts of data reduction, simple linear regression using matrices, residual analysis, certain techniques to select a best regression equation, multiple regression, analysis of variance and covariance, and data analysis and computation using statistical package programs. Prerequisite: MAT 282. Cr 3.

STA 586 Nonparametric Methods

Empirical distribution functions and their properties, certain goodness-of-fit techniques, inference concerning quantiles, comparison of two and more treatments, rank tests in randomized complete designs, and some special topics. Prerequisite: MAT 282. Cr 3.

STA 587 Applied Multivariate Analysis

Multivariate normal distribution, inference about a mean vector, comparison of several multivariate means, multivariate linear regression model, principal components, and factor analysis and canonical correlation. Prerequisites: MAT 295 and MAT 282. Cr 3.

STA 588 Introduction to Biostatistics

Basic concepts of estimation and hypothesis testing, standardization of rates, life tables, analysis of categorical data, multiple regression including binary response regression models. Prerequisite: MAT 282. Cr 3.

STA 589 Survival Analysis

Survival and reliability concepts, mathematics of survival models, parametric and non-parametric estimates from complete and censored data, Kaplan-Meier estimators, regression models including Poisson regression and Cox's proportional hazards model, time-dependent covariates, and analysis of rates. Prerequisite: MAT 282. Cr 3.

School of Business

Interim Dean: John W. Bay

Director of External Linkages and Partnerships: Michael Donahue; *MBA Co-Director and Chair of the MBA Faculty:* John B. Jensen; *MBA Co-Director and External Program Development:* Valarie C. Lamont; *MSA Program Director:* George R. Violette; *Program Manager:* Alice B. Cash; *Professors:* Andrews, Houlihan, Violette, Voyer; *Associate Professors:* Artz, Grover, Hillard, Jensen, Manny; *Assistant Professors:* Jackson, Munger, Pryor, Smoluk, VanderLinden

The School of Business at the University of Southern Maine is a community of educators and professionals dedicated to the development of the people and the economy of Maine. Our foremost responsibility is to encourage students and to help them learn.

The master of business administration program is designed for students who want to advance their careers and contribute to their company. It emphasizes development of a broad critical perspective, interpersonal skills, and the analytical tools of management. It also emphasizes an appreciation of the international and ethical contexts of professional practice. The MBA program is designed to accommodate both full- and part-time working professionals. Students are encouraged to apply to the program regardless of their undergraduate academic specialization.

Subject to Board of Trustees approval in July 2000, a master of science in accounting program (MSA) will be implemented in fall 2000. The master of science in accounting program is designed to prepare students to meet the challenges of the rapidly changing accounting profession. The MSA program is suitable for individuals currently working in the profession, and for those desiring to start or return to a career in accounting. The program is appropriate for students from a variety of educational backgrounds including liberal arts and engineering, as well as business and accounting. The MSA program will provide students with a strong conceptual and applied understanding of accounting that integrates technical accounting knowledge with ethical professional judgment.

The School of Business is accredited by the AACSB, the International Association for Management Education. AACSB assures quality and promotes excellence and continuous improvement in undergraduate and graduate education for business administration and accounting.

Admission

At the University of Southern Maine, several factors are evaluated in determining a candidate's admissibility to the MBA or MSA program. Included in the assessment of a candidate's potential to perform satisfactorily in the MBA or MSA 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 questions 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.

Applicants admitted conditionally will be required to complete a specified set of courses (either foundation, regular or both). 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 program director to enroll in courses, subject to permission of the instructor. All students in this group must sign a non-degree release (see page 53).

Non-matriculated Students All students wishing to enroll in MBA or MSA 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 or MSA 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 program director, alone or in consultation with the Admissions Committee.

Others seeking to enroll in MBA or MSA 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 page 53).

Other USM Graduate Students Students matriculated in other graduate programs at the University of Southern Maine may enroll in School of Business graduate-level courses on a space-available basis providing that appropriate course prerequisites or other equivalents as approved by the program director, 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 page 53).

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.

Application Material

In addition to the materials described in the Admissions chapter, applicants for these programs must submit:

1. A completed application. In the required essay applicants should, in addition to stating their reasons for wanting an MBA or MSA, 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 on the paper-based TOEFL or 213 on the computer-based TOEFL 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 or MSA 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 or MSA 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 six semester hours of transfer credit may be accepted. 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.

Time Limit In order to be counted toward the MBA or MSA 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, ACC 630, 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 or MSA 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 or ACC 630 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 ACC 630 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 ACC 630 or higher, the student must repeat the course. When a student repeats a course numbered MBA 610 or ACC 630 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 ACC 630 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 or MSA 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 or MSA 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 or MSA program may not be readmitted.

Special Policies In order to receive graduate credit toward the MBA or MSA 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 or MSA program, no more than six credits used to fulfill requirements for that degree may be applied toward completion of the MBA or MSA degree.

Master of Business Administration

The master of business administration program at the University of Southern Maine is composed of 24 credit hours of core courses and 6 credit hours of elective courses. In addition, up to 21 credit hours of foundation courses may be waived depending on the student's previous academic background.

Foundation Courses

Credit Hours
0-21

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 MBA 601, 602, 604, or 608 are included in the student's grade point average. However, any foundation 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 foundation 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 for MBA 601, 602, 604, or 608. However, any undergraduate courses taken will not be included in the computation of the student's grade point average.

BUS 320 Business Finance	3.0
BUS 340 Managing Organizational Behavior	3.0
BUS 360 Marketing	3.0
MBA 601 Economic Analysis:	
An intensive survey of micro and macroeconomic theory	3.0
MBA 602 Fundamentals of Accounting:	
An intensive survey of financial and management accounting	3.0
MBA 604 Probability and Statistics for Business Decision Making	3.0
MBA 608 Operations Analysis	3.0

Computer application skills All students are expected to have basic computer skills in word processing and spreadsheet usage, either through prior experience or education. Students lacking in computer application skills are responsible for seeking coursework that will fulfill these expectations.

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 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. There is a fee for this experience.

	<i>Credit Hours</i>
<i>Core Courses</i>	21
Accounting (choose one):	3
MBA 630 Management Accounting Systems	
MBA 633 Taxation for Business and Investment Planning	
Ethical and Legal Issues	3
MBA 615 Ethical and Legal Issues in Business	
Finance	3
MBA 620 Financial Management	
Information Systems	3
MBA 674 Information Systems Management	
Management (choose one):	3
MBA 642 Leadership	
MBA 648 Organizational Analysis	
Marketing (choose one):	3
MBA 660 Managerial Marketing	
MBA 665 Consumer Behavior	
Operations Analysis	3
MBA 675 Production/Operations Management	
Strategy	3
MBA 680 Organizational Strategy	
<i>Electives</i>	6
ACC 631 Current Issues and Developments in Accounting	
ACC 632 Financial Statement Reporting and Theory	
ACC 634 Advanced Taxation	
MBA 626 Advanced Corporate Finance	
MBA 627 Investment Management	
MBA 628 Financial Institutions	
MBA 629 Financial Economics	
MBA 630 Management Accounting Systems (if not chosen to fulfill the Core requirement)	
MBA 633 Taxation for Business and Investment Planning (if not chosen to fulfill the Core requirement)	
MBA 642 Leadership (if not chosen to fulfill the Core requirement)	
MBA 643 Change and Creativity	
MBA 648 Organizational Analysis (if not chosen to fulfill the Core requirement)	
MBA 649 Special Topics in Management: Introduction to System Dynamics Entrepreneurship and Business Formation Strategic Human Resource Management	
MBA 660 Managerial Marketing (if not chosen to fulfill the Core requirement)	
MBA 665 Consumer Behavior (if not chosen to fulfill the Core requirement)	
MBA 668 Service Quality and Customer Satisfaction	
MBA 669 Directed Project in Marketing Research	
MBA 671 Quality Management: Systems, Strategies, and Tools	
MBA 672 Supply Chain Management	
MBA 673 Business Systems Simulation	
MBA 676 Forecasting for Business Decision Making	
MBA 677 Advanced Topics in Quantitative Analysis	
MBA 691 Independent Study	
MBA 695 Cooperative Education	

Master of Science in Accounting

The MSA program will provide students with a strong conceptual and applied understanding of accounting that integrates technical accounting knowledge with ethical professional judgment. Because accounting professionals need a broad understanding of the business disciplines and how those disciplines interact with accounting, students with undergraduate degrees outside of business or accounting will be required to take a number of foundation courses prior to enrollment in graduate classes. In addition, all students who do not have prior experience in the accounting profession will be required to participate in a cooperative education (co-op) experience as part of their program. Opportunities exist for part-time and full-time co-op experiences to provide flexibility in meeting student needs.

Students may customize their MSA by spreading graduate electives over a variety of areas or by selecting electives in a particular non-accounting area complementary to their individual preference. All students must take at least three (and may take up to five) non-accounting electives as part of their program. Thus, the electives provide an opportunity for breadth or additional depth within the program.

The MSA degree may be pursued on either a part-time or full-time basis. Classes meet once a week in late afternoon and evening time periods. Students, provided all prerequisites have been met, may be able to complete the MSA in one year of full-time study through careful scheduling and advanced planning with the MSA director.

Program Requirements

MSA Common Body of Knowledge and Accounting Foundation courses 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. Each course must be completed with a grade of C (2.0) or higher.

Common Body of Knowledge (18 credits)

All courses listed are 3 credit hours, unless noted.

BUS 320	Business Finance
BUS 340	Managing Organizational Behavior
BUS 360	Marketing
MBA 601	Economic Analysis
MBA 604	Probability and Statistics for Business Decision Making
MBA 608	Operations Analysis

Computer Applications Skills All students are expected to have basic computer skills in word processing and spreadsheet usage, either through prior experience or education. Students lacking in computer application skills are responsible for seeking coursework that will fulfill these expectations.

Accounting Foundation Core (14 credits)

ACC 223	Introduction to Accounting Systems (2 credits)
ACC 301	Intermediate Accounting I
ACC 302	Intermediate Accounting II
ACC 429	Accounting Information Systems
ACC 602	Fundamentals of Accounting

MSA Requirements (9 credits)

ACC 631	Current Issues and Developments in Accounting
ACC 632	Financial Statement Reporting and Theory
ACC 636	Professional Responsibilities and Conduct

MSA Electives (9-12 credits)

ACC 410 required if no prior external auditing course in undergraduate or graduate work; ACC 633 required if no prior tax course in undergraduate or graduate work; ACC 695 required if no prior accounting work experience.

ACC 410	Auditing and Assurance
ACC 441	Advanced Financial Accounting
ACC 630	Management Accounting Systems

ACC 633	Taxation for Business and Investment Planning
ACC 634	Advanced Taxation
ACC 691	Independent Study
ACC 695	Cooperative Education

Non-Accounting Electives (9-12 credits)

At least 9 credit hours must be in non-accounting coursework and may include MBA courses numbered 615 or higher or other approved graduate courses; approval must come from the MSA director.

MBA 615	Ethical and legal Issues in Business
MBA 620	Financial Management
MBA 626	Advanced Corporate Finance
MBA 627	Investment Management
MBA 628	Financial Institutions
MBA 629	Financial Economics
MBA 642	Leadership
MBA 643	Change and Creativity
MBA 648	Organizational Analysis
MBA 649	Special Topics in Management: Introduction to System Dynamics Entrepreneurship and Business Formation Strategic Human Resource Management
MBA 660	Managerial Marketing
MBA 665	Consumer Behavior
MBA 668	Service Quality and Customer Satisfaction
MBA 669	Directed Project in Marketing Research
MBA 671	Quality Management: Systems, Strategies, and Tools
MBA 672	Supply Chain Management
MBA 673	Business Systems Simulation
MBA 674	Information Systems Management
MBA 675	Production/Operations Management
MBA 676	Forecasting for Business Decision Making
MBA 677	Advanced Topics in Quantitative Analysis
MBA 680	Organizational Strategy

3-2 Program

The master of business administration (MBA) and the master of science in accounting (MSA) programs allow interested and qualified students to complete a bachelor's degree and an MBA or MSA in five years depending on the undergraduate major. (Degree requirements for some majors necessitate a longer completion time.) Generally, students in the 3-2 program focus on their bachelor's degree requirements during their first three years, a mix of bachelor's and MBA or MSA requirements in the fourth year, and mostly MBA or MSA requirements in the fifth year. Each degree is awarded once the specific degree requirements are successfully met.

Admission Requirements

Students may enroll in the 3-2 program either directly from high school, or after the end of their junior year of undergraduate studies. Students entering directly from high school need an SAT combined score of 1200 or higher. Students entering directly from high school will be required to attain a GPA of 3.0 or higher after 90 credit hours of undergraduate coursework to remain in good standing and be allowed to continue in the 3-2 program. Students currently enrolled at USM may enter the 3-2 program by meeting the regular MBA or MSA admission criteria of a formula score of 1100 or higher with a minimum GMAT score of 500. (The formula is: undergraduate GPA x 200, plus the GMAT total score.) Students entering the 3-2 program after they are enrolled at USM will be required to attain a GPA of 3.0 or higher after 90 credit hours of undergraduate coursework to remain in good standing and be allowed to continue in the program.

Enrollment in MBA- and MSA-level courses

In either admission path, a student may not enroll in MBA- or MSA-level courses until they have accumulated 90 credit hours of undergraduate coursework.

The MBA 3-2 program for majors outside the School of Business

USM Undergraduate Core	34 credit hours
Undergraduate Major & Electives	As determined by the major
* MBA Foundation Requirements	18-21 credit hours
* MBA Core and Electives	<u>30 credit hours</u>

Total: 150+ credit hours
(undergraduate and graduate)

The MBA 3-2 program for accounting and business administration majors

USM Undergraduate Core	34 credit hours
Undergraduate Major & Electives	As determined by the major
* MBA Foundation Requirements	Fulfilled by undergraduate major requirements
* MBA Core and Electives	<u>30 credit hours</u>

Total: 150+ credit hours
(undergraduate and graduate)

The MSA 3-2 program for majors outside the School of Business

USM Undergraduate Core	34 credit hours
Undergraduate Major & Electives	As determined by the major
* MSA Common Body of Knowledge and Accounting Foundation Requirements	33 credit hours
* MSA Requirements and Electives	<u>30 credit hours</u>

Total: 150+ credit hours
(undergraduate and graduate)

The MSA 3-2 program for business administration majors

USM Undergraduate Core	34 credit hours
Undergraduate Major & Electives	As determined by the major
* MSA Common Body of Knowledge and Accounting Foundation Requirements	Fulfilled by undergraduate major requirements
* Accounting Foundation	12-15 credit hours
* MSA Requirements and Electives	<u>30 credit hours</u>

Total: 150+ credit hours
(undergraduate and graduate)

The MSA 3-2 program for accounting majors

USM Undergraduate Core	34 credit hours
Undergraduate Major & Electives	As determined by the major
* MSA Common Body of Knowledge and Accounting Foundation Requirements	Fulfilled by undergraduate major requirements
* Accounting Foundation	Fulfilled by undergraduate major requirements
* MSA Requirements and Electives	<u>30 credit hours</u>

Total: 150+ credit hours
(undergraduate and graduate)

*Please see previous pages for MBA Foundation, Core, and Elective courses, and for MSA Common Body of Knowledge, Accounting Foundation, and MSA Required and Elective courses.

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 program manager and by contacting the School of Business co-op coordinator. In a typical three-credit co-op experience, a student works a minimum of 140 hours on-site and will be advised by a faculty member during the co-op process. With the faculty sponsor, the student negotiates a learning contract 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 or MSA 695 for prerequisites and restrictions. For further information, contact the program manager or the School of Business Co-op Office at 780-4020.

ACC 223 Introduction to Accounting Systems

All accounting procedures required for an accounting cycle are practiced in this course in depth; to include transaction processing, journals, ledgers, trial balances, preparation of financial statements, and the closing process. A manual practice set is required. The course then moves on to experience accounting procedures using a computerized integrated general ledger system. Accounting data analysis and report writing are emphasized, with spreadsheet integration examined as time permits. Prerequisites: ACC 110 (or ACC 602), and ABU 190 or computer proficiency. Cr 2.

ACC 301 Intermediate Accounting I

An examination of the conceptual framework, the primary financial statements, and the methods and rationale for recording and reporting assets. Emphasis is on the effect of present and potential economic events on the financial statements. The course discusses the advantages, limitations, and deficiencies associated with generally accepted principles in connection with presenting decision-useful information. Prerequisites: ACC 211 (or ACC 602), and ACC 223 (or 213) and junior standing. Cr 3.

ACC 302 Intermediate Accounting II

An examination of the methods and rationale for recording liabilities and owners' equity. The course also examines the statement of cash flows. Emphasis is on the effect of present and potential economic events on the primary financial statements. The course discusses the advantages, limitations, and deficiencies associated with generally accepted principles in connection with presenting decision-useful information. Prerequisites: ACC 301 and junior standing. Cr 3.

ACC 410 Auditing and Assurance

This course examines the public accounting profession, auditing standards, and professional ethics. The course explores the process by which an auditor forms an opinion as to the "fairness of presentation" of financial statements, giving an overview of audit evidence and audit evidence accumulation methodology. The course exposes students

both to the demand for and supply of the profession's flagship service, financial statement audits, and to the nature of the value-added assurance and attestation services decision makers demand in the information age. The course illustrates with real companies, links class discussion and assignments to student skills, and encourages unstructured problem solving. This course provides an opportunity for students to study auditing concepts and theory at an advanced level by examining a number of issues, with extensive reading from the auditing research literature, in addition to textbook material. Students with prior coursework in external auditing may not enroll for MSA degree credit. Prerequisites: ACC 302 and senior standing. Cr 3.

ACC 429 Accounting Information Systems

This course combines readings and guest lectures on topics in accounting information systems with hands-on accounting system projects. Topics include information needs and control issues associated with the revenue and disbursement cycles, the role of requirements analysis in selecting accounting software, and current trends in accounting information systems. The primary focus is on collecting, maintaining, and presenting information to meet company needs. Students will use database software. The course will also include an introduction to e-business issues related to accounting systems. Prerequisites: ACC 211 (or ACC 602), ACC 223 (or ACC 213), and junior standing. Cr 3.

ACC 441 Advanced Financial Accounting

This course focuses on the theoretical concepts associated with the basic accounting issues of purchase and pooling of interests in the context of direct asset acquisitions. The basics of preparing a consolidated income statement and balance sheet are explored. Students will examine the entire life-cycle of a partnership including profit and loss agreements. Also considered is the international accounting environment which includes re-measurement and/or translation of a foreign entity's financial statements into U.S. currency. Students will examine governmental accounting issues at the state and local level and will study the standards deficiencies associated with generally accepted prin-

ciples in connection with presenting decision-useful information. Students with prior coursework in advanced financial accounting may not enroll for MSA degree credit. Prerequisites: ACC 301 and junior standing. Cr 3.

ACC 602 Fundamentals of Accounting

This course provides an intensive survey of the fundamentals of financial and management accounting. It includes an appreciation and understanding of generally accepted accounting principles and their application in the preparation and analysis of financial statements with an emphasis on decision making. The course also introduces the concept of cost used by managers in decision making in planning and controlling operations in organizations. Cr 3.

ACC 630 Management Accounting Systems

This course 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, MBA 602 (or ACC 602). Cr 3.

ACC 631 Current Issues and Developments in Accounting

The study of current output concerning accounting issues of a technical, professional, and academic nature. Areas of accounting studied will include recent developments in financial, managerial, auditing, taxation, and systems at the local, national, and international levels. Prerequisites: ACC 410, ACC 429, and MBA 633 (or ACC 313). Cr 3.

ACC 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. Cr 3.

ACC 633 Taxation for Business and Investment Planning

An examination of the implications of current federal income tax laws and policies for business management decisions; and recognition of tax traps and potential tax savings. Prerequisites: MBA 601, MBA 602 (or ACC 602), BUS 320. Cr 3.

ACC 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 or MBA 633. Cr 3.

ACC 636 Professional Responsibilities and Conduct

This course covers the legal implications of business transactions generally confronted by accountants. The professional and ethical responsibilities of accountants to the public, to the profession, and to governmental authorities will be explored. Prerequisites: ACC 410 and ACC 313 or ACC 633. Cr 3.

ACC 691 Independent Study

Selected topics in the areas of accounting may be studied and researched on an independent basis. Enrollment is normally limited to MSA degree candidates. Prerequisites: permission of instructor and director of MSA program. Cr 1-3.

ACC 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 instructor and MSA director. Enrollment is normally limited to MSA majors who have not completed their degree requirements. A maximum of three credits of ACC 695 may be used toward the degree. Cr 1-3.

BUS 320 Business Finance

This course introduces students to the theories and techniques of managing capital sources and uses within the framework of shareholder wealth maximization. Lecture, problems, cases. Prerequisites: computer proficiency or ABU 190, MBA 601, MBA 602, MBA 604, MBA 608 (or concurrent). Cr 3.

BUS 340 Managing Organizational Behavior

A comprehensive survey of the disciplines of management and organizational behavior, and of the practices managers employ in planning, organizing, leading, and controlling organizations. Topics include self-awareness, perception, motivation, leadership, group dynamics and teamwork, communication, strategic planning and organizational design, planned change and continuous improve-

ment, and information and control systems. The environmental context, workforce diversity, the global economy, and managerial ethics are core integrating themes. Cr 3.

BUS 360 Marketing

This course is an introduction to the field of marketing. Topics include marketing strategy for products and services, market segmentation, product issues, pricing, promotion, distribution, consumer behavior, marketing research and information systems, international marketing, and nonprofit marketing. Cr 3.

MBA 601 Economic Analysis

An intensive survey of microeconomic theory and macroeconomic theory. Economic problems such as price and output decisions, resource allocations, inflation, and unemployment are analyzed. Cr 3.

MBA 602 Fundamentals of Accounting

This course provides an intensive survey of the fundamentals of financial and management accounting. It includes an appreciation and understanding of generally accepted accounting principles and their application in the preparation and analysis of financial statements with an emphasis on decision making. The course also introduces the concept of cost used by managers in decision making in planning and controlling operations in organizations. Cr 3.

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. Prerequisite: computer proficiency or ABU 190. Cr 3.

MBA 608 Operations Analysis

This course examines the role, perspective, and commonly used tools of quantitative analysis in operational decision making. Emphasis is placed upon developing students' abilities to recognize the need for quantification; formulate operations management problems quantitatively; select and test computer-based decision-support system models; collect meaningful data; and interpret the implications of analysis results. Prerequisites: MBA 604; computer proficiency or ABU 190. Cr 3.

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. 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: BUS 320. 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 620. 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 620. 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 620. 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, MBA 620. 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, MBA 602. Cr 3.

MBA 633 Taxation for Business and Investment Planning

Implications of current federal income tax laws and policies for business management decisions. Recognition of tax traps and potential tax savings. Prerequisites: MBA 601, MBA 602, BUS 320. 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: BUS 340. Cr 3.

MBA 643 Change and Creativity

This course will provide an applications-oriented understanding of change—both personal and organizational, and will help students develop creative problem-solving skills that not only allow one to survive, but actually thrive in the context of change. Perspectives covered in the course include organizational development, contemporary models of change, linear and nonlinear creativity techniques, innovation and creativity models, and various psychological theories useful to better understand change from a personal point of view. Prerequisite: BUS 340. Cr 3.

MBA 648 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: BUS 340. 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: BUS 340. 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: BUS 340. 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: BUS 340. 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, BUS 360. 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: BUS 360. 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: BUS 360. 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: BUS 360. 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. 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. 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. 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 effective-

ness, 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. Cr 3.

MBA 675 Production/Operations Management

An examination of the role of operations within manufacturing and service organizations. Emphasis is placed upon recognizing operational opportunities and tradeoffs, and employing computer simulation and other quantitative tools and decision support systems to assist strategic and operational decision making. Topics include: quality management, capacity management, process design, facility location, layout, production planning, and manufacturing philosophies such as group technology, the theory-of-constraints, and just-in-time. Prerequisite: MBA 608. 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. 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 conceptual 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. 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.

Center for Business and Economic Research

Co-Directors: Bruce H. Andrews, Charles F. Davis

Senior Research Associates: Andrews, Colgan, Jensen, Lamont, Munger; *Business Editor, MBI:* Donahue; *Managing Editor, MBI:* Max

The Center for Business and Economic Research (CBER) was formed 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 information management. 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. CBER also publishes *Maine Business Indicators*, a quarterly newsletter focusing on key business and economic issues facing Maine. Recently, CBER has helped develop and maintain Maine's economic development wide area network and has also been developing a prototype database system to characterize the labor force in each of the 17 labor market regions in Maine. 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.

Center for Entrepreneurship and Small Business

Director: Valarie C. Lamont

In November 1996 the Board of Trustees of the University of Maine System approved the creation of the Center for Entrepreneurship and Small Business. Housed within the School of Business, the Center is simultaneously developing an academic program for undergraduate students and non-credit offerings to serve the needs of start-up and existing small businesses. In partnership with the Heart of Maine, the Center sponsors the FastTrac business development program statewide. The Center also sponsors participation in the Price-Babson Fellows Program at Babson College. More information can be found on the Center's Web site at www.usm.maine.edu/cesb or by contacting the Center for Entrepreneurship and Small Business Office at the University of Southern Maine, 68 High Street, Portland, ME 04101, (207) 780-5919.

Maine Small Business Development Centers

Director: Charles F. Davis

Associate Director: Ahna H. Newell

The Maine Small Business Development Centers (SBDC) was established as one of eight pilot programs across the country to provide comprehensive business assistance to emerging and existing companies statewide. Through a network of eight centers and eighteen satellite offices, staffed with qualified, experienced busi-

ness counselors, the Maine SBDC provides business diagnosis/analysis, one-on-one counseling, management information resources and a business research service, seminars, conferences, and linkage with other economic development organizations. The Maine SBDC is a partnership of the U.S. Small Business Administration, the Maine Small Business Commission through the Department of Economic and Community Development, the University of Southern Maine's School of Business, and local sponsoring organizations. More information can be found on the Maine SBDC's home page (www.mainesbdc.org) or by contacting the Maine SBDC State Office at the University of Southern Maine, PO 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) provides prelicensing and continuing education courses in real estate, appraisal, banking, and property management. Courses are delivered using a variety of formats, including live classroom, public television, video, computer, Internet, 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 Center for Educational Policy, Applied Research and Evaluation: David L. Silvermail; *Director of Professional Development Center:* George C. Lyons; *Director of Southern Maine Partnership:* Lynne Miller

Admissions and Advising Office, 117 Bailey Hall, Gorham, Maine 04038
Center for Educational Policy, Applied Research, and Evaluation, 119 Bailey Hall, Gorham, Maine 04038
Professional Development Center, 305 Bailey Hall, Gorham, Maine 04038
Southern Maine Partnership, 301 c Bailey Hall, Gorham, Maine 04038

Education today occurs 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 teacher 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.

USM's College of Education and Human Development degree programs are accredited by the National Council for Accreditation of Teacher Education (NCATE).

Graduate Programs

The College of Education and Human Development offers degrees and certificate programs in the following areas:

Adult Education

Master of Science in Adult Education
Certificate of Advanced Study in Adult Learning

Counselor Education

Master of Science in Counseling
Mental Health Rehabilitation Technician IV Certificate
Mental Health Rehabilitation Technician III Certificate
Certificate of Advanced Study in Counseling
Certificate of Advanced Study in Couple and Family Therapy

Educational Leadership

Master of Science in Education in Educational Leadership
Assistant Principal Certificate
Athletic Administrator Certificate
Middle Level Education Certificate
Superintendent Certificate
Certificate of Advanced Study in Educational Leadership

Industrial Education

Master of Science in Education in Industrial Education

Literacy Education and English as a Second Language

Master of Science in Education in Literacy Education
Literacy Certificate

Certificate of Advanced Study in Literacy Education
Master of Science in Education in Literacy Education with a concentration in
English as a Second Language
Certificate of Advanced Study in English as a Second Language

School Psychology
Master of Science in School Psychology

Special Education
Master of Science in Special Education

Teacher Education
Extended Teacher Education Program (ETEP)

**College of Education and
Human Development
Departments**

The College of Education and Human Development is made up of the following departments:

Department of Human Resource Development

Chair: John M. Sutton, Jr.

Adult Education—*Professor:* Brady; *Associate Professor:* Atkinson; *Assistant Professor:* Larson; *Instructor:* Collins

Counseling—*Professors:* Murphy, Sutton, VanZandt; *Associate Professors:* Fall, Stevens; *Assistant Professor:* Katsekas; *Instructor:* Bernacchio

School Psychology—*Professor:* Steege

The Department of Human Resource Development aims 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, student affairs in higher education, public school adult education director certification, and self-designed. The counselor education program offers specialties in school counseling, rehabilitation counseling, psychosocial rehabilitation counseling, and mental health counseling (clinical counseling and professional counseling). Certificate of Advanced Study Programs in adult learning and counseling are also available.

Department of Professional Education

Chair: India Broyles

Educational Leadership—*Professors:* Capelluti, Miller, Silvermail; *Associate Professors:* Barnes, Broyles, Goldsberry; *Assistant Professors:* Beaudry, Nye

Industrial Education—*Associate Professors:* Nannay, Zaner

Literacy Education—*Professors:* O'Donnell, Wood; *Associate Professor:* Amoroso; *Adjunct Assistant Professor:* Bouchard

Special Education—*Professors:* Cohen, Lyons; *Associate Professors:* Curry, Rees

The Department of Professional Education provides initial educational and professional development opportunities to new and current educators. The Department offers programs in three areas of study: educational leadership, literacy education, and special education. Within educational leadership, the Department offers a master's degree, two certificate programs, and a certificate of advanced study. The master's program is divided into three areas: administration, for certification as school principal; administration, for certification as a director of special education; and teacher leadership. Within literacy, the Department offers a master's degree with the option of a concentration in English as a second language, a literacy certificate program, and certificates of advanced study in literacy education and in English as a second language. Within special education, the Department offers a master's degree that includes concentrations in elementary education, secondary education, and education of the gifted and talented.

Department of Teacher Education

Chair: Walter Kimball

Director of Teacher Education: Richard Card

Associate Professors: Austin, Card, Davis, Kimball, Kissen; *Assistant Professors:* Dutt-Doner, Kuech

The Department of Teacher Education provides a teacher education program in the context of a rapidly changing profession. The Extended Teacher Education Program (ETEP) is a nationally recognized, post-baccalaureate, teacher certification program which includes an intensive nine-month internship; completion of certification requirements; and completion of a master's degree in teaching and learning.

Admission to the Master's Degree Programs

College of Education and Human Development 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: hold a baccalaureate degree from an accredited institution; have earned a cumulative grade point average of 2.5 (on a 4.0 scale) in a baccalaureate degree program; have earned a score of 40 points or above on the Miller Analogies Test (MAT), or 900 or above combined verbal and quantitative scores on the Graduate Record Examination (GRE) (this requirement is waived for applicants already holding a graduate degree); and have earned a score of at least 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 213 on the computer-based TOEFL for students whose native language is not English.

Applicants who do not have a 2.5 overall grade point average or who did not score 40 on the MAT or 900 combined on the verbal and quantitative sections of the GRE must enclose a letter asking for special consideration, in which they provide evidence of an ability to complete graduate studies successfully. Without such a letter, applicants who fail to meet eligibility requirements may be automatically denied. Special admission requirements are listed for some programs. Please consult the following pages for details.

Candidates for admission to the graduate degree programs must file all application materials with the College of Education and Human Development prior to the application deadline. All application materials should be submitted to the College's Admissions and Advising Office, 117 Bailey Hall, Gorham, Maine 04038.

Application materials must include:

- a) One completed copy of the Application for Admission to Graduate Study and an application fee of \$25.00 (nonrefundable);
- b) Official transcripts of all previous college or university work sent directly from the awarding institution;
- c) 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;
- d) Official scores on the MAT or the GRE, taken within five years of application sent directly from the testing service. This requirement is waived for applicants already holding a graduate degree.

Certificates of Advanced Study (CAS)

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

Candidates for admission to the CAS programs must file the following materials with the College prior to the application deadline. All application materials should be submitted to the College's Admissions and Advising Office, 117 Bailey Hall, Gorham, Maine 04038. Applications materials must include:

- a) One completed copy of the CAS application form with a \$25.00 nonrefundable application fee;
- b) Official copies of college/university transcripts from all previous graduate coursework;
- c) 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, and demonstrated capability and motivation to engage in advanced graduate study;

- d) 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 program fits the applicant's personal and professional goals.

Application Deadlines

Master's 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
Literacy Education	February 1 and September 15
School Psychology	February 1
Special Education	February 1 and September 15
Teacher Education	
Extended Teacher Education Program (ETEP)	January 8
Certificates of Advanced Study	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. 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 graduate assistantships are available for graduate students. Assistants must carry a minimum of six credit hours per semester. Duties may involve teaching, research, advising, office administration, and supervision of students/interns. Applications for assistantships are available from the Admissions and Advising Office, 117 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 six or more credits per semester during the following year. Applications for graduate scholarships are available from the Admissions and Advising Office, 117 Bailey Hall, and are due March 1.

Program Policies

In addition to the general policies described in the Academic Policies chapter of this catalog, 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 exceptional circumstances. Graduate students in master's level programs at other universities may transfer into our programs, bringing some or all of their credits with them if the program from which they are transferring is an approved program from an accredited university. Requests for transfer courses must be included on the graduate application, and will be considered on a course-by-course basis at the time of admission. Additional transfer policies may be listed under individual programs.

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 six hours of academic credit may be waived or substituted.

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

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 to retain only those students who, in the judgment of the faculty, satisfy the requirements of scholarship, maturity, and personal suitability for teaching. The program maintains the ability to change admission and/or program requirements as needed to meet changes in state certification standards.

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.

Master of Science in Adult Education

The master of science in adult education is the only graduate program of its kind in northern New England. Originally established in 1972 to meet the region's need for trained public school administrators of adult education programs, 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, businesses, and human service organizations. Most seek professional competence and recognition for a position currently held. Usually, the student 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 roles include those of trainer, teacher, staff development specialist, program designer, or organizational change agent. Other students contemplate career change or entry and see adult education as a versatile field with strong growth potential.

The master of science in adult education requires 39 credits of coursework. Students must also submit a professional portfolio to complete the degree.

Special Admission Requirements

In addition to the general requirements of the College, candidates should provide a narrative, preferably typed, which addresses the following topics:

- a) relevant educational and experiential background;
- b) reasons for wanting to be in a helping profession;
- c) commitment to pursuing a career in adult education;
- d) reasons for seeking admission to the program;
- e) a statement of personal philosophy;
- f) a statement of personal strengths and weaknesses.

The narrative will be evaluated in terms of clarity of expression, grammatical construction, and other facets of English composition, as well as the quality of responses.

The admissions process requires a formal interview. Candidates to be interviewed will be selected on the basis of the above information. During the interview, issues relating to the following topics will 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.

Graduate students in master's level adult education programs at other universities may transfer into the program if they take their final 12 hours, including directed study or internship and graduate seminar, in USM's adult education program. A maximum of 9 credits in self-designed coursework may be counted toward this degree.

Program Requirements

Basic Core (12 credits)

HRD 604	Self-Directed Education: Orientation
HRD 605	Self-Directed Education: Review and Focus
HRD 606	Self-Directed Education: Comprehensive Essay
HRD 600	History and Philosophy of Adult Education
EDU 600	Research Methods and Techniques
HRD 631	The Adult Learner

Middle Core (12 hours required)

HRD 601	Marketing Training and Adult Education
HRD 630	Facilitating Adult Learning
HRD 632	Program Development in Adult Education and Human Resource Development
HRD 633	Managing Adult Education and Human Resource Development
HRD 634	Using Technology in Education
HRD 661	Life Span Development II
HRD 667	Action Research and Evaluation Methodologies

One of the following three counseling courses may be taken as 3 credits toward the middle core:

HCE 620	Fundamentals of Counseling Theories
HCE 621	Fundamentals of Counseling Skills
HCE 626	Group Process and Procedures

Field-Based Practice Courses (3 credits)

HRD 687	Internship in Adult Education and Human Resource Development or
HRD 698	Directed Study in Human Resource Development

Concentration Courses (9 credits)

Senior Course (3 credits)

HRD 649	Seminar in Adult Education and Human Resource Development
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Concentrations (3 courses, 9 credit hours)

1. Training and Development

HCE 604	Career Development
HRD 635	Training and Staff Development
HRD 640	Human Resource Development in Organizational Settings
HRD 647	Work and Learning Institute
EDU 671	Organizational Behavior

2. Educational Gerontology

HRD 557	Gerontology for Educators
HRD 558	Summer Institute in Educational Gerontology: Aging and Life Review
HRD 559	Summer Institute in Educational Gerontology: Aging, Death and Bereavement

3. Community/International Education
 - HRD 637 Community Education
 - HCE 640 Human Resource Development in Community Settings
 - HRD 646 International Adult Education
4. English as a Second Language
 - EDU 520 Reading Development and Instruction
 - EDU 560 ESL Classroom Teaching Practices
 - EDU 561 Aspects of the English Language
 - EDU 562 Linguistic and Cultural Diversity in the Classroom
5. Counseling
 - HCE 604 Career Development
 - HCE 620 Fundamentals of Counseling Theories
 - HCE 621 Fundamentals of Counseling Skills
 - HCE 626 Group Process and Procedures
 - HCE 690 Individual Counseling Practicum
6. Autobiographical Learning
 - HRD 558 Summer Institute in Educational Gerontology: Aging and Life Review
 - HRD 664 Culture, Tradition, and Diversity
 - HRD 693 Life Stories and Personal Mythmaking
7. Student Affairs in Higher Education
 - HRD 555 Introduction to Student Affairs in Higher Education
 - HRD 556 Summer Institute in Special Topics

Note: This concentration requires a variation in the basic and middle core requirements; please consult with your advisor.
8. Public School Adult Education Director Certification
 - EDU 678 School Law
 - EDU 679 Evaluation and Supervision of School Personnel
 - EDU 683 School Finance

Note: This concentration requires a variation in the basic and middle core requirements; please consult with your advisor.
9. Teaching Adult Learners
 - HRD 630 Facilitating Adult Learning
 - HRD 634 Using Technology in Education
 - HRDX 639 Teaching for Transformation
10. Self-Designed

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 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. This is an individualized, flexible program which permits students to apply their learning to field-based projects.

Program Requirements

Required Courses (9 credits)

- EDU 660 CAS Seminar
- HRD 600 History and Philosophy of Adult Education
- HRD 631 The Adult Learner

The HRD courses will be waived for students who have a master's degree in adult education or who have taken them previously. These students will take 6 credits of advisor-approved coursework instead.

Electives (18 credits)

A field-based capstone project will be completed as one of the following: a field-based study; a public policy initiative; a publishable theory paper; or a personal learning curriculum for adults. Students will present their projects in a seminar of faculty and peers.

Master of Science in Counseling

Within the area of counselor education, the College offers a master's degree, certificate programs, and a certificate of advanced study. 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, mental health counseling (clinical counseling and professional counseling), rehabilitation counseling, and psychosocial rehabilitation counseling. The Mental Health Rehabilitation III Certificate Program may be taken independently of the master's degree. The certificate of advanced study is a post-master's program for current counselors who are interested in pursuing advanced coursework.

A basic belief of the counselor education program is that every human changes and grows throughout one's life. From time to time, individuals need help in this struggle for positive growth. Counseling and guidance services provide professional helpers who can facilitate growth and development effectively. In addition to teaching counseling skills, the program promotes students' personal growth 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 master of science in counseling degree is divided into four specialty areas: school counseling, mental health counseling (clinical and professional), rehabilitation counseling, and psychosocial rehabilitation counseling. Depending on the specialty area, the counselor education program requires 48-60 credit hours of coursework, which includes core courses, required specialty courses, and electives. In addition to coursework, each counseling student must successfully complete the Counselor Preparation Comprehensive Examination (CPCE).

Special Admission Requirements

In addition to the general requirements of the College, candidates to the master's program should provide a narrative, preferably typed, in the form of an autobiog-

raphy 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 threetypewritten, double-spaced pages which will be evaluated in terms of clarity of expression, grammatical construction, and other facets of English composition, as well as the quality of responses.

The admissions process requires a formal interview. 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 ability.

Graduate students in master's level counseling programs at other universities may transfer into the program if they take their final 21 hours, including the internship requirement, in USM's counseling program.

I. School Counseling Specialty

The school counseling specialty requires a total of 54 credit hours of coursework. Upon completion, students are eligible for certification from the Maine Department of Education in the area of school guidance and counseling, levels K-12. Certified graduates are qualified to become employed in elementary, middle, and secondary schools in Maine. Students are trained to become specialists in the planning and delivery of comprehensive developmental school counseling programs that reflect current research and validated paradigms. The school counseling specialty holds 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 Requirements

Core Courses (33 credits)

HCE 500	Orientation to the Counseling Profession
HCE 604	Career Development
HCE 605	Psychological Measurement and Evaluation
HCE 620	Fundamentals of Counseling Theories
HCE 621	Fundamentals of Counseling Skills
HCE 626	Group Process and Procedures
HCE 627	Group Counseling
HRD 664	Culture, Tradition, and Diversity
HRD 668	Human Development
HCE 690	Individual Counseling Practicum
EDU 600	Research Methods and Techniques

Required Specialty Courses (15 credits)

HCE 607	School Guidance Programs and Services
HCE 609	The Practice of School Counseling
HCE 622	Counseling Children and Adolescents
HCE 686	Internship in Counselor Education (6 credits - 600 hours)

Electives (6 credits)

II. Mental Health Counseling Specialty

The mental health counseling specialty is divided into two areas: clinical counseling and professional counseling. These programs hold accreditation from the Council for the Accreditation of Counseling and Related Education Programs (CACREP).

Clinical Counseling

The clinical counseling program requires a total of 60 credit hours of coursework. The program offers students a comprehensive array of studies which integrates the historical, philosophical, societal, cultural, economic, and political dimensions of the mental health and human service system with the roles, functions, skills, and professional identity of clinical counselors. Coursework will focus on the diagnosis, treatment, and prevention of mental and emotional disorders, and the general principles and practices for the promotion of optimal mental health. Dur-

ing the final portion of their coursework, students will intern under the supervision of a licensed mental health worker. An individual graduating from this specialty will be eligible to sit for the National Counselor Examination (NCE) and prepared to be licensed as a clinical professional counselor (LCPC) in Maine.

Program Requirements

Core Courses (33 credits)

HCE 500	Orientation to the Counseling Profession
HCE 604	Career Development
HCE 605	Psychological Measurement and Evaluation
HCE 620	Fundamentals of Counseling Theories
HCE 621	Fundamentals of Counseling Skills
HCE 626	Group Process and Procedures
HCE 627	Group Counseling
HRD 664	Culture, Tradition, and Diversity
HRD 668	Human Development
HCE 690	Individual Counseling Practicum
EDU 600	Research Methods and Techniques

Required Specialty Courses (18 credits)

HCE 640	Professional Issues for Mental Health Counselors
HCE 644	Crisis Intervention
HCE 645	Diagnosis and Treatment Planning
HCE 686	Internship in Counselor Education (9 credits - 900 hours)

Electives (9 credits)

Professional Counseling

The professional counseling program requires a total of 48 credit hours of coursework. Upon completion, students will have the skills needed to provide services in a variety of public and private agencies in Maine and across the country. An individual graduating from this program will be eligible to sit for the National Counselor Examination (NCE) and prepared to be licensed as a professional counselor (LPC) in Maine.

Program Requirements

Core Courses (33 credits)

HCE 500	Orientation to the Counseling Profession
HCE 604	Career Development
HCE 605	Psychological Measurement and Evaluation
HCE 620	Fundamentals of Counseling Theories
HCE 621	Fundamentals of Counseling Skills
HCE 626	Group Process and Procedures
HCE 627	Group Counseling
HRD 664	Culture, Tradition, and Diversity
HRD 668	Human Development
HCE 690	Individual Counseling Practicum
EDU 600	Research Methods and Techniques

Required Specialty Core

HCE 640	Professional Issues for Mental Health Counselors
HCE 686	Internship in Counselor Education (6 credits - 600 hours)

Electives (6 credits)

Substance Abuse Counseling Certificate

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 within their master's degree. This expertise is available as part of either the professional counseling or clinical counseling specialties. 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. The following courses are required for the certificate:

HCE 642	Perspectives on Chemical Dependency
HCE 643	Psychopharmacology and Substance-Related Disorders
HCE 644	Crisis Intervention
HCE 650	Basic Concepts of Systems Theory and Family Therapy
HCE 686	Internship in Counselor Education (6 credits - 600 hours in an in-patient/out-patient substance abuse treatment facility)

III. Rehabilitation Counseling Specialty

The master's program in rehabilitation counseling is intended to promote quality rehabilitation services to persons with disabilities through the education of rehabilitation professionals, providing services to rehabilitation organizations, and 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:

- the value, worth, dignity, and capabilities of all people;
 - the right of all people to full societal participation with individuals in settings of their choice;
 - the treatment of persons with disabilities as equal partners in the rehabilitation process;
 - the emphasis on societal, community, and professional change as much as individual change;
 - the importance of hope, individual capacity, community inclusion, support, and education; and
 - 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:
- the use of class and community experiences to acquaint students with rehabilitation philosophies, methods, and organizations;
 - 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:

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

This program is designed to 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. The rehabilitation counseling specialty holds accreditation from the Council on Rehabilitation Education (CORE).

The rehabilitation counseling specialty requires a total of 48 credit hours of coursework. This specialty focuses on the medical, psychological, vocational, and societal issues that surround people with disabilities and the practice of rehabilitation. Students are also offered practicum and internship experiences in community agencies that promote equity and empowerment of people with disabilities. Upon completion of their degree, students are eligible to take a national exam that qualifies them as certified rehabilitation counselors (CRC). Graduates of this specialty become employed in public, private, and nonprofit rehabilitation agencies in Maine and across the country.

Program Requirements

Core Courses (21 credits)

HCE 605	Psychological Measurement and Evaluation
HCE 620	Fundamentals of Counseling Theories
HCE 621	Fundamentals of Counseling Skills
HCE 626	Group Process and Procedures

HRD 668	Human Development
HCE 690	Individual Counseling Practicum
EDU 600	Research Methods and Techniques

Required Specialty Courses (21 credits)

HCE 610	Introduction to Rehabilitation Counseling and Services
HCE 611	Medical and Psychological Aspects of Disability and Rehabilitation
HCE 612	Disability and Family in a Multicultural Society
HCE 615	Vocational Counseling and Placement in Rehabilitation
HCE 619	Myth, Madness, and Mental Illness
HCE 686	Internship in Counselor Education (6 credits - 600 hours)

Electives (6 credits)

IV. Psychosocial Rehabilitation Counseling Specialty

Mental Health Rehabilitation Technician (MHRT) IV Certificate

The psychosocial rehabilitation specialty requires a total of 48 credit hours of coursework. The program is particularly suitable for persons with baccalaureate degrees and experience in the mental health field who desire further training and certification in psychological rehabilitation. It provides graduate training in psychosocial rehabilitation for mental health professionals with direct application to current trends in mental health practice in Maine. MHRT IV certification is awarded on completion of this degree. Graduates are eligible to sit for the Rehabilitation Counselor Certification Examination in order to become certified rehabilitation counselors (CRC).

Program Requirements

Core Courses (21 credits)

HCE 605	Psychological Measurement and Evaluation
HCE 620	Fundamentals of Counseling Theories
HCE 621	Fundamentals of Counseling Skills
HCE 626	Group Process and Procedures
HRD 668	Human Development
HCE 690	Individual Counseling Practicum
EDU 600	Research Methods and Techniques

Required Specialty Courses (24 credits)

HCE 610	Introduction to Rehabilitation Counseling and Services
HCE 611	Medical and Psychological Aspects of Disability and Rehabilitation
HCE 612	Disability and Family in a Multicultural Society
HCE 614	Principles of Psychosocial Rehabilitation
HCE 615	Vocational Counseling and Placement in Rehabilitation
HCE 619	Myth, Madness, and Mental Illness
HCE 686	Internship in Counselor Education (6 credits—600 hours)

Elective (3 credits)

Mental Health Rehabilitation Technician (MHRT) III Certificate

The MHRT III certificate program is especially suited for practitioners who work in the mental health system and desire training in psychosocial rehabilitation, and persons with prior graduate training who need flexible coursework to update their skills and knowledge in the psychosocial rehabilitation approach. Persons with a bachelor's degree and one year direct experience in the mental health field may apply for the five-course sequence. Applicants for the MHRT III certificate program must call (207) 780-5316. To qualify for certification, students must complete:

HCE 610	Introduction to Rehabilitation Counseling and Services
HCE 611	Medical and Psychological Aspects of Disability and Rehabilitation
HCE 612	Disability and Family in a Multicultural Society
HCE 614	Principles of Psychosocial Rehabilitation
HCE 615	Vocational Counseling and Placement in Rehabilitation

Certificate of Advanced Study in Counseling

The certificate of advanced study (CAS) 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 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, psychosocial rehabilitation counseling, and couple and family therapy.

Transfer Policy

Students may not transfer courses that were part of a master's degree of fewer than 60 credits toward the CAS. Up to six post-master's graduate credits may be accepted by the CAS admissions committee, provided these credits were earned no more than three years prior to matriculation in the CAS and were completed with a grade of B or better.

Students may be able to apply up to 12 credits that were part a master's degree that required 60 or more credits toward the CAS. These courses must be directly related to the student's proposed CAS program of study, provided these credits are approved by the counselor education program faculty and were completed with a grade of B or better.

Special Admission Requirements

In addition to the general requirements of the College, candidates should provide a proposed plan of study for the CAS that includes:

- a. a brief autobiography, including the area of study in the master's degree and related experience, professional training, and credentials;
- b. overall goal to be accomplished through the program;
- c. future aspirations and professional development needs;
- d. proposed coursework, including a tentative list of courses or other curricular experiences.

Program Requirements

EDU 660 CAS Seminar (3 credits)

Self-designed Concentration (27 credits)

Portfolio - Students will develop a professional portfolio describing progress toward professional goals while in the CAS program. Seminars will be scheduled once each semester in which students who are in the last semester of their CAS program will summarize and share highlights of their programs and portfolios.

Certificate of Advanced Study in Couple and Family Therapy

The Certificate of Advanced Study in Couple and Family Therapy is a collaborative effort of the Family Institute of Maine Foundation and the College of Education and Human Development. This program is designed to assist advanced-level clinicians to develop competence as couple and family therapists. The program requires 30 credit hours of graduate coursework. Courses are taught by Family Institute of Maine Foundation faculty, who have advanced-level specialty training in couple and family therapy and many years experience in both couple and family therapy practice and teaching. Students work collaboratively with faculty from both the Family Institute of Maine Foundation and the College to design a course sequence that is substantive, developmental, and focused. The program is designed to be completed in two calendar years of part-time study and will assist clinicians seeking state licensure in marriage and family therapy. The courses are open to graduate students from other departments and to community clinicians wishing to enrich their educational foundation or to advance their theoretical knowledge and clinical skills.

Special Admission Requirements

Candidates should have a master's degree in counseling and, preferably, two years experience in clinical practice. In addition to the general requirements of the College, candidates should provide a proposed plan of study for the CAS that includes:

- a. a brief autobiography, including the area of study in the master's degree, related experience, professional training, and credentials;
- b. overall goal to be accomplished through the program.

Program Requirements

Core Courses (21 credits)

EDU 660	CAS Seminar
HCE 650	Basic Concepts of Systems Theory and Family Therapy
HCE 651	Systemic Assessment in Couple and Family Therapy
HCE 652	Classic Models of Family Therapy
HCE 653	Postmodern Methods of Family Therapy
HCE 656	Fundamentals of Couple and Family Therapy Skills
HCE 693	Practicum in Couple and Family Therapy

Elective Courses (9 credits)

Advanced Seminar in Structural Family Therapy
Advanced Seminar in Narrative Therapy
Advanced Seminar in Bowen Family Systems Therapy
Human Sexuality
Advanced Seminar in Couple and Sex Therapy
Feminist Family Therapy
Advanced Issues in Couple and Family Therapy
Treating the Child in Family Therapy
Couple and Family Therapy Supervision
Family Research
Understanding Organizations

Master of Science in Education in Educational Leadership

The master of science in education 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 directors, curriculum coordinators, or teacher leaders.

The educational leadership program is divided into three areas of study: administration, for certification as school principal; administration, for certification as a director of special education; and teacher leadership. Graduates of the educational leadership program will be able to:

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

In addition to these common outcomes, graduates of the administration strands leading to certification as a school principal or director of special education programs will be able to:

- a) understand the culture of schools, leadership theories, and the impact of the leadership function;
- b) assess school climate and culture and develop a positive organizational environment for adult and student learning;

- c) understand the politics of decision making and how to make decisions that promote the school-wide agenda for learning;
- d) fulfill the daily operations and management requirements of the principalship or directorship;
- e) understand legal constraints and precedents which dictate educational policy and practice;
- f) supervise and evaluate teacher performance and provide positive mechanisms for the improvement of practice;
- g) understand and apply knowledge about adult learning and teacher development.

The teacher leadership area of study prepares educators for roles as team leaders, staff development specialists, curriculum coordinators, 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 program will be able to:

- a) evaluate the societal values, trends, and issues that impact education;
- b) 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.

Special Admission Requirements

In addition to the general requirements of the College, applicants to the educational leadership program should provide evidence of strong overall undergraduate performance; evidence of professional experience (with preference in the administration strand 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, special education director, or teacher leader; and evidence of other related academic or professional experiences.

Program Requirements for Certification as a School Principal Core Courses (12 Credits)

EDU 600	Research Methods and Techniques
EDU 605	Testing and Assessment
EDU 603	Analysis of Teaching or
EDU 617	Teaching in the Middle Level School
EDU 604	Curriculum Development or
EDU 615	Middle Level Curriculum and Organization

Specialty Courses (27 credits)

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

Program Requirements for Certification as a Director of Special Education

EDU 600	Research Methods and Techniques
EDU 603	Analysis of Teaching
SED 618	Programming for Learners with Special Needs
SED 684	Administration in Special Education
EDU 671	Organizational Behavior
EDU 672	Political Basis of Decision Making

EDU 677	Seminar in School Management
EDU 678	School Law
EDU 679	Evaluation and Supervision of School Personnel
EDU 680	Staff Development
SED 682	Special Education Law: Conflict and Resolution
EDU 686	Internship in Special Education Administration (a six-credit, two-semester course)

Program Requirements for Teacher Leadership

Core Courses (18 credits)

EDU 600	Research Methods and Techniques
EDU 601	Naturalistic Inquiry and Qualitative Research
EDU 605	Testing and Assessment
EDU 610	Critical Issues in Teaching and Learning
EDU 603	Analysis of Teaching or
EDU 617	Teaching in the Middle Level School
EDU 604	Curriculum Development or
EDU 615	Middle Level Curriculum and Organization

Capstone (6 credits)

EDU 612	Practicum/Seminar (a six-credit, two-semester course)
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Concentrations (15 credits)

Self-designed Concentration

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

Curriculum Concentration

EDU 671	Organizational Behavior
EDU 679	Evaluation and Supervision of School Personnel
EDU 680	Staff Development

One additional curriculum course

One HCE or HRD course such as

HRD 661	Life Span Development II
HCE 626	Group Process and Procedures
HRD 631	The Adult Learner

Special education requirement met in undergraduate or inservice education.

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

Note: In order to earn middle-level endorsement, candidates must also complete 18 credit hours in each of two academic disciplines.

Assistant Principal Certificate

The assistant principal certificate program is designed to meet the state requirements for assistant principal certification in Maine and to provide a foundation for graduate work in educational administration. This 12-credit program consists of 4 courses:

EDU 670	Introduction to Administration
EDU 671	Organizational Behavior
EDU 678	School Law
EDU 679	Evaluation and Supervision of School Personnel

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 leadership. In addition, they will receive USM certificates of program completion which can be

cited on resumé and vitae. Although credits from the certificate program may be transferable to a master's program, students who wish to matriculate into a master's program must apply separately for admission.

Admission to the assistant principal certificate program is based on successful completion of a bachelor's degree and experience in public or private elementary or secondary education. Application materials include:

- a) 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) a current resumé.

Athletic Administrator Certificate Program

The athletic administrator certificate program is designed to prepare graduates for the responsibilities of the athletic administrator in middle and high schools in Maine. Students who complete the athletic administrator certificate program will not only have impressive graduate background in athletic administration, but will have satisfied the state requirements for a Maine assistant principal's certificate. In addition, graduates will have completed a significant part of the entry and foundation coursework for a master's in educational leadership. Courses may be taken in any sequence. Upon completion of the program, students will be awarded USM certificates for both athletic administration and the assistant principalship, which can be included on resumé and job applications. Upon presentation of the USM transcript, the state office of certification will issue a state of Maine assistant principal certificate. Although 12 of the 18 credit hours earned in this program (indicated by asterisks below) can be transferred into a master's program, students who wish to matriculate into the master's program must apply separately for admission.

EDUX 690	Introduction to Athletic Administration
*EDU 670	Introduction to Administration
*EDU 671	Organizational Behavior
*EDU 679	Evaluation and Supervision of School Personnel
*EDU 678	School Law
EDUX 691	Sports Law and Regulation Compliance

Admission to the athletic administrator certificate program is based on successful completion of a bachelor's degree and experience in public or private middle or high school athletics. Application materials include:

- a) a completed application and \$10 application fee;
- b) a brief essay stating your reason for pursuing the athletic director certificate program;
- c) up-to-date resumé.

Middle Level Education Certificate

The middle level education certificate program is designed to meet the professional knowledge certificate requirements for the middle level teacher endorsement in Maine and to provide a foundation for graduate work in middle level education. (Students seeking middle-level endorsement are also required to meet the academic content area requirements as established by the State.) This 12-credit program consists of 4 courses:

EDU 615	Middle Level Curriculum and Organization
EDU 617	Teaching in the Middle Level School
HRD 669	Adolescent Development
EDU 514	Improving Teaching in the Content Areas through Literacy

Courses may be taken in any sequence. At the conclusion of the certificate program, students will not only have satisfied the professional knowledge area state requirements for middle level teacher endorsement but will have completed a significant part of the coursework for the master's degree in educational leadership. In addition, they will receive USM certificates of program completion which can be cited on resumé and vitae. Although credits from the certificate program may be transferable to a master's program, students who wish to matriculate into a master's program must apply separately for admission.

Admission to the middle level education certificate program is based on successful completion of a bachelor's degree and experience in public or private elementary or secondary education. Application materials include:

- a) completed middle level 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 resumé.

Superintendent Certificate Program

The superintendent certificate program is designed to meet the state requirements for a superintendent's certificate. This 9-credit program will consist of two courses, offered over a 14-month period: EDU 687 Internship in the Superintendency (6 credits, year long) and EDU 683 School Finance. Upon completion of these courses, students will receive a USM certificate of program completion which can be cited on resúmes and vitae. Although credits from the certificate program may be transferable to a Certificate of Advanced Study (CAS) program, students who wish to matriculate in the CAS program must apply separately for admission to the graduate program.

Admission Requirements

- Master's degree
- All requirements for superintendent certificate met except internship and finance knowledge area
- Experience in public or private elementary or secondary education
- Completed application materials

Application Materials

- Completed superintendent certificate program application and \$10 application fee
- Official copy of transcripts of any previous graduate work
- A brief explanation of the time frame in which you plan to complete the certificate program
- A letter of support from the superintendent of schools who has agreed to mentor your internship.

Certificate 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 an introductory seminar and a 3-6 credit capstone experience. Students engage in careful reading of research and scholarship, oral and written presentations, and applied projects. As a result of completing this program, students will have demonstrated: self-assessment and reflective practice tools, skills, and habits of mind; research design and 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.

Program Requirements

EDU 660 CAS Seminar (3 credits)

Self-designed Concentration (21-24 credits)

Graduate coursework may be taken in any existing graduate program within the College of Education and Human Development or USM's Muskie School of Public Service, School of Business, and College of Arts and Sciences or from other institutions, upon approval of the faculty advisor.

Capstone Project (3-6 credits)

Three capstone project options are available: EDU 612 Practicum; EDU 685/686/687 Internship in Principalship/Special Education Administration/Superintendency; or EDU 665 CAS Directed Study.

Master of Science in Education in Industrial Education

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 this 33-credit program 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 fields. 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.

Upon graduation, students will be able to:

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

Special Admission Requirements

A applicant'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 faculty in the Department of Technology.

Program Requirements

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)

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.

Master of Science in Education in Literacy Education

The master of science in education 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. Students 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 users of language. This program requires 36 credit hours of coursework and successful completion of a comprehensive examination.

Program Requirements

First Tier Courses (15 credit hours)

EDU 520 Reading Development and Instruction

EDU 510 The Writing Process

EDU 511 Children's Literature or

EDU 513 Adolescent Literature

EDU 560 ESL Classroom Teaching Practices

EDU 600 Research Methods and Techniques

Second Tier Courses (12 credit hours)

EDU 514 Improving Teaching in Content Areas through Literacy

EDU 621 Literacy Problems: Assessment and Instruction

EDU 607 Teacher Research in Literacy

EDU 622 Designing and Managing Literacy Instruction, PS-3 or

EDU 630 Designing and Managing Literacy Instruction, 4-8

Third Tier Courses (9 credit hours)

EDU 634 Seminar in Literacy Research

EDU 639 Practicum in Literacy Education (6 credits)

Students are advised, in general, to take first tier courses before second tier courses, and to take third tier courses last. Within each tier, the order of courses taken does not matter. Each tier builds on previously taken courses, and upper level courses often have prerequisites.

Literacy Certificate

The literacy certificate program is offered to accommodate teachers and special education teachers, educational technicians, and other holders of baccalaureate degrees who do not want to complete all of the requirements for a master's degree but wish to obtain a basic background in literacy. This program provides an opportunity for educators to increase their understanding of the literacy learning process. Students who complete program requirements receive official transcript recognition of their work and a certificate from the literacy education program attesting to their completion of coursework in reading and writing instruction. Holders of the certificate have the competencies and proficiency levels needed to plan effective literacy instruction for their students. Although credits from the certificate program may be transferable to a master's program, students who wish to matriculate into a master's program must apply separately for admission.

This 12-credit program consists of four graduate-level courses in literacy education and is overseen by graduate faculty serving as advisors. The sequence of courses focuses on students' acquisition of literacy and evolution as literacy users. The courses include:

EDU 520 Reading Development and Instruction

EDU 510 The Writing Process

EDU 511 Children's Literature or

EDU 513 Adolescent Literature

EDU 514 Improving Teaching in Content Areas through Literacy or

EDU 521 Electronic Literacy and Education

Admission to the literacy certificate program is based on successful completion of a bachelor's degree and an interest in literacy-related issues. Application materials must include:

- a completed literacy certificate program application and \$10 registration fee;
- a brief essay;
- a current resumé.

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 advanced study. The program will vary, depending on the focus of the master's degree and the student's goals. Students will have considerable choice in 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.

Program Requirements

Option I - For students with a master's degree in literacy education *with* a concentration in English as a Second Language who want to become certified as literacy specialists.

EDU 660 CAS Seminar (3 credits)

Concentration (12 credits)

EDU 600 Research Methods and Techniques **or**
EDU 607 Teacher Research in Literacy

EDU 621 Literacy Problems: Assessment and Instruction

EDU 511 Children's Literature **or**
EDU 513 Adolescent Literature

EDU 622 Designing and Managing Literacy Instruction, PS-3 **or** *
EDU 630 Designing and Managing Literacy Instruction, 4-8

Electives (12 credits)

Advanced Seminar in Literacy/Capstone Project (3 credits)

Option II - For students with a master's degree in literacy education *without* a concentration in English as a Second Language.

EDU 660 CAS Seminar (3 credits)

Concentration (9 credits)

EDU 600 Research Methods and Techniques **or**
EDU 607 Teacher Research in Literacy

EDU 560 ESL Classroom Teaching Practices
EDU 562 Linguistic and Cultural Diversity in the Classroom

Electives (15 credits)

Advanced Seminar in Literacy/Capstone Project (3 credits)

Master of Science in Education in Literacy Education with a Concentration in English as a Second Language

The master of science in education in literacy education with a concentration in English as a second language (ESL) provides students with the knowledge base related to language acquisition by English language learners (ELLs). The emphasis is on literacy development in the second language. The program provides classroom practitioners with the skills needed to assess language and implement instruction to improve learners' proficiency for competent second language use.

Program of Study

Required Core Courses (30 credits)

EDU 510 The Writing Process*
EDU 514 Improving Teaching in Content Areas through Literacy
EDU 520 Reading Development and Instruction*
EDU 560 ESL Classroom Teaching Practices*
EDU 561 Aspects of the English Language*

EDU 600	Research Methods and Techniques
EDU 607	Teacher Research in Literacy
EDU 635	Seminar in Second Language Literacy
EDU 639	Practicum in Literacy Education (6 credits)
ESL Electives (6 credits)	
EDU 562	Linguistic and Cultural Diversity in the Classroom*
EDU 563	Language Testing and Assessment*

State endorsement in ESL requires professional teacher certification as well as coursework in ESL instruction.

*These courses 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 English as a Second Language

The certificate of advanced study 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 endorsement as an ESL teacher, K-12. 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 goals of the student. Participants will have considerable choice in designing coursework and projects, and will work closely with a faculty advisor.

Program Requirements

EDU 660	CAS Seminar (3 credits)
Concentration (18 credits, endorsement program)	
EDU 600	Research Methods and Techniques
or	
EDU 607	Teacher Research in Literacy
EDU 560	ESL Classroom Teaching Practices
EDU 561	Aspects of the English Language
EDU 562	Linguistic and Cultural Diversity in the Classroom
EDU 563	Language Testing and Assessment
EDU 635	Seminar in Second Language Literacy

Electives (6 credits)

Advanced Seminar in Literacy/Capstone Project (3 credits)

Master of Science in School Psychology

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. The program 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; 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. The school psychology program requires 70 credit hours of coursework.

Individuals graduating from this program are eligible to sit for the examination leading to licensure as a psychological examiner by the Maine Board of Examin-

ers of Psychologists, for certification as a nationally certified school psychologist, and for certification by the Maine Department of Education as a school psychological service provider. The program conforms to training standards specified by the National Association of School Psychologists (NASP), the Maine Department of Education, and the Maine Board of Examiners of Psychologists.

Special Admission Requirements

In addition to the general requirements of the College candidates should provide a narrative, preferably typed, which will be evaluated in terms of clarity of expression, grammatical construction, and other facets of English composition, as well as the quality of responses. The narrative should address the following topics:

- a) relevant educational and experiential background;
- b) reasons for wanting to be in a helping profession;
- c) commitment to pursuing a career in school psychology;
- d) reasons for seeking admission to the program;
- e) a statement of personal philosophy;
- f) a statement of personal strengths and weaknesses.

The admissions process requires a formal interview. Candidates to be interviewed will be selected on the basis of the above information. During the interview, issues relating to the following topics will 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.

Graduate students in master's level school psychology programs at other universities may transfer into the program if they take their final 21 hours, including the internship requirement, in USM's school psychology program.

Program Requirements

Psychological Foundations (15 credits)

HRD 664	Culture, Tradition, and Diversity
HRD 668	Human Development
HRD 671	Physical Bases of Behavior
HRD 674	Abnormal Psychology
HRD 676	Cognitive-Affective Bases of Behavior

Educational Foundations (6 credits)

SED 611	Nature and Needs of Learners Who Are Exceptional
	Elective from graduate education course offerings

Assessment (12 credits)

HRD 677	Cognitive and Psychoeducational Assessment
HRD 678	Personality and Behavioral Assessment

Intervention (12 credits)

HCE 603	Consultation
HCE 622	Counseling Children and Adolescents
HCE 626	Group Process & Procedures
SED 615	Classroom & Behavior Management for Learners With Special Needs

Research (6 credits)

EDU 600	Research Methods & Techniques
HRD 659	Research Methods in Applied Intervention

Professional School Psychology (19 credits)

HRD 670	Seminar in School Psychology
SED 682	Special Education Law: Conflict and Resolution
HRD 688	Internship in School Psychology (1,500 hours)
HRD 694	Practicum in School Psychology
HRD 697	Orientation to School Psychology

Master of Science in Special Education

The master of science in special education prepares individuals who wish to work in the area of special education. Cross categorical coursework 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. Students must also submit a professional portfolio.

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

- a) educational and behavioral characteristics, needs, and services appropriate for children and youth, including state and federal laws, regulations, court decisions, and guidelines;
- b) methods of assessing academic, behavioral, social, pre-vocational, and vocational strengths and weaknesses of students;
- c) methods, materials, and procedures for organizing, conducting, developing, and evaluating individualized educational programs;
- d) the effects of culture, disability, gender, race, and socioeconomic status on individuals;
- e) methods, materials, and procedures for accommodating students who have diverse racial and cultural backgrounds;
- f) methods of ensuring equity and fairness in the practice of special education;
- g) methods of managing disruptive and inappropriate student behavior and fostering pro-social behavior;
- h) processes of consultation and program planning with parents, teachers, and other professionals, including interpersonal skills and techniques associated with effective consultation; and
- i) principles of organizing and administering special education programs as well as the supervision of teachers, aides, and other professionals who deliver services.

Program Prerequisite

SED 611 Nature and Needs of Learners Who Are Exceptional

This three-credit course is a prerequisite to the program, and contributes no credit toward the degree. This course must be taken prior to matriculation or during the first semester following matriculation. Equivalent experience may be substituted for this course upon approval by program faculty.

Program Requirements (39 credits)

Elementary and Secondary Education

Core (27 credits)

EDU	520	Reading Development and Instruction
EDU	600	Research Methods and Techniques
SED	614	Methods of Teaching Mathematics for Students with Special Needs
SED	615	Classroom and Behavior Management for Learners with Special Needs
SED	618	Programming for Learners with Special Needs
SED	639	Communication Disorders in Children
SED	679	Consultation and Special Education
SED	682	Special Education Law: Conflict and Resolution
SED	692	Transition for Elementary and Secondary Students

Elementary Education (6 credits)

SED	653	Assessment in Special Education
SED	687	Technology in Special Education

Secondary Education (6 credits)

SED	689	Prevocational/Vocational Assessment and Education
SED	690	Psychology of Adolescents with Disabilities

Capstone (6 credits)
 SED 685 Advanced Seminar in Special Education
 SED 699 Directed Study

Internship (6 credits)
 SED 688 Internship in Special Education

Note: This course is required for students without prior certification in special education.

Education of the Gifted/Talented

Core (9 credits)
 EDU 600 Research Methods and Techniques
 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 (18 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 Systems
 SED 670 Secondary Programs for the Gifted/Talented
 SED 679 Consultation and Special Education

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

Portfolio

All students in the special education program, as well as those concentrating in special education administration through the educational leadership program, must complete professional portfolio requirements. The purpose of the portfolio is to provide an opportunity for students to reflect upon and to demonstrate what they have gained in the program. It is expected that 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 effectively. Students are encouraged to discuss the portfolio process in more detail with their advisors.

Extended Teacher Education Program (ETEP)

The task of preparing teachers to meet the needs of learners in the 21st century is complex and demanding. The College, 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:

- Understands that all knowledge is provisional and tentative and recognizes that teachers are, above all else, learners.
- Exhibits a sense of active inquiry and curiosity through a commitment to lifelong learning.

- Models respect for individual differences and the basic worth of each individual.
- Has a genuine respect for children.
- 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.
- 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.
- Enhances instruction through continuing evaluation, reflection, and adaptation of teaching to the learning needs of the students.
- Participates in learning activities that foster independent thinking.
- Speaks and writes fluently and communicates clearly.
- Is technologically literate and competent in information gathering, analysis, retrieval, and application.
- Recognizes the similarities in teaching and learning in a wide range of contexts.
- Understands organizational and social systems and continual change as a paradigm of personal and professional development.
- 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:

a) *Undergraduate*: USM's undergraduate 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 careers 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.

Students must also complete specific academic courses during their undergraduate degree program to meet state certification requirements for their intended teaching field. Students should consult with the Admissions and Advising Office in 117 Bailey Hall about these requirements.

b) *Graduate*: The post-baccalaureate program consists of two phases:

1. 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, and social studies. The program also provides a concentration in conjunction with the special education program. This opportunity provides K-8 special education certification, K-8 general certification, and a master's degree in special education through a 14-month course of study. The certification year program is a cohesive, integrated program that takes place in Professional Development School sites in southern Maine, ranging from urban to rural, and leads to state teacher certification. Coursework and experiences focus on the acquisition and application of learning principles and practices.

A program is offered for aspiring secondary independent school teachers at the western Maine site of ETEP in cooperation with Fryeburg Academy. 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.

Notes: All content area requirements for the desired level and subject for teacher certification must be met before beginning the certification year. Health insurance is required of all students in the program.

2. The advanced level, which leads to the master of science in education degree. Students participating in the special education concentration will earn a master's degree in special education; other ETEP interns should consult the options below.

Master's Degree Options

Teaching and Learning Upon successful completion of the certification year and the meeting of specific criteria which include 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 13 credits required for completion of this master's degree are scheduled during the summer and one weekend each month during the academic year. Each sequence of courses is designed to be taken by a group of ETEP graduates who will work and learn together for the duration of one school year.

Other Options Students completing the certification year of ETEP also have the option of applying to one of these other master's degree programs in the College: 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.

Admission

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.

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

This course is 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 middle or secondary teachers who wish to develop a deeper understanding of literature for adolescents and who needs to learn how to help young people read widely. At-

tention 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, and study skills while teaching subject matter. The course has practical application for all classroom teachers in grades 4-12. Cr 3.

EDU 515 Teaching Writing: Middle/Secondary Levels

This course is designed for teachers of grades 5-12 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

This course traces the development of literacy and examines conditions which foster its growth. Topics relate to major stages of literacy development and include: preschool influences on literacy, ini-

tial 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 521 Electronic Literacy and Education

This course offers educators and librarians a hands-on experience in the uses of the Internet in K-12 education. The course covers electronic mail, online conferencing, academic and educational resources, online learning techniques, electronic research, and construction of individual home pages. Participants learn to: evaluate the strengths and weaknesses of online resources; integrate the Internet into the curriculum; use the Internet for professional development; compose and publish home pages; and analyze pedagogical, legal, social, ethical, and economic issues embedded in electronic literacy. Cr 3.

EDU 524 Supervised Practicum in Literacy

Working under supervision, students use selected assessment instruments with adults and children who have learning and reading difficulties. Instructor permission is required. Cr 1-6.

EDU 560 ESL Classroom Teaching Practices

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 is on evolving 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 survey course examines the elements of English and their relevance in second language acquisition. The course analyzes 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 Linguistic and Cultural Diversity in the 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 Language Testing and Assessment

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

EDU 564 Second Language Curriculum Design

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 is an examination of language acquisition from the perspective of oral proficiency to literacy instruction and the considerations involved in the design of instructional materials. There is also 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 and Qualitative Research

This course introduces students to an approach to educational research that studies schools as natural settings. Depending largely on qualitative methods, students learn the assumptions underlying field research and develop the ability to read qualitative/naturalistic studies critically and to do small site-based research projects. Prerequisite: EDU 600 or permission of instructor. 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 course provides students with an understanding of curriculum and curriculum development. Using a collaborative approach, teachers and administrators plan the design of a curriculum consistent with personal ideals and a given context. Students analyze the curriculum in terms of knowledge, skills, learning processes, and affective dimensions. Special emphasis is given to the processes of curriculum implementation and curriculum evaluation. Cr 3.

EDU 605 Testing and Assessment

This course develops students' knowledge of testing and assessment and provides opportunities for students to apply that knowledge. Topics 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 among assessment, curriculum, and teaching and learning standards; and 3) be able to effectively communicate their knowledge of testing and assessment to a variety of audiences. 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 are exposed to various research paradigms, and learn and practice techniques of data collection and analysis. During the semester each student selects a problem, designs an action research study or piece of naturalistic inquiry, collects and analyzes sample data, and summarizes findings. In addition, they reflect upon and critique their 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 educational leadership 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 provides students with a process of inquiry useful for identifying, classifying, and analyzing instructional problems and the skill in making decisions about curriculum and pedagogy. Cr 3.

EDU 612 Practicum/Seminar

This practicum/seminar, for experienced teachers in the teacher leadership program, 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 presented and discussed in an open forum. 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 focuses on: a) the history, development, present status, and future direction of middle level education; b) the unique physical, social, emotional, and intellectual characteristics of early adolescents as they relate to school programs and practices; and c) 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. Students investigate, try out, and evaluate responsive teaching strategies and explore the design and structure of advisor/advisee programs and curricula. Cr 3.

EDU 619 Special Topics in Middle Level Education

This course examines issues in middle level education research and practices. Students 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 the development of 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

This course focuses on the development of language (both oral and written) in children 3-8 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

This 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 and 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 an 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 second language reader and writer. There will be an analysis of first language reading models and their relevance to literacy acquisition in English as a second language. 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 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 660 CAS Seminar

The CAS seminar is designed to engage learners from a variety of disciplines in written and oral discourse about substantive educational and human development issues. The seminar uses a theme-based approach that features universal issues of importance to educators, learners, and human resource professionals. The course is taken within the first two semesters of the CAS student's program. Prerequisites: open to matriculated CAS students in the College of Education and Human Development.

Cr 3.

EDU 663 CAS Seminar II

This capstone seminar combines close reading of common texts with individual literature reviews. The course is a true seminar where close textual reading, precise analytic writing, and student-led discussion are emphasized. Prerequisite: completion of 21 credits in CAS Program.

Cr 3.

EDU 664 CAS Workshop in Educational Leadership

This course serves as one of the options for the capstone project for the CAS in educational leadership. In this two-semester experience that leads to an exhibition of student learning, students demonstrate both a plan to address a particular problem of interest and relevance and a disciplined collection of data that will determine the success with which the problem has been addressed. The focus of the first semester is on developing and documenting a clear plan for addressing the selected problem; the focus of the second is on implementing the action plan and collecting data. Class meetings will also emphasize collaborative action and networking. Prerequisite: completion of most courses in CAS program.

Cr 6.

EDU 665 CAS Directed Study

This course provides CAS students with an opportunity to focus on long-term applied research projects near the beginning of their programs of study, rather than wait until they have completed their regular CAS coursework. Some students enter the program having embarked upon long-term projects that will positively impact their schools or school systems. This capstone option gives them the opportunity to combine work on those projects at the same time that they take other graduate courses in their individual CAS programs. This project will be carried out through the program, but the culminating synthesis should take place in the last academic year of the program.

Cr 3-6.

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 in this course. Emphasis is on analytical means to a) reveal forces which affect decision-making and leadership behavior, and b) 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: a) learning the nuts and bolts needed for daily management, b) examining current issues facing the principalship, and c) learning strategies for managing and understanding oneself within the principal's role. Prerequisite: instructor's permission.

Cr 3.

EDU 678 School Law

This course acquaints 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 teacher leadership and examines the theory and practice of staff development in schools and other human service settings. Building on current research on adult development, organizational analysis, and school improvement, students 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 is required.

Cr 3.

EDU 683 School Finance

This course provides a working knowledge and understanding of Maine state law and of school system finances and the funding process. An historical perspective is explored as well as current issues and problems on a statewide and national level. Specific emphasis is given to revenue generation

and distribution, state and federal influences, local tax issues, budget development, budget management, and budget administration and control.

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 is 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 (3 credits each semester).

EDU 686 Internship in Special Education Administration

This two-semester internship course 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 the course.

Cr 6 (3 credits each semester).

EDU 687 Internship in Superintendency

This internship, made up of supervised field experiences in the school superintendency, is the capstone course for CAS students whose program focus has been certification and preparation in the superintendency. Prerequisite: permission of instructor.

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.

Cr var.

HCE 500 Orientation to the Counseling Profession

This introductory course is designed to acquaint individuals who are preparing to enter the counseling profession with a broad overview of the profession's historical and theoretical foundations and to begin the development of their professional identities. This course must be taken the first semester following matriculation.

Cr 3.

HCE 502 The Family: Implications for Educators

This course reviews selected topics in the area of family life that are relevant to educators. The course provides a multidisciplinary overview of major theories of family behavior, precursors to marital and family life, and the variability of family life across the life span. Consideration is given to such issues as parenting styles, sibling relationships, effects of divorce, single-parent families, blended families, family violence, and substance use, abuse, and dependence within the family.

Cr 3.

HCE 504 Women's Issues in Counseling

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

Cr 3.

HCE 603 Consultation

This course introduces 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.

HCE 604 Career Development

This course examines the ways in which counselors assist people of all ages in their life/career development. Emphasis is 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, is also addressed.

Cr 3.

HCE 605 Psychological Measurement and Evaluation

This course focuses on tests and related measurement techniques. The course content includes a review of the history of testing, current issues, fun-

damental 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 are reviewed.

Cr 3.

HCE 606 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 includes 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.

HCE 607 School Guidance Programs and Services

This course is intended for those preparing to be school counselors. It considers 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: matriculated graduate students in the counselor education program or permission of the instructor.

Cr 3.

HCE 609 The Practice of School Counseling

This course is an introduction to the school counseling profession and current issues in the field. Assignments incorporate field experiences that promote reflective learning and skill building. Prerequisite: matriculated student or permission of instructor.

Cr 3.

HCE 610 Introduction to Rehabilitation Counseling and Services

This course will provide an orientation to the counseling profession, focusing on rehabilitation concepts, services, and settings. Included will be: history, trends, and related legislation; critical components of the rehabilitation process; contemporary counselor roles and functions; professional education, associations, standards, and credentials; ethical and legal issues; technology issues and practices; and rehabilitation agencies and services. Field visits and the examination of rehabilitation services from various participant perspectives will be required.

Cr 3.

HCE 611 Medical and Psychological Aspects of Disability and Rehabilitation

This course explores the medical and psychological issues surrounding the concepts of disability and rehabilitation. Particular emphasis is given to examining: a) the medical model as an organizing framework for viewing disability and rehabilitation;

b) the diagnoses and treatment of various physical, developmental, sensory, and emotional conditions; c) the perspectives and responses of people with disabilities toward their diagnosed conditions and prescribed treatments; d) the principles and practice of functional assessment; and e) the ethical issues surrounding medical and rehabilitation services. Also examined are psychological explanations of disability, their applications, and their implications for rehabilitation practice. A primary focus is on highlighting the perspectives that people with disabilities hold toward their life situations, and the medical and rehabilitation settings and professionals they encounter. Cr 3.

HCE 612 Disability and Family in a Multicultural Society

This course provides an indepth analysis of the effects of disability on individuals and their families within the context of a pluralistic society. It explores the experience of living with a disability and family dynamics in the context of the broader community and society. Students study multicultural issues relative to disability and rehabilitation. The course also examines the reactions, adjustments, and accommodations to disability as perceived by individuals with disabilities and rehabilitation professionals. Cr 3.

HCE 614 Principles of Psychosocial Rehabilitation

This course provides a foundation of knowledge and skills useful in habilitation and rehabilitation work with persons who have psychiatric disabilities. A major emphasis of this course addresses 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 are used to promote learning. This course is required for master's degree candidates in psychosocial rehabilitation. It is also open to persons interested in this innovative approach to mental illness. Cr 3.

HCE 615 Vocational Counseling and Placement in Rehabilitation

This course encompasses the theoretical foundations of vocational counseling, the vocational implications of disability, the application of occupational and labor market data, and vocational choice with rehabilitation consumers. The use of job selection, analysis, and modification and matching skills in the development of work and career options for persons with disabilities is included. The course also presents the role, functions, and strategies used by rehabilitation professionals in job placement and the supported employment of persons with severe disabilities. Accommodation of rehabilitation consumers in accordance with federal statutes such as the Americans with Disabilities

Act (ADA) is examined in the context of a multicultural society. Cr 3.

HCE 619 Myth, Madness, and Mental Illness

This course covers the historical, scientific, professional, and societal beliefs that have surrounded the concepts of madness and mental illness. Particular emphasis is given to issues related to recovery, the ex-patient's movement, legal rights and protections, medications, alternative treatments, trauma, and ethical issues in service delivery. Students will also explore their own values and motives for entering the field and examine the strengths and liabilities they may bring to their work. Cr 3.

HCE 620 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 are closely examined. Research literature which has a bearing on the effectiveness and noneffectiveness of counseling is reviewed. Cr 3.

HCE 621 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 is on helping the student develop greater self-knowledge and skills in interpersonal communication within the counseling relationship. Prerequisite: open to matriculated graduate students only. Cr 3.

HCE 622 Counseling Children and Adolescents

This course examines selected theories, related techniques, and skills for counseling children and adolescents. Attention is 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 is reviewed. Prerequisites: matriculation in counselor education or school psychology and HCE 668, or permission of instructor. Cr 3.

HCE 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 are explored. The course is an introductory course and is one of the required courses for becoming a registered play therapist. Prerequisite: none. Cr 3.

HCE 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: HCE 621 and HCE 622. Cr 3.

HCE 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 is emphasized. Open to matriculated graduate students only. Cr 3.

HCE 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 is analyzed to promote a deeper understanding of group roles and functions. Prerequisites: HCE 621 and HCE 626 or equivalent. Cr 3.

HCE 640 Professional Issues for Mental Health Counselors

Mental health clinics, hospitals, substance abuse facilities, and social service agencies are among the various organizations involved in helping people through mental health counseling. This course examines the mental health needs of people in rural and urban communities and the views of mental health counseling held by those organizations who serve these people. Students will examine problems organizations encounter in helping people and the consequences of services that interfere with helping. Attention is given to interprofessional and interorganizational approaches to improving the quality of mental health counseling. A special emphasis of the course is to examine mental health counseling from a historical, philosophical, and developmental perspective. Cr 3.

HCE 641 Mind/Body Techniques

This course addresses the relationship between cognitive processes and physiology from a healing/personal wellness perspective. Various aspects of Eastern thought/religion, as well as Western behavioral medicine are explored in regard to physical health and emotional well-being. Research on the mind/body relationship is reviewed and discussed. Participants will be required to learn and practice meditative and mind/body techniques. Cr 3.

HCE 642 Perspectives on Chemical Dependency

This course focuses 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 that professional educators, human service workers, and other helping professionals play in prevention, early intervention, and the various approaches to recovery and aftercare are considered in depth. Cr 3.

HCE 643 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 disturbing brain chemistry and promoting substance-related disorders is explored. Relationships between substance-related disorders and mental illnesses are outlined. Interactions among the biological, psychological/emotional, and behavioral aspects of substance abuse are examined in relation to symptom reduction and identification, intervention strategies, and the treatment of substance abusing clients. Cr 3.

HCE 644 Crisis Intervention

This course introduces students to the theory and practice of crisis intervention. A theoretical perspective is established, and short-term crisis counseling strategies examined. Several different crisis situations will be discussed in relationship to agencies or persons responsible for interventions. Prerequisite: HCE 621 or permission of the instructor. Cr 3.

HCE 645 Diagnosis and Treatment Planning

This course focuses on the current diagnostic systems and their use. The development of treatment plans and the use of related services are reviewed. The role of assessment, intake interviews, and reports are examined. Prerequisite: HCE 690 or permission of the instructor. Cr 3.

HCE 650 Basic Concepts of Systems Theory and Family Therapy

This course provides students with an historical context for the field of family therapy. A general historical overview is followed by the presentation of sociological theories of family and family development. General systems theory and its application to family therapy are explored, providing students with an understanding of the systemic underpinnings of family therapy. Other theories that have influenced the field will be explored. Cr 3.

HCE 651 Systemic Assessment in Couple and Family Therapy

This course defines the parameters of systemic assessment and how it differs from and can be integrated with individual assessment. How systemic assessment operates within the current legal/medical context is explored. Students learn specific models, methods, and measures of systemic assessment, including interpersonal/communication models, formal assessment measures, structural map-

ping, tasks/exercises, tracking family sequences, genograms and family diagrams, the scale of differentiation, and assessing larger systems. The influence of race, culture, ethnicity, gender, and sexual orientation in the assessment and treatment process is explored. Cr 3.

HCE 652 Classical Models of Family Therapy

This course familiarizes students with the classic models of family therapy with an emphasis on Bowen family systems and cultural family therapy. Students will be exposed to the differing view of "system" represented in these approaches. They also will learn the contrasting theoretical principles of each model, as well as the basic technical skills specific to each model. Cr 3.

HCE 653 Postmodern Methods of Family Therapy

This course familiarizes students with the contemporary developments in the field that have influenced the emergence of new practice paradigms such as narrative therapy, collaborative language systems therapy, and solution-focused therapy. The course emphasizes the theoretical principles of these models as well as the basic technical skills associated with each. Cr 3.

HCE 655 Human Sexuality for Counselors

This course provides 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 explores 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.

HCE 656 Fundamentals of Couple and Family Therapy Skills

This course introduces the beginning family therapy student to the practical aspects of conducting systemic therapy. The course provides skills in conducting systemic interviews with individuals, couples, and families, making initial assessments, and learning to manage a professional practice. In addition, the course focuses on the role of personal values, beliefs, and interpersonal style in the practice of couple and family therapy. Prerequisites: HCE 650, HCE 651, HCE 652, and HCE 653, or permission of the instructor. Cr 3.

HCE 681 Clinical Supervision

This course introduces students to the practice of clinical supervision within the counseling profession. The course focuses 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 is 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.

HCE 686 Internship in Counselor Education

This course provides an opportunity for the student to integrate formal coursework with on-the-job experience in selected institutions. Prerequisite: HCE 690. Cr 1-9.

HCE 687 Internship in Clinical Supervision

This course provides 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: HCE 681 and HCE 694. Cr 3.

HCE 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: HCE 607 (school counseling specialty only), HCE 620, HCE 621, HCE 622 (school counseling specialty only), and HCE 626. Cr 3.

HCE 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 HCE 690. Prerequisite: approval of the supervising professor. Cr 3.

HCE 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 is placed on the structural analysis of typical client problems and the use of appropriate strategies of intervention. Other emphases include the staffing of actual cases and a knowledge of community resources available to the counseling clientele. Prerequisite: HCE 690. Cr 3.

HCE 693 Practicum in Couple and Family Therapy

This course is an intensive supervised experience in applying professional knowledge and skills to the practice of couple and family therapy. Role playing, video and audio tapes, live supervision, and demonstrations are used in assisting each student develop an integrated therapy style. In addition, the course provides experience in conducting systemic interviews with individuals, couples, and families,

making initial assessments, and learning to manage a professional practice. Prerequisites: HCE 650, HCE 651, HCE 652, HCE 653, and HCE 656, or permission of the instructor. Cr 6.

HCE 694 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. Prerequisites: HCE 681 and matriculation in CAS programs. Cr 3.

HCE 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: HCE 621, HCE 622, HCE 623, HCE 624, and HCE 690. Cr 3.

HRD 501 Strategies and Techniques in Classroom Management

This course consists 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 555 Introduction to Student Affairs in Higher Education

This course provides students with an overview of student affairs in colleges and universities. Particular attention will be given to historical developments as rooted in the emergence of the unique model of higher education in the U.S., to models of student development, to evaluation of the various models of student affairs organizations, and to emerging issues in managing student affairs programs. The intent is to provide students with the information and skills necessary to understand and evaluate the field as well as to assess their own interest and commitment to student affairs. Cr 3.

HRD 556 Summer Institute in Student Affairs

This summer institute is designed to provide students with a week-long immersion experience in a topic selected because of its significance to student affairs in higher education. Topics addressed are those that have been identified as timely by student affairs professional organizations and/or highlighted in recent student affairs literature. The topics for the institute and the faculty to teach it will change each summer. Recent institutes have covered assessment in student affairs, legal issues in student affairs, and academic advising. The institute is required for students concentrating in student affairs as part of their adult education master's program. 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 are examined. Students 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 History and Philosophy of Adult Education

This course examines historical and philosophical foundations of adult education. Key trends and theoretical frameworks are explored. Students will be introduced to a range of adult education practice domains in Maine and elsewhere. Creating a "community of learners" and modeling other adult education practices is a central goal of this course. Cr 3.

HRD 601 Marketing Training and Adult Education

This course acquaints the student with the purpose, organization, function, methods, tools, and techniques of marketing within the setting of adult education, continuing education, and training programs. Attention is given to the development of a customized marketing plan, focusing on the research and planning phases of the plan. This is an applied course in which students spend a significant amount of time participating in hands-on learning experiences, working in teams. 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. 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 carry out explorations of resources that can enhance their professional knowledge and practice. Prerequisite: To be taken the semester before HRD 687, HRD 698, or HRD 699. Cr 1.

HRD 606 Self-Directed Education: Comprehensive Exam

This is the third of three one-credit core courses that establish the foundational concepts and skills of self-directed education to be built on throughout the program. The course is intended to be taken as the final course of the program to prepare students for the comprehensive examination and future learning and work. Cr 1.

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 is 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 cen-

ters, continuing education offices, and training and staff development departments in profit and non-profit organizations. Particular attention is given to the development of mission statements, the use of advisory boards, community needs assessment approaches, personnel management, and the development of a management style. Cr 3.

HRD 634 Using Technology in Education

This course explores uses of technology in a variety of educational contexts including distance education, higher education, adult basic education, non-formal education, workplace education, the classroom, and self-directed learning. It provides a broad overview of educational technology (particularly microcomputer) development, use, evaluation, and selection. Concepts, skills, and hands-on laboratory exercises using knowledge of one computer system to help understand other computer types, applications, and systems. Participants will explore using computers and other technologies as a strategy for teaching, managing, and learning. The course is presented in three concurrent modules: a) theory, b) practice, and c) project. 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 a 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

This course will introduce students to the contemporary workplace which is made up of diverse workers and is in a constant state of change; and the role and function of human resource develop-

ment in that workplace. The course asks the question: how can HRD be both a strategic partner to management and a supporter of employees; be both a compliance officer and a resource to help the organization and employees grow and develop? The course explores a variety of principles and practices that HRD professionals use to carry out this very complex role. Cr 3.

HRD 646 International Adult Education

This course provides students with a broad overview of some of the historical roots and current practices of adult education internationally. It provides 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 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 emphasizes 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 six weeks of the course include practical experiences, while the remaining 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 is conducted by University faculty and the field-based certified school psychologist/certified school psychological

service provider. Prerequisites: HRD 677, HRD 678, HCE 603, and HRD 697 (or the equivalent experiences). 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 Diversity

This course focuses on developing multicultural awareness and on understanding the cultural foundations of human growth and development. The theoretical and research emphasis focuses on the exploration of cultural values, traditions, and issues of diversity. The course considers specific ethnic groups to determine how values, beliefs, and traditions might influence attitudes toward growth potential. Cr 3.

HRD 666 Individual Assessment: A Holistic Approach

This course explores 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: HCE 605 and EDU 600 or equivalents. Cr 3.

HRD 667 Action Research and Evaluation Methodologies

This course provides an overview of the role of research and evaluation within organizations and community settings. Techniques in survey development and evaluation strategies are emphasized. A number of methodologies is presented, such as: the normal group, the Delphi technique, assessment centers, performance appraisal, interviews and observation. Cr 3.

HRD 668 Human Development

This course examines the processes underlying growth, development, and behavior changes of humans from conception through adulthood and aging. The interaction of biological and environmental factors is considered in studying physical, cognitive, and psychosocial development during the stages of the life span. Cr 3.

HRD 669 Adolescent Development

This course introduces developmental theory and research as it relates to adolescence. A multi-disci-

plinary view of adolescent development is taken to examine the processes underlying growth, development, and behavioral changes during adolescence. The interaction of biological and environmental factors is considered in studying the physical, cognitive, social, affective, and moral aspects of adolescent development. The primary focus is on the adolescent as a learner. Note: This course is intended for students matriculated in the Extended Teacher Education Program and middle level education program. 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, sociocultural 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 685 CAS Completion Project in Adult Learning

Students will undertake a major project of their own design as a final requirement for completion of the certificate of advanced study in adult learning. Students will participate in a support seminar and will make a formal presentation to an audience of program peers, faculty, colleagues, family, and friends. There are four options for projects: (1) field-based study, (2) public policy initiative, (3) publishable theory paper, or (4) personal learning curriculum for adults. Cr 3.

HRD 687 Internship in Adult Education and Human Resource Development

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: HRD 677, HRD 678, HRD 694, HRD 697, and HCE 603, or permission of instructor. Cr 8.

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 indepth 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, HRD 678, HRD 697, and HCE 603; satisfactory completion of practica experiences interwoven within content courses. Prerequisite: permission of program faculty. Cr 2.

HRD 697 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 3.

HRD 698 Directed Study in Human Resource Development

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

HRD 699 Independent Study in Human Resource Development

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

ITE 650 Technology: Its Evolution and Social Impact

This course will concentrate on an anthropological study of industry and technology over the millennia. Emphasis is 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 are 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 is placed upon the analysis of contemporary technology education curriculum models, career education and occupational training, instructional strategies, delivery systems, and the development

of appropriate 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 are identified through a formal proposal process and will be studied independently. The group meets on a regular basis to discuss study progress and present their findings and conclusions in formal oral and written presentations. Both ITE 653A and ITE 653B are required.

Cr 3 (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.

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 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. Students 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 study strategies for adapting, developing, implementing, and assessing learning experiences. Cr 3.

SED 614 Methods of Teaching Mathematics for Students with Special Needs

This course for practicing teachers focuses on teaching methods and new teaching approaches in mathematics used with students with special needs. Current issues of concern, major curriculum thrusts, such as the National Council of Teachers of Mathematics Standards, Maine's Learning Results, promising practices, and methods to differentiate instruction and assessment techniques are addressed in this course. Approaches for students of different age levels from early childhood through secondary school are included. 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 618 Programming for Learners with Special Needs

This course is for individuals who 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 learn strategies for planning and providing differentiated learning experiences within appropriate learning environments. 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 considers 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 is discussed. Particular attention is 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 are reviewed. Communication differences seen in multicultural populations are considered. The role of the pre-school and classroom teacher in various ser-

vice delivery models is presented. Class participants are 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 describes 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 are studied. Factors associated with the selection of a particular mode of communication over the other modes are 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 hearing loss on a school-age child. Different approaches to the education of deaf and hard of hearing children are explored and individuals 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 offers 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 are explained. Students are taught the physics of sound and principles of pure tone audiometry. Auditory training equipment, including hearing aids and other assistive devices, are introduced. Students 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 are 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

Students examine a variety of informal procedures for use in the assessment of the instructional needs of exceptional learners. Students learn how to develop and conduct interviews, observations, and continuous and periodic assessments of instruction. Record keeping procedures are also examined. Students are expected to develop several in-depth projects. Prerequisite: SED 653. Cr 3.

SED 659 Education of the Gifted/Talented

This course is for individuals responsible for initiating, mainstreaming, and/or extending services for gifted/talented students. Topics for study include: a) identification procedures, b) curriculum development and implementation, c) administration and classroom management, d) staff development and community involvement, and e) 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 a) developing or modifying learning experiences for gifted/talented students at the elementary or secondary school level, b) implementing differentiated learning experiences within the regular classroom or through a special grouping arrangement, and/or c) 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 a) identifying creative potential within students, b) planning and implementing learning experiences for nurturing creative thinking, c) selecting or developing instructional materials for enhancing creativity, d) establishing learning environments conducive to creativity, and/or e) 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 of study 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 under-achievers, 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 in Education of the Gifted/Talented

This course is for individuals and teams of individuals responsible for planning district-wide programs for gifted and talented students. Participants develop a procedural written plan of action for guiding the development and the implementation of programs. Planning areas include: a) identification, b) curriculum, c) administration, d) staff development, and e) 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 are 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 for classroom teachers, program coordinators, parents, and other individuals who interact with gifted and talented students. Topics for examination include: a) factors affecting social and emotional development, b) achievement and underachievement, c) curriculum and the affective domain, and d) 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 focuses on critical issues related to the field. Students 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/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 Consultation and Special Education

This course is for individuals who are responsible for the planning and the coordination of programs for exceptional learners. The focus of the course is 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 are discussed. Methods of conflict resolution, including mediation, are 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 are examined in-depth each semester. Individual and group presentations are 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 integrates and synthesizes research and practices across disciplines in exceptionality. Individual and group presentations are 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 are 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 are available for demonstration and student use. Methods and techniques for evaluation and determination of appropriate and inappropriate use of technology are stressed. Cr 3.

SED 688 Internship in Special Education

Students complete 350 hours of supervised teaching experience. Interns apply effective instructional practices and experience interdisciplinary planning, team work facilitation, and consultation. Internship experiences reinforce the acquisition of ethics and standards of the teaching profession. Prerequisite:

completion of 18 hours of coursework in the special education program and instructor permission.

Cr var.

SED 689 Prevocational/Vocational Assessment and Education

This course introduces the fundamentals of selecting and administering prevocational and vocational assessment tools, including their types, purposes, and methods of interpretation. Participants learn how to use the tools in order to plan and implement programming for secondary-level students who have handicapping conditions and other special needs. Participants are introduced to strategies for assisting secondary students in preparing for, locating, and participating in training and employment opportunities. Cr 3.

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 are addressed. Developmental theory presented through classwork and readings are supplemented by research and interviews with adolescents and their teachers and families. Cr 3.

SED 692 Transition for Elementary and Secondary Students

This course introduces participants to the concept of transition from school to work and community living for disabled secondary students. Students 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 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 are determined in conjunction with faculty supervisor. Prerequisite: completion of three courses or advisor's permission. Cr var.

University of Maine School of Law

Dean: Colleen A. Khoury

Professors: Cluchey, Delogu, Friedman, Gregory, Lang, Potter, Rieser, Rogoff, Ward, Wells, Zarr, Zillman; *Associate and Assistant Professors:* Duff, Gould, Howard, Lupica, Wrighins; *Adjunct Professors:* Godfrey, Petrucci

The University of Maine School of Law has long offered a high quality of legal education to a carefully selected student body. With a fine faculty, excellent library resources, and a nationally oriented curriculum strong in basic legal courses, the Law School takes pride in educating men and women who will become capable and motivated attorneys.

The academic program is rigorous and demanding. Thanks to the School's size, however, its students have the benefit of small classes, frequent and informal contact with the faculty, and a friendly atmosphere. These factors do much to ease the strains attendant upon entry to an exacting profession.

The School averages 85-90 students per class, of whom approximately 50 percent are women; the number of students in the School is about 270, making it one of the smallest in the country. The student body is remarkably varied in age, professional and academic experience, and background.

The School's faculty of 17 full-time and a number of part-time instructors is drawn from the local community of attorneys, and represents a diversity of backgrounds, expertise, and interests.

The School is fully accredited by the American Bar Association and is a member of the Association of American Law Schools.

Established at Portland in 1961, the Law School is an administrative unit of the University of Southern Maine, but has responsibilities to the statewide University system. The School is located in a building, accessible for handicapped students, that provides facilities for classroom and seminar discussion, library research, moot court participation, clinical practice, legal publications, and student activities.

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

MOT Program Director: Roxie M. Black

Associate Professor: Black; *Assistant Professor:* Moisan

Master of Occupational Therapy

Lewiston-Auburn College offers a professional, entry-level master's degree in occupational therapy 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 developmental, 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 previous 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, institutions, schools, community agencies and centers, and other facilities where potential clients may be effectively served.

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.

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: Secretary, 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 is highly recommended. If you have a graduate degree, your graduate cumulative GPA will be used. If your cumulative GPA is not 3.0 or better, the likelihood of acceptance is significantly diminished. Your application will not be considered if you have a cumulative GPA lower than 2.75.
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 science 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; 2) retake the course; or 3) take a CLEP exam if one is available.

Math Competency	
** Statistics (such as MAT 120D or SBS 328 or equivalent)	3 credits
* College Algebra (such as MAT 108 or equivalent)	3 credits
* 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
*** Abnormal Psychology	3 credits
** Human Growth and Development (Lifespan course)	3 credits
Intro to Physics with lab	4 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.	
** There are DANTES exams available for these courses.	
*** There are REGENTS College Exams available for these courses.	

- 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.
- All applicants must complete a minimum of 15 hours of job shadowing or work experience in an occupational therapy department.
- After the application deadline, all applicants who meet the above five requirements will be scheduled for an in-house writing sample and interview.
- 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, writing skills, and interviewing. 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).
- Based on the applicant's performance on the first seven criteria, and factors such as life experience, level of motivation, and concern for under-represented groups in the program, the admissions committee will make a decision.
- 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.

The MOT program has a rolling admissions process, and will accept applications from September 1 to August 1 prior to the fall semester to which one is applying. Unconditional acceptance to the MOT program 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 August 1 deadline. Students who are in the process of completing prerequisite courses will 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 August 1.

Although there is a rolling admission date, admission is competitive and the 24 spots will be filled on a first-come basis with qualified applicants. It is imperative that you submit your application as soon as possible.

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 faculty committee 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 or she will be dismissed from the program.

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. 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 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

The MOT program has undergone an extensive curricular revision. Students in the master's in occupational therapy program will complete 77 graduate credits consisting of 4 semesters of full-time coursework, 6 additional months of full-time fieldwork and a capstone project.

Students are required to complete **three** Level I Fieldwork experiences in psychosocial, physical dysfunction, and developmental disabilities. The fieldwork is completed concurrent with the semester in which the relevant coursework is taken.

Personal health insurance is required for all students in this program. Students may select the University insurance coverage or a private company as long as the coverage meets that of the University policy.

Program of Study

FIRST YEAR

Fall Semester

			Credits
OTH	501	OT Foundations	2
OTH	502	Occupation and Clinical Reasoning	4
OTH	503	Communication for Health Professionals	3
OTH	513	Basic Kinesiology	3
OTH	514	Human Anatomy: Structure and Function	4
			<hr/> 16

Spring Semester

OTH	504	Applied Research I	3
OTH	505	Mental Health Theory and Practice	7
OTH	507	Social Issues and Ethics	3

OTH	508	Occupational Performance and the Brain	3
* OTH	509	Level I Fieldwork: Mental Health	<u>1</u>
			17

SECOND YEAR

Fall Semester

OTH	512	Applied Research II	3
OTH	601	Neuroscience for OTs	3
OTH	603	Physical Dysfunction Theory and Practice	7
OTH	612	Capstone Preseminar	1
OTH	614	Clinical Conditions	2
* OTH	510	Level I Fieldwork: Physical Dysfunction	<u>1</u>
			17

Spring Semester

OTH	604	Developmental Disabilities Theory and Practice	7
OTH	606	Management Skills for OTs	3
OTH	613	Capstone Project	1
OTH	615	Developmental Adaptation and Dysfunction	3
* OTH	511	Level I Fieldwork: Developmental Disabilities	<u>1</u>
			15

Summer Semester

** OTH	620	Level II Fieldwork	6
		<i>This fieldwork experience is dependent on the availability of sites. If not taken in the summer, it will be scheduled for fall and will be followed by the second Level II Fieldwork (OTH 621).</i>	

THIRD YEAR

Fall Semester

** OTH	620	Level II Fieldwork	6
		or	
** OTH	621	Level II Fieldwork	6
		<i>May be taken spring of third year depending upon scheduling.</i>	
		Total credit requirements	77

* Students must complete three Level I Fieldwork experiences: Psychosocial, Physical Dysfunction, and Developmental Disabilities.

** All students must complete two Level II Fieldwork experiences.

OTH 501 Occupational Therapy Foundations

Introduces the student to the profession of occupational therapy by studying the history and philosophy of occupational therapy. Models of practice for occupational therapy 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 2.

OTH 502 Occupation and Clinical Reasoning

Introduces students to the theory of occupation and the relationship between occupation and occupational therapy practice. Students will develop an appreciation of the complexity of occupations across the life span by observing and analyzing a variety of occupations on and off campus. Clinical reasoning theory will be taught and practiced as part of the observation analysis.

Cr 4.

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. Medical terminology will be included.

Cr 3.

OTH 504 Applied Research I

This course introduces the student to the spectrum of investigative strategies that can be used to answer questions 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 exercises, targeted assignments, and the development of research questions and a research project.

Critical thinking will be encouraged through article analysis and evaluation of peer projects. Cr 3.

OTH 505 Mental Health Theory and Practice

Emphasis is on occupational therapy theory, evaluation, planning, and treatment techniques commonly used with individuals who have psychosocial impairment across the life span. The etiology, symptoms, and course of each condition are reviewed, as is the analysis of occupational performance as it relates to psychosocial dysfunction. Activity analysis and problem solving are used to assess the use of intervention strategies from multiple perspectives with a focus on understanding the importance of culture, gender, and developmental level on occupational choices. Corequisites: OTH 502, OTH 507, OTH 508, OTH 509. Cr 7.

OTH 507 Social Issues and Ethics in Occupational Therapy

This course is designed to assist first-year master's-level students to understand the larger social, ethical, professional, and systematic issues that impact on health care and occupational therapy practice. It will focus on ethical issues, dilemmas, and decision making, as well as the OT code of ethics. Sociopolitical pressures and legal issues, and their impact on ethical practice, will also be explored. Prerequisite: first-year master's-level OT students. Cr 3.

OTH 508 Occupational Performance and the Brain

This course will provide in-depth analysis of brain function and its relationship to human occupation across the life span. Emphasis will be on learning and other related functions of the brain most pertinent to occupational performance and dysfunction. The relationship of states of damage and dysfunction to occupational performance will be addressed. The psychosocial, physical, and developmental practice domains of OT will be included as they relate to brain functions. Within this context a more global and holistic approach to the understanding of occupational performance will be gained. Pre- and co-requisites: OTH 505, OTH 514. Cr 3.

OTH 509 Level I Fieldwork: Mental Health

Students are placed in clinical settings where they can begin to develop professional behaviors, communication skills, and skilled observation in a psychosocial setting. The accompanying seminar allows students to share and process their experiences as a group. Corequisites: OTH 505, OTH 507, OTH 508. Cr 1.

OTH 510 Level I Fieldwork: Physical Dysfunction

This course provides fieldwork experience (placement in a clinical setting) as a participant/observer in the practice area of adults with physical dysfunction. The combination of direct fieldwork experi-

ence plus an integrated seminar allows the student to further integrate classroom and clinical knowledge. Pre- and co-requisites: OTH 508, OTH 601, OTH 602, OTH 603. Cr 1.

OTH 511 Level I Fieldwork: Developmental Disabilities

This course provides fieldwork experience as a participant/observer in the practice area of developmental disabilities. The combination of direct fieldwork experience plus an integrated seminar allows the student to further integrate classroom and clinical knowledge. Co-requisites: OTH 604, OTH 605. Cr 1.

OTH 512 Applied Research II

This course provides the opportunity for students to expand their application of 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 constructively evaluate the work of their colleagues. Course sessions and assignments will be devoted to guiding students through the research process. Cr 3.

OTH 514 Human Anatomy: Structure and Function

This course provides an in-depth study of the structure and function of the systems of the human body. Emphasis will be placed on the neuro, skeletal, and muscular systems. Labwork will consist of independent study with models, CD-ROM, and online programs. Cr 4.

OTH 601 Neuroscience for Occupational Therapy

This course will provide foundation knowledge in neuroanatomy and neurophysiology as it relates to human occupation. Emphasis will be on understanding the concepts of neuroscience that are the underpinnings of theory and treatment applications of occupational therapy. Pre- or co-requisites: OTH 510, OTH 514, OTH 603, OTH 614. Cr 3.

OTH 603 Physical Dysfunction Theory and Practice

This class will integrate occupational therapy theory and practice in the area of adults with physical dysfunction. The format of the class includes weekly lectures and two lab sessions per week. This will provide students with an opportunity to apply new knowledge to clinical cases, develop clinical reasoning skills, and learn hands-on skills needed for entry-level practice. Continued emphasis on occupational performance and activity analysis will be an integral part of the learning process. Pre- or co-requisites: OTH 510, OTH 514, OTH 601, OTH 614. Cr 7.

OTH 604 Developmental Disabilities Theory and Practice

Occupational therapy and related developmental

theory provide the framework for occupational therapy intervention with individuals with developmental disabilities. The format of the class includes weekly lectures and two lab sessions per week. This will provide students with an opportunity to apply new knowledge to clinical cases, develop clinical reasoning skills, and learn hands-on skills needed for entry-level practice. Emphasis is placed on the developmental process to form a base of knowledge for enhancing occupational performance across the life span. Pre- or co-requisites: OTH 511, OTH 513, OTH 514, OTH 601, OTH 615. Cr 7.

OTH 606 Management for Occupational Therapists

Emphasis is on the development of leadership/management skills in various health organizational settings. Abilities in program development, supervision and leadership, staffing, departmental development, reimbursement and regulatory issues, and Continuous Quality Improvement will be covered. Prerequisites: OTH 601, OTH 602, OTH 603.

Cr 3.

OTH 612 Capstone Preseminar

Students will meet with their advisor individually or in groups to refine and begin working on their topic for their reflective capstone project. Cr 1.

OTH 613 Capstone Project

Students will meet with their advisor individually or in groups to prepare for submission of their capstone project. All materials must be submitted and accepted prior to the end of the fourth semester. Cr 2.

OTH 614 Clinical Conditions for Physical Dysfunction

Medical conditions and diagnoses for adults with physical dysfunction will be addressed. Emphasis will be on understanding medical conditions as they relate to occupational performance. Pre- or co-requisites: OTH 510, OTH 601, OTH 603. Cr 2.

OTH 615 Developmental Adaptation and Dysfunction

Understanding developmental theory will be the focus of this course with particular emphasis on sensorimotor development. Medical conditions and developmental disabilities from birth and early childhood will be described and identified. The impact of these conditions on occupational performance will also be addressed. Pre- or co-requisites: OTH 511, OTH 513, OTH 514, OTH 601, OTH 604. Cr 3.

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. This affiliation will take place following the completion of all MOT 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 and Health Professions

Dean: Jane M. Kirschling

Associate Dean: Janet Z. Burson

Graduate Program Chair: Phyllis F. Healy

Master of Science in Nursing

Professor: Kirschling; *Associate Professors:* Becker, Burson, Hart, Healy, Johnson, Keith, Moody, Peake-Godin, Rodgers, Rosene, Thompson, Toy, Vines; *Assistant Professors:* Childs, Lawson, Sepples

Program Description

The master of science in nursing presents a vibrant, challenging, future-oriented program of study that prepares graduates for practice in diverse health care settings. The program is designed to prepare nurses as nurse practitioners and clinical nurse specialists. 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. Special emphasis is given to working with underserved and vulnerable populations. Master's students in nursing gain skills and knowledge that build on their clinical experience and on their generalist undergraduate preparation.

Graduate students extend their clinical expertise in working with individuals and high risk populations. Master's students and nurse practitioner students 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, adult and family nurse practitioner 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/clinical nurse specialist* 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 the *adult health management clinical nurse specialist* concentration, students gain advanced skills in medical-surgical and home care intervention with individuals, families, and groups. With requisite clinical experience, graduates are prepared to sit for clinical nurse specialist certification. Additionally, the increased management emphasis prepares graduates to represent and advocate for nursing practice by offering advanced study of the organizational, fiscal, and political context within which nursing is practiced. Depending on electives selected, a student may receive 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 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.

- 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 and Health Professions may be requested by the program 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:

- Two letters of reference reflecting professional practice and academic achievement.
- 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 and Health Professions 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

Mumps

Evidence of immunity to Chicken Pox

Tetanus & Diphtheria

Hepatitis Vaccine (3 doses) and

Hepatitis titer

Student health records and evidence of RN licensure must be on file in the College of Nursing and Health Professions prior to entry into clinical courses. Health insurance, equal to or better than the USM Student Health Insurance Basic Plan, is **required** prior to beginning clinical coursework.

Program Requirements

The M.S. program in nursing is four academic semesters in length for students taking an average of twelve (12) credits per semester. Both full-time and part-time study are available. A total of 45-56 credit hours are required for completion of the master's degree program in nursing.

Advanced practice clinical areas available for study include:

- Nurse Practitioner
 - Adult
 - Family
- Clinical Nurse Specialist
 - Psychiatric/Mental Health
 - Adult Health Care Management

Sample Full-Time Program Sequence

Adult and Family Nurse Practitioner

FALL I			Credits
NUR601	Advanced Pharmacotherapeutics		3
NUR 602	Advanced Pathophysiology/Health Assessment		6
NUR 603	Nursing Theory and Knowledge Development		3
Total credits			12
SPRING I			
NUR 604	Nursing Research		3
NUR 608	Applied Theory of Family and Small Groups		3
NUR 652*	Primary Care Management of the Well Child		1
NUR 654	Advanced Family Health I		6
or			
NUR 664	Advanced Adult Health I		6
Total credits			12/13

* Family only

FALL II		
AMS535	Epidemiological Research	3
	or	
NUR658	Clinical Project	3
NUR 653*	Primary Care of the Child with Acute Episodic Illness	1
NUR655	Advanced Family Health II	6
	or	
NUR 665	Advanced Adult Health II	6
	Total credits	12/13

*Family only

SPRING II		
NUR 606	Health Policy, Ethics & Change	3
NUR684	Community Health & Medical Care	3
NUR656	Advanced Family Health III	6
	or	
NUR 666	Advanced Adult Health III	6
	Total credits	12
	Total Graduate Program Credits	54/56

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.

Sample Full-Time Program Sequence Adult Psychiatric/Mental Health

FALL I		
NUR 603	Nursing Theory and Knowledge Development	3
NUR 671	Foundations of Advanced Practice Mental Health Nursing	3
NUR 672	Biological and Behavioral Components of Mental Health and Illness	3
NUR 680	Advanced Psychopharmacology	3
	Total credits	12
SPRING I		
NUR 604	Nursing Research	3
NUR 606	Health Policy Ethics and Change	3
NUR 674	Advanced Mental Health I	6
	Total credits	12
FALL II		
NUR658	Clinical Project	3
NUR 675	Advanced Mental Health II	6
NUR 6xx	Graduate Elective I*	3
	Total credits	12
SPRING II		
NUR 676	Advanced Mental Health III	6
NUR 6xx	Graduate Elective II*	3
	Total credits	9

*Thesis may be substituted for six elective credits. Thesis requirement=6 credits
To be eligible to take the Psychiatric Nurse Practitioner exam, the following plan is recommended:

1. NUR 602 Advanced Patho/Health Assessment, 6 cr.
and
2. 112 clinical hours related to medication management. These clinical hours will be worked out in consultation with the psych/mental health faculty teaching NUR 675 and 676.

Total Graduate Program Credits 45

Sample Full-Time Program Sequence
Clinical Nurse Specialist: Adult Health Care Management

FALL I

NUR 603	Nursing Theory and Knowledge Development	3
NUR 604	Nursing Research	3
NUR 643	Applied Pathophysiology and Pharmacotherapeutics	3
HPM670	American Health Care System	<u>3</u>
	Total credits	12

SPRING I

AMS 535	Epidemiological Research	3
NUR 608	Applied Theory of Families and Small Groups	3
NUR 644	Advanced Nursing Assessment and Intervention I	<u>5</u>
	Total credits	11

FALL II

HPM673	Fundamentals of Health Care Management	3
NUR 645	Advanced Nursing Assessment and Intervention II	5
NUR 658	Clinical Project	<u>3</u>
	Total credits	11

SPRING II

NUR 647	Advanced Nursing Management	5
NUR 6xx	Elective I*	3
HPM6xx	Elective II*	<u>3</u>
	Total credits	11

*Thesis may be substituted for elective. Thesis requirement = 6 credits

Total Graduate Program Credits 45

**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 and Health Professions 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 and credit for 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 credits for non-nursing required courses. Call Kathie Blinick, director of Prior Learning Assessment, 780-4040, for an appointment or information.

Courses within the B.S. program that must be taken in required sequence

A. *BIO 345	Pathophysiology	3 credits
B. **CON 308	Professional Communications and Technology Utilization in Nursing and Health Sciences	3 credits
*NUR 209/210	Total Health Assessment	4 credits

C.	NUR 314	RN Credit Options	30 credits
	NUR 684/ HPM 674	Community Health and Medical Care	3 credits
	CON 401	Health Related Research	3 credits
D.	NUR 417	RN Lab	4 credits
RN lab may not be taken unless RN credit options have been completed and posted.			

*Courses available for credit-by-examination.

**Not required if RN has completed a baccalaureate degree in another field.

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 undergraduate courses, the R.N. to master of science student enrolls in graduate courses. All graduate courses are required and earn a total of 45 or 54/56 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 or diploma in 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 as Family or Adult Nurse Practitioner or Psychiatric/Mental Health Clinical Specialist

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	
Advanced Mental Health I, II, III	18
Principles of Advanced Psychopharmacology/Pharmacology	3
NUR 671 Foundations of Advanced Practice Mental Health Nursing	3
NUR 672 Biological and Behavioral Components of Mental Health and Illness	3
Total credits	27

Program Requirements in Adult Health or Family Health

Advanced Pharmacology	3
Advanced Pathophysiology/Health Assessment	6
*Clinical Concentration Courses	
Advanced Family Health I,II,III	18
or	
Advanced Adult Health I,II,III	18
Primary Care Management of the Well Child (Family only)	1
Primary Care of the Child with Acute Episodic Illness (Family only)	1
Total credits	27/29

*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 three years of full-time study. 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 fall of the second year, students may sit for the State Board Examination (NCLEX-RN) and become licensed as a registered nurse. Upon completion of the second year of coursework, students must 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 as nurse practitioners or clinical nurse specialists 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 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
NUR 209/210	Total Health Assessment/Lab	4
NUR 288	Transition to Professional Nursing	3
CON302	Pharmacology	<u>3</u>
		Total credits 10
FALL I		
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 17
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 684/ HPM 674	Community Health and Medical Care	3
NUR 404	Adult Health Nursing Lab	<u>4</u>
		Total credits 16

FALL II

Begin graduate study in one of the following advanced practice nursing concentrations:

Adult Nurse Practitioner

Family Nurse Practitioner

Adult Psychiatric/Mental Health Clinical Specialist

Adult Health Care Management Clinical Specialist

See previous pages for sample program sequences.

Total Program Credits:

Graduate Program = 45-54/56 Credits

Undergraduate Program = 43 Credits

Total Credits = 88-97/99

Master's Degree for Certified Family, Adult, and *Women's Health Nurse Practitioners

The master's degree program for certified adult, family, and women's health nurse practitioners is designed to meet the educational needs of certified adult, family, and women's health nurse practitioners who do not hold either a baccalaureate and/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. Certified and state approved Advanced Practice RN-MS students are not required to take undergraduate health assessment, microbiology, pathophysiology, or NUR 417 RN Lab.

Sample Curriculum—Full Time

FALL I		
NUR 601	Advanced Pharmacotherapeutics	3
NUR 603	Nursing Theory and Knowledge Development	3
AMS 535	Intro to Epidemiological Research	3
	Graduate Elective I	<u>3</u>
		Total credits 12
SPRING I		
NUR 604	Nursing Research	3
NUR 608	Applied Theory of Family and Small Groups	3

NUR 684/ HPM 674	Community Health and Medical Care	3
	Graduate Elective II	<u>3</u>
	Total credits	12
FALL II		
NUR 606	Health Policy, Ethics, and Change	3
NUR 658	Clinical Project	3
	Graduate Elective III	<u>3</u>
	Total credits	9
	Total program credits	33

Note: RN to MS students must complete additional undergraduate coursework.

* An articulation agreement has been established with Planned Parenthood Federation of America, Inc., of Philadelphia, Penn. Graduates of other programs will be evaluated on an individual basis.

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: a) earned no more than five years prior to matriculation, and b) a grade of at least a B was earned in the course. 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 and Health Professions is accredited by the National League for Nursing. For additional information contact: the National League for Nursing Accrediting Commission, 350 Hudson Street, New York, NY 10014, (212) 989-9393.

The programs of the College of Nursing and Health Professions are subject to change at any time without advance notice.

Elective Courses

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 530 Issues in Lesbian Health

This course will introduce and investigate crucial issues affecting the health and well-being of lesbians in society. An Internet seminar format will be utilized to present and examine the unique socio-cultural differences of lesbians and how these differences affect health status and the securing of essential health care services. Special focus on nursing care to lesbians and their families will underpin the course.

Cr 3.

NUR 535 Death and Dying: Contemporary Issues

This course focuses on dying, death, and bereavement in contemporary Western society within the context of theory, research, and practice. Issues around sudden death and dying from a chronic and/or terminal illness will be explored. Selected topics include cardiopulmonary resuscitation, palliative and hospice care, pain and symptom management, physician-assisted suicide, family caregiving at the end of life, advance care planning, pregnancy loss, and the death of a child. Normal grief will be differentiated from pathological or traumatic grief. Finally, the continuum of services (e.g., support groups, psycho-educational groups, Internet chat groups) available for bereaved persons will be explored.

Cr 3.

NUR 540 International Health

This is a multi-disciplinary elective course, which presents multiple perspectives on improving the health of populations in the interconnected global environment.

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 597 Understanding Addictions: Alcohol, Tobacco, and Other Drugs

This course is an interdisciplinary examination and study of issues surrounding alcohol and other drug addictions. Emphasis is placed on epidemiology; pharmacology; theoretical models; strategies for prevention, treatment, and relapse prevention; needs of special populations; and ethical, legal, and sociopolitical aspects surrounding addiction. A class project provides guided experience with survey

research methods, application of data management, and analysis skills using SPSS PC/Windows. No prior experience necessary. Practice using the Internet to explore topics of interest is incorporated each week. Cr 3.

NUR 630 Evolving Concepts in HIV Prevention, Management, Research, and Policy

This course focuses on the HIV epidemic from historical, cultural, and research perspectives. Metaphorical and ethical concerns that have affected the course of this epidemic are discussed. Physical, social, and psychological issues in long-term case management of diverse clients with HIV are reviewed. Students evaluate the efficacy, cost, and ethics of complex treatment modalities. Current CDC guidelines and policies for testing, counseling, and treatment will be considered. Students choose a focus area of interest and consider current research within that area. Cr 3.

NUR 631 Primary Care Prevention and Management of HIV Infection

This clinical course will provide the advanced practice nurse with theoretical knowledge and clinical experience in testing and counseling, primary and secondary prevention, and case management of individuals living with HIV infection in Maine. The course will involve both classroom and clinical time, with classroom time concentrated in the early portion of the semester. Students will rotate through various clinical sites where they will be precepted by physicians, case managers, counselors, social workers, and advanced practice nurses with expertise in the field of HIV prevention management. 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. Ab-

normal 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. Cr 3.

NUR 606 Health Policy, Ethics, and Change
Sociopolitical, economic, and ethical frameworks are used to analyze public policies with an empha-

sis 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 who influences, creates, and puts policy into operation.

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 652 Primary Care Management of the Well Child

This course is to be taken concurrently with NUR 654 Advanced Family Health I. The emphases are on assessment and interventions for well children and anticipatory guidance and education for the parents of well children. Decision making related to prioritizing child and family health care and health education needs is emphasized. Concurrent with NUR 654.

Cr 1.

NUR 653 Primary Care of the Child with Acute Episodic Illness

This course is to be taken concurrently with NUR 655 Advanced Family Health II. The emphasis is on assessment and therapeutic management of children with acute episodic illnesses. Prerequisites: NUR 652, 654.

Cr 1.

NUR 654 Advanced Family Health I/ NUR 664 Advanced Adult 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 in primary care settings. Decision-making abilities and role development are emphasized. Lecture, seminar, and case study analysis constitute teaching methods for the course. Clinical practicum is required. Prerequisites: NUR 601, 602. Prerequisite or concurrent: NUR 608.

Cr 6.

NUR 655 Advanced Family Health II/ NUR 665 Advanced Adult Health II

This is the second 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, diagnosis, intervention, and management strategies in the adult, elder, and adolescent populations related to long-term health problems and the accompanying social and cultural issues. Particular focus will be on interdisciplinary and collaborative aspects of the advanced practice role,

direct care for selected groups, and concepts of case management. Concomitant clinical component required. Prerequisite: NUR 654, 664. Family health students only: NUR 652. Prerequisite or concurrent: NUR 608, 603, and AMS 535. Family health students only: concurrent with NUR 653.

Cr 6.

NUR 656 Advanced Family 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 emphasis is placed on caring for children and women of childbearing age within the family context. Therapeutic interventions are focused on both the individual client and family. Concomitant clinical component required. Prerequisites: NUR 653, 655. Prerequisite or concurrent: NUR 606, 684/HPM 674.

Cr 6.

NUR 658 Graduate Clinical Project

In this course, students identify a problem of clinical importance and conduct a clinical improvement or research project. A written paper and an oral presentation will be required. Prerequisite: at least 9 credits including NUR 604

Cr 3.

NUR 666 Advanced Adult Health III

This is the final 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. Students will implement and evaluate a clinically based, patient education project. Weekly seminars will examine clinical topics of relevance to the practicum. Concomitant clinical component required. Prerequisites: NUR 665. Prerequisite or concurrent: NUR 606, 684/HPM 674.

Cr 6.

NUR 671 Foundations of Advanced Practice Mental Health Nursing

This course examines the range of issues pertinent to the advanced practice psychiatric mental health nurse. Specific emphasis is on advanced mental health assessment and the initial clinical interview from a theoretical and research perspective. Other content includes the role, history, and development of the advanced practice clinician in this specialty and in specific areas of practice including case management and consultation/liason. The health care environment will be discussed and implications for psychiatric mental health nursing practice and research will be examined.

Cr 3.

NUR 672 Biological and Behavioral Components of Mental Health and Illness

This course inclusively examines mental health and illness from several theoretical perspectives. Students will be introduced to theory and applications of biological psychiatry, psychiatric epidemiology, and psychosocial theories. Emphasis will be on de-

veloping knowledge and skill in diagnosis using the DSM IV. The course will also examine common medical problems that mimic the major psychiatric disorders and identify strategies for making differential diagnoses. Cr 3.

NUR 674 Advanced Mental Health 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. Prerequisites: NUR 680, 671. Prerequisite or concurrent: NUR 603, 672. Cr 6.

NUR 675 Advanced Mental Health 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. Concomitant clinical component required. Prerequisite: NUR 674. Prerequisite or concurrent: NUR 606. Cr 6.

NUR 676 Advanced Mental Health 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 675. Cr 6.

NUR 680 Principles of Advanced Psychopharmacology/Pharmacology

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

Interim Dean: Robert L. Woodbury

Associate Dean: Andrew Coburn

Coordinator of Student Affairs: Carlene R. Goldman

Professors: Barringer, Clary, Coburn, Colgan, Kartez, Lapping, Thompson;

Associate Professors: Bernotavicz, Goettel, Hartley, Hitchcock, Kilbreth, LaPlante, Payne; *Assistant Professors:* Bolda, Howard, 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 lives of our people and our nation. The School combines the significant research capabilities of three nationally recognized applied research centers with the graduate programs in public policy and management, health policy and management, and community planning and development, and a Ph.D. program in public policy and management.

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 1999 amounted to over \$20 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 three major research institutes: the Institute for Child and Family 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, health policy and management, and community planning and development (with joint degrees with the School of Law). 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.

The Muskie School also offers a Ph.D. in public policy and management. The Ph.D. program is designed for students who are interested in studying and influencing critical public policy issues facing Maine and the nation. Graduates of the Ph.D. program prepare for senior policy and management positions in all levels of government, nonprofit agencies, school districts, research organizations, and consulting firms as well as positions in colleges and universities.

Admission

Admission to the master's degree programs 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, health policy and management, or in community planning and development, 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 to the master's degree programs are considered in the spring of each year for the fall semester, and in the fall for matriculation in January.

Credit toward completion of degree requirements owing to previously completed graduate study or prior learning experience may be granted in certain cases.

Admission decisions to the Ph.D. program are based on the applicant's overall academic record, GRE scores, professional experience, and educational goals. The Ph.D. Admissions Committee will carefully consider each applicant's ability to perform doctoral studies successfully.

Application Deadline

The application deadline for the master's degree programs is March 1 for the fall semester (September), and December 1 for the spring semester (January). Applications received after the deadline will be considered on a space available basis.

The application deadline for the Ph.D. program is March 1. Applications received after the deadline will be considered on a space-available basis.

Application Material

Applications for the master's degree programs or Ph.D. program must include:

1. An official USM graduate application, including a written statement of educational goals.
2. Official scores of the Graduate Record Examination.
3. Official transcripts of all undergraduate and other graduate education.
4. Three letters of recommendation.
5. Application fee (\$25.00).

Master's Degree 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 14 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, with instructor permission, enroll in Master's 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 Affairs Committee for transfer credit. Upon approval of the Academic Affairs 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 appropriate Academic Affairs 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 Affairs 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 appropriate Academic Affairs 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 Affairs Committee. The Academic Affairs 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 credit requirement for graduation; students may take additional electives to meet the 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 Affairs 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 additional credits of coursework to augment the master's degree, or as a 12-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 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.

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 also welcome.

The certificate requires the completion of 12 credit hours of coursework, at least one course must be selected from each of Groups A and B. Students may propose other courses from the CPD program in their certificate program. These must be approved by the chair.

Group A

CPD	660	Comprehensive Planning
CPD	661	Land Use Control and Zoning
CPD	664	Principles of Design
PPM	666	Environmental Policy

Group B

CPD	665	Transportation Planning
CPD	667	Housing and Real Estate
PPM	650	State and Regional Economic Development
PPM	651	Government Business Relations
PPM	652	Community Economic Development

Certificate of Graduate Study in Health Policy and Management

The certificate program in Health Policy and Management provides health professionals from diverse backgrounds with a solid foundation of knowledge and skills in health policy, planning, and financing, as well as the fundamentals of health care management and community health. Enrollment in the certificate pro-

gram is limited to ensure active participation and interaction among faculty and program participants.

Students select four courses (12 credits) from a list of five approved courses from the graduate program in health policy and management. Courses are offered at the Muskie School in Portland as well as at all University of Maine System campuses through UNET (the University's Interactive Television Network). Students admitted to the master of science in health policy and management program will receive credit for courses taken in the certificate program in which they received a grade of B or better.

Four courses must be completed to earn the certificate:

HPM	670	The American Health Care System
HPM	673	Fundamentals of Health Care Management
HPM	674	Community Health and Medical Care
HPM	676	Health Care Planning and Marketing
HPM	677	Managed Care

Certificate of Graduate Study in Nonprofit Management

The certificate program in nonprofit management provides those who work in or with nonprofit organizations 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	615	Foundations for Public Service and Management
PPM	632	Human Resource Management
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, Health, and Nonprofit Sectors
PPM	638	Foundations: Charity, Philanthropy, and the Third Sector
PPM	639	Topics in Public and Nonprofit Management
PPM	641	Budgeting and Accounting for Public and Nonprofit Managers (faculty permission only)
PPM	645	Grant Writing and Financial Management in the Nonprofit Organization

Joint Degrees Program

The joint degrees programs in law and public policy, in law and health policy and management, and in law and community planning and development offer the juris doctor degree (J.D.) through the University of Maine School of Law, and the master's degree through the Muskie School of Public Service. The programs allow students to earn both the J.D. and master's 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 years that would ordinarily be required.

Master of Public Policy and Management

Since 1984, the public policy and management (PPM) program has offered a master's 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's 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 42 credits is required to earn the master's degree in public policy and management. A core curriculum of 21 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* or *public management*. Each track requires a combination of required and elective courses totaling 12 credits.

Students who specialize in policy analysis examine the role of analysis in public policy making, and are taught the methods typically employed by analysts. 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 three credits of electives to be used in any manner. Typically, a student will either take an additional course 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 finance and budgeting.

PPM 601	Applied Statistics	3 credits
PPM 602	Research Design	3 credits
PPM 610	Foundations of Public Policy	3 credits
PPM 611	Economics and Public Policy	3 credits
PPM 613	Law and Public Policy	3 credits
PPM 615	Foundations for Public Service and Management	3 credits
PPM 640	Public Finance and Budgeting	3 credits

Tracks of Study

After completion of the core courses, students select a twelve-credit track of study in either policy analysis 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 Track

Required Course

PPM 620 Introduction to Policy Analysis

Select three credits

PPM 603 Advanced Research Methods

PPM 604 Evaluation Methods

PPM 622 Applied Policy Analysis

Select an additional six credits from above courses or from the following

PPM 619 Communication Skills for Public Managers

PPM 622 Introduction to Arc View

PPM 623 Risk and Public Policy

PPM 624 Gender, Race, Politics, and Public Policy

PPM 629 Policy Analysis Practicum

PPM 633 Strategic Planning in the Public and Nonprofit Sectors

PPM 642 Seminar in Financial Analysis

PPM 643 Fiscal Analysis for Community Development

PPM 650 State and Regional Economic Development

PPM 651 Government Business Relations

PPM 652 Community Economic Development

PPM 666 Environmental Policy

Public Management Track

Organizational Management

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 Sectors

PPM 636 Management Information Systems in the Public, Health, and Nonprofit Sectors

PPM 641 Public Financial Management

PPM 643 Fiscal Analysis for Community Development

Select an additional three credits

PPM 619 Communication Skills for Public Managers

PPM 622 Applied Policy Analysis

PPM 634 Managing the American City

PPM 635 Managing in the Nonprofit Sector

PPM 637 Intergovernmental Relations

PPM 639 Topics in Public Management

PPM 651 Government-Business Relations

MBA 601 Economics for Business Managers

Financial Management

Required Course

PPM 641 Public Financial Management

Select an additional nine credits

PPM 600 Computer Applications

PPM 603 Advanced Research Methods

PPM 630 Organizational Dynamics

PPM 634 Managing the American City

PPM 638 Foundations and the Philanthropy Process

PPM 641 Public Financial Management

PPM 642 Seminar in Financial Analysis

PPM 643 Fiscal Analysis for Community Development

PPM 645 Grant Writing and Financial Management

PPM 649 Applied Research in Finance

PPM 650 State and Regional Economic Development

PPM 652 Community Economic Development

CPD	656	Development Finance
HPM	675	Health Care Finance
LAW	616	State and Local Government

Beyond the core and track requirements, students take three 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 three-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 listening, 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 Resources Economics

Introduces students to environmental problems and their economic impacts. It assesses the economic importance of both environmental degradation 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 563 Public Policy Tribal Governance and the Native American Experience in Maine

An interdisciplinary approach to examining some of the major issues Native American tribes and nations in Maine face as the 21st century approaches. Topics include sovereignty, economic development, cultural and language preservation, land and water rights, and health and social welfare. Concepts of "nation building" and leadership from tribal points of view are central themes of the course. Additionally, students focus on the Maine experience of Native American tribes with particular attention to the issues of land resettlement and tribal autonomy. Cr 3.

PPM 565 Environmental Politics and Policy

Provides an introduction to policy making and implementation processes through a survey of current waste disposal issues, air and water pollution control policies, and management issues in environmental protection. Cr 3.

PPM 575 International Environmental Politics and Policy

Addresses factors that can be obstacles or incentives in the process of negotiating effective agreements. Such factors include the role of the United Nations, nationalism, sovereignty, the North-South

conflict, and the role of non-governmental organizations. Cr 3.

PPM 600 Computer Applications for Public Policy and Management

Designed for students with little or no background in spreadsheet applications, the course focuses on the acquisition and refinement of basic desktop analysis skills using a spreadsheet program and the statistical software Systat™. Cr 1.

PPM 601 Applied Statistics for Public Policy and Management

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, discriminate analysis, and time series analysis. Prerequisites: PPM 601, 602, and 603 or permission of the instructor. Cr 3.

PPM 610 Foundations of Public Policy

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. Cr 3.

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 Foundations for Public Service and Management

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 619 Communication Skills for Public Managers

The course focuses on professional communication skills (oral, written, and graphic) required in public organizations. Students will become familiar with types and styles of public speaking and writing, and the techniques and tools for developing professional presentations, as well as a greater understanding of communication theories. The course incorporates a variety of learning experiences, including in-class exercises to develop technical writing skills, individual and group presentations, case studies, and presentations by guest speakers. Cr 3.

PPM 620 Introduction to Policy Analysis

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 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 625 Hate Crimes in America: Public Policy Implications

Explores the problem of hate crimes from the perspective of policy makers in government, law enforcement, education, and health care. Examines a number of discrete and frequently controversial issues arising from hate crimes, including: the need

for and effectiveness of hate crime laws, who commits hate crimes and why, and the impact of hate crimes on victims and their communities. 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 non-profit 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 Sectors

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. Special 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, Health, 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 638 Foundations: Charity, Philanthropy, and the Third Sector

This course examines the intricate and sometimes secretive composition and dynamics of the foundation universe found in the U.S. today generally, and in Maine specifically. Central questions to this course of study are: what are foundations' guiding principles and why do they act as they do? This seminar-based course will be offered to students with two goals in mind: total immersion in the elements of the foundation world and practical and theoretical exposure to foundation grant/project approval procedures. Cr 3.

PPM 639 Topics in Public Management

Selected topics in public management determined from time to time. Cr 3.

PPM 640 Public Finance and Budgeting

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 Budgeting and Accounting for Public and Nonprofit Managers

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

Concentrates on the process of securing the resources to support effective nonprofit projects. The goal of the course is to prepare students to identify sources of funding, to write proposals that will attract grant awards, and to develop an understanding of what it takes to build an organization that foundations, public entities, and individual donors are confident in supporting. The course will begin with an examination of current trends in this post-industrial economy in which money is available to the voluntary and private sector. It will also focus on the importance of understanding the "ways of money" and knowing how to develop and administer a budget that will inspire trust in the organization's reputation for effectively managing its programs and its fiscal resources. 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 will examine 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, location subsidies, etc.). The course also will emphasize understanding of public issues from the perspective of both public and private sectors. Cr 3.

PPM 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.

PPM 666 Environmental Policy

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 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 3.

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 program from the Accrediting Commission on Education for Health Services Administration when the program becomes eligible for accreditation.

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 27 credits, including courses in statistics, economics, health economics, community health, health politics, health care finance, health care management, health law, and the American healthcare system.

An additional 15 credits of electives are required. A field experience and a capstone project complete the 47-credit curriculum.

Core Curriculum

AMS	545	Applied Biostatistical Analysis	3 credits
* PPM	611	Economics and Public Policy	3 credits
HPM	670	The American Healthcare System	3 credits
HPM	671	Economic Issues in Health Care	3 credits
HPM	672	Politics of Health Policy	3 credits
HPM	673	Fundamentals of Health Care Management	3 credits
HPM	674	Community Health and Medical Care	3 credits
HPM	675	Health Care Finance	3 credits
HPM	678	Health Law	<u>3 credits</u>

Total: 27 credits

Electives: Students must take 15 credits of electives, at least 9 of which are chosen from the following:

AMS	535	Epidemiologic Research (P)
HPM	676	Healthcare Planning and Marketing (M)
HPM	677	Managed Care (MP)
HPM	679	Research Seminar in Health Care Policy (P)
HPM	680	Organizational Problem Solving (M)
HPM	681	Quality and Outcome of Health Care (MP)
PPM	636	Management Information Systems (MP)
PPM	632	Human Resource Management (M)
PPM	615	Managing the Human Organization (M)
PPM	602	Research Design (P)
PPM	603	Advanced Research Methods (P)
PPM	604	Evaluation Methods (P)
PPM	622	Applied Policy Analysis (P)
PPM	624	Gender, Race, Politics, and Public Policy (M)
PPM	630	Organizational Dynamics

M=recommended for students with an interest in management

P=recommended for students with an interest in policy

Other courses:

Field Experience	2 credits
Capstone	<u>3 credits</u>
Total	47 credits

* Students with prior coursework in microeconomics may request an exemption from PPM 611. If students can demonstrate that such work was completed at the graduate level, they may also petition to transfer the credit hours from the graduate institution to USM, subject to current procedures and limitations on transfer credit. If graduate credit is not awarded for prior coursework in microeconomics, the student must make up the credit hours with another elective or an independent study.

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 with another student, 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.

AMS 535 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, nonrandomized 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 general medical literature will be used to illustrate the application of the concepts to specific epidemiologic issues.

Cr 3.

AMS 545 Applied Biostatistical Analysis

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, cross tabulations and stratified analysis, life tables, multiple regression, and logistic regression. 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.

HPM 670 The American Health Care System

Introduces students to the organization and financing of the American health care system and the dynamic changes that are occurring as a result of

market-based and policy forces. The course develops an understanding of the key elements of the system and the relationship among consumers and purchasers, providers (including the new organizational arrangements of providers and insurers), and the regulatory and policy environment in which the system functions. Students will explore the underlying political, policy, and market forces that are affecting the health care system and will examine the implications of these trends for federal and state-level policy and health system reform efforts.

Cr 3.

HPM671 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 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 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.

HPM674 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. Current models of community-based health planning and health systems development are used by students to assess the needs of vulnerable populations in Maine.

Cr 3.

HPM675 Health Care Finance

Examines the processes and methods of accounting and finance for health care institutions. Topics include a brief review of accounting practices in-

cluding 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 provides a history of HMOs and other models of managed care with a close investigation of the 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 the analysis of data to support patient care, financial, and strategic decision making.

Cr 3.

HPM 678 Health Law (LAW 618)

Intended to provide 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 the class "building" an integrated delivery system. The objective of the course is to understand the organizational structure of the health care delivery system and the interrelationship of the providers comprising the system. Topics covered include: the financing of health care, both historically, and as anticipated under various principles of health care reform; the regulatory oversight of health care, including such principles as maintaining tax-exempt status, licensure, accreditation, and financial fraud; and the regulatory oversight, licensure, and disciplining of individual providers.

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.

Cr 3.

HPM 681 Quality and Outcomes of Health Care

This survey course provides an overview of health care quality and outcomes. It covers a conceptual

framework for describing and studying quality and outcomes, commonly used measurement and monitoring systems, key agencies and organizations, and policy and technical issues related to quality improvement and outcome measurement. The course focuses on several recent developments in the field: the focus on outcomes rather than process, including the patient's perspective, measuring quality and outcomes among populations of managed care enrollees, and using risk adjustment to "level the playing field" when comparing quality outcomes across providers.

Cr 3.

HPM 695 Independent Study

Cr 3.

HPM 696 Field Experience

Cr var.

HPM 699 Capstone Project

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.

The professional field of community planning and development concerns itself with the continuing attempt by society to strike a 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.

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 technologies, such as Geographic Information Systems. All students will learn about the interaction between the economy and the environment which makes planning such a challenging profession.

A major component of the program is that it provides opportunities to do professional work in the planning and development field. All students without significant experience in the field are required to complete a field experience equivalent to three credits. Many other opportunities are made available by the school and by local and state agencies to help acquire job experience while completing the degree program.

Program Requirements

The master's degree requires 54 credits. A required core of 39 credits (including capstone and field experience) provides basic skills 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.

As part of this core, students take a sequence of four courses to lead them from theory to practice. For full-time students, these courses are taken in the following order, normally in a four-semester sequence. Part-time students are expected to complete CPD 601 and CPD 602 in their first year.

CPD 601	Planning Theory and History
CPD 602	Sustainable Communities
CPD 603	Planning Workshop
CPD 699	Capstone

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*. A joint-degree option with the University of Maine School of Law is available.

Core Curriculum

CPD 601	Planning Theory and History	3
CPD 602	Sustainable Communities	3
CPD 603	Planning Workshop	3
CPD 615	Conflict Management, Group Process and Leadership	3
CPD 620	Spatial Analysis	3
CPD 696	Field Experience	3
CPD 699	Studio/Capstone	3
PPM 601	Applied Statistics	3
PPM 610	Foundations of Public Policy	3
PPM 611	Economics and Public Policy	3
PPM 613	Law and Public Policy	3
PPM 640	Public Budgeting and Finance	3

Research Methods

Students may select three additional credits in research methods from CPD 625 Community Planning Analysis, PPM 603 Advanced Research Methods, or CPD 621 GIS Laboratory.

Land Use and Environment Track

Select 6 credits		
CPD 660	Comprehensive Planning	3
CPD 661	Land Use Control and Zoning	3
CPD 664	Principles of Design	3
Select 3 credits		
PPM 652	Community Economic Development	3
PPM 650	State and Regional Economic Development	3
Select 6 credits		
PPM 551	Public Policy Dispute Resolution	3
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 Sectors	3
PPM 623	Risk and Public Policy	3
PPM 643	Fiscal Analysis for Community Development	3
CPD 621	GIS 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	3
PPM 619	Communication Skills for Public Managers	3
PPM 637	Intergovernmental Relations	3
LAW 635	Land Use and Growth Policy	3

Community and Economic Development Track

Select 6 credits		
PPM 652	Community Economic Development	3
PPM 650	State and Regional Economic Development	3
CPD 667	Housing and Real Estate	3
PPM 666	Environmental Policy and Planning	3
CPD 665	Transportation Policy	3
Select 3 credits		
CPD 660	Comprehensive Planning	3
CPD 661	Land Use Control and Zoning	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 for 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	Communication Skills for Public Managers 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 Skills for Public Managers 3

CPD 601 Planning Theory and History

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 602 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 3.

CPD 603 Planning Workshop

This course will center around one or more group projects in planning and/or economic development. It will focus on getting students to be able to design, research, produce, and communicate professional-level projects during one semester, and is intended to serve as the foundation for the capstone. In all but exceptional cases, it will be a prerequisite to the capstone. Cr 3.

CPD 615 Conflict Management

Introduces students to the processes of conflict resolution, stakeholder involvement, communication with non-technical audiences, and styles of leadership that are essential to effective adoption and implementation of plans. Cr 3.

CPD 620 Spatial Analysis

This course provides an introduction to the analysis of spatial characteristics of regions and com-

munities, with particular emphasis on the use of geographic information systems (GIS). Cr 3.

CPD 621 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 622 Introduction to Arc View

An introduction to the Arc View program, a Windows-based Geographic Information Systems program. Covers beginning and intermediate uses of the program. This course is available as a track elective in all CPD tracks. Cr 1-3.

CPD 625 Community Planning Analysis

This is an introduction to estimating and projecting the demand for land, housing, and public space in comprehensive land use plans and development project impact evaluations. Exercises, profile of a municipal land-use database, and a final impact analysis exam exercise are key requirements, as is attendance at all meetings. Cr 1.

PPM 651 Government Business Relations

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.). Emphasis on understanding public issues from the perspective of both public and private sectors. Cr 3.

PPM 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 656 Principles of Development Finance

This course explores various approaches to providing financial assistance to firms for economic development purposes. The roles of nonprofit community development corporations as well as public sector programs such as tax increment finance, industrial development bonds, and loan guarantees are examined. The emphasis is on developing an understanding of both the underlying principles and actual operations of finance programs.

Cr 2.

CPD 660 Comprehensive Planning

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 Control and Zoning

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 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 695 Independent Study

Cr 3.

CPD 696 Field Experience

Internship in a planning or development agency.

Cr 3.

CPD 699 Studio/Capstone

Students will complete individual capstone research or planning projects that will provide the opportunity to integrate material from throughout the curriculum. The capstone element is similar to the existing requirement in PPM.

Cr 3.

*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.

ANES 612 Documenting New England: Oral History and Ethnography

Introduces the practice, politics, and history of documentary field studies, focusing on oral history and ethnography as both a method and as a particular genre of culture, writing, and representation. In

class, students explore various strategies and practices of ethnography, including travel writing, local color, anthropology, exploration literature, documentary history, and post-colonial interventions, and grapple with contemporary issues that confront modern practices of "field work" such as cultural authority, displacement, marginalization, modes of cultural interpretation, stranger talk, insiders/out-siders, "wrong" stories and "true," among others. In the field, students work with informants to record and interpret the cultures and histories of a particular place and people.

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.

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 organizational 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.

LAW 689 Environmental Law Clinic

Students have an opportunity to work under faculty supervision on current environmental and natural resources law problems on behalf of public interest organizations in the state or region. Enrollment is limited. Prerequisite: LAW 617 or 637. 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: 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 profession-

als or institutions with whom they deal 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.

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 who influences, creates, and puts policy into operation. Cr 3.

Ph.D. Program in Public Policy and Management

The Ph.D. program in public policy and management is designed for students who are interested in studying and influencing critical public policy issues facing Maine and the nation. Graduates of the Ph.D. program prepare for senior policy and management positions in all levels of government, nonprofit agencies, school districts, research organizations, and consulting firms as well as positions in colleges and universities.

Study in the core fields of public policy and management, in a substantive specialization area, and in appropriate advanced research methods and tools, is required of all students. The program of study emphasizes preparation for writing rigorous, policy-relevant dissertations. Coursework, directed studies, and supervised research will provide students with opportunities to frame projects early in their programs and develop the necessary capacity to carry out dissertation plans.

Program of Study

The program of study consists of courses in the foundations of public policy and management, doctoral core, research methods, policy specialization, and dissertation.

Foundation Courses (21 credits)

Each student must demonstrate that she or he has completed foundation study in each of the six fields listed prior to enrollment in doctoral coursework. The foundation requirement may be met by enrolling in the Muskie School coursework shown in parentheses.

Foundations of Public Policy (PPM 610, PPM 620, or HPM 672)
Economics and Public Policy (PPM 611)
Public Management (PPM 610B, PPM 615, CPD 615, or HPM 673)
Law and Public Policy (PPM 613)
Public Finance and Budgeting (PPM 640 or HPM 675)
Statistics and Research Design (PPM 601 or AMS 545 and PPM 602)

Doctoral Core Courses (12 credits)

The doctoral core consists of 12 credits of coursework in policy and management theory. The courses listed below are required of all students.

Intellectual Foundations of Public Policy and Management
Seminar in Public Policy
Economic Analysis for Public Policy
Seminar in Public Organizations and Management

Research Methods (12 credits)

All students are expected to develop competencies in research methods appropriate to their area of specialization and research interests. In addition to the two required courses listed below, students select two additional methods electives. (6 credits)

Seminar in Quantitative Methods
Conduct of Inquiry

Specialization (18 credits)

Each student will select an area of specialization that provides a framework for organizing his or her advanced studies. Formal areas of specialization include health policy, education policy, and sustainable development policy. A student may also develop an individualized specialization, subject to approval by the adviser and the Ph.D. program director.

The specialization will comprise three types of courses:

1. Advanced courses and seminars
2. Directed studies
3. Supervised research

Dissertation (12 credits)

After completion of coursework and the doctoral examinations, each student undertakes dissertation research. The dissertation is a comprehensive project that demonstrates the ability of the student to contribute to knowledge in the field. The dissertation may focus on policy formulation and adoption, implementation, evaluation, or some other topic within the area of specialization.

Summary of Requirements

Foundation Courses	21 credits
Doctoral Core	12 credits
Research Methods	12 credits
Specialization	18 credits
Dissertation	<u>12 credits</u>
Total	75 credits

A maximum of 30 credits from previous graduate work completed prior to admission to the Ph.D. program may be applied toward the degree. Students must complete a minimum of 33 credits of coursework plus the 12 credits of dissertation after admission to the program. Subject to approval of their supervisory committee, students may enroll in up to 6 credits of coursework toward the research methods or specialization requirement offered at another accredited institution.

Center for Teaching

The Center for Teaching provides professional development opportunities and resources for faculty who strive for teaching excellence. Center programs are developed by a director working with an advisory board and draw on the expertise of faculty at USM. In addition, the Center publishes a newsletter with ideas for enhancing teaching effectiveness.

Office of Sponsored Programs

Pre-Award Services

The Office of Sponsored Programs (OSP) is responsible for encouraging externally funded initiatives in support of program-related activities of academic, research and development, 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 awareness of funding opportunities, assists in refining project ideas and matching them with a potential sponsor's priorities and requirements, assists in the preparation of grant applications, and serves as the final approving authority for such applications.

OSP subscribes to a number of governmental and foundation references and maintains a variety of supplementary materials useful to grantseekers. In addition to having access to many on-line funding sources, OSP maintains a subscription to an on-line funding opportunities database via the Community of Science. This is accessible by all faculty and staff and can be invaluable to individuals seeking to do their own searches.

OSP publishes a monthly newsletter during the academic year that provides information on funding opportunities for scholarly, creative, or research oriented projects; highlights currently funded projects, and provides recognition for new faculty and staff awards.

Post-Award Services

The OSP provides financial management assistance and administrative support to principal investigators (PI), project directors (PD) and research staff after an award is received. These services are a collaborative effort on the part of OSB staff and project staff. Services include: review and approval of all award documents, preparation and submission of financial reports, requests for reimbursement, budget revisions, amendments, etc. Services continue through the termination date, ending with the submission of the final program and final financial reports.

Increasingly, governmental agencies are turning to OSPs to provide management and approval for post-award modifications. In many cases, such requests can be approved and processed by OSP with proper notification to the sponsor.

Additional information is available online at www.usm.maine.edu/osp.

World Affairs Council of Maine

Program Director: Patty Williams; *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.

USM Extension

USM Extension is responsible for providing lifelong learning opportunities to the people of southern Maine. As Maine's largest, most comprehensive educational outreach program, USM Extension is dedicated to providing the people of southern Maine with a rich array of opportunities for completing their degrees, acquiring new skills, or furthering their intellectual interests in convenient times, places, and formats.

USM Extension encompasses the Center for Extended Academic Programs, which includes Weekend College, English as a Second Language services, Off-Campus Programs, Educational Technologies, Early Study, Senior College, and Stone House Conference Center at Wolfe's Neck, Freeport; Summer/Winter Session and International Programming; Office of International Exchange; Center for Continuing Education, including the Institute for Family-Owned Business and the Department of Conferences; and the Lifeline Center for Fitness, Recreation, and Rehabilitation.

Administration of the University of Southern Maine

Administrative Organization as of July 1, 2000

President: Richard L. Pattenaude, 705 Law Building, Portland, tel: 780-4480
Provost and Vice President for Academic Affairs: Joseph S. Wood, 711 Law Building, Portland, tel: 780-4485
Chief Financial Officer: Samuel G. Andrews, 724 Law Building, Portland, tel: 780-4484
Vice President for Enrollment Management: Rosa S. Redonnett, 732 Law Building, Portland, tel: 780-4035
Vice President for Student Development: Judith S. Ryan, 732 Law Building, Portland, tel: 780-4035
Vice President for University Advancement: Vincent Pellegrino, 721 Law Building, Portland, tel: 780-4708
Executive Assistant to the President: Robert J. Goettel, 709 Law Building, Portland, tel: 780-4482

Administrative Offices Serving Students

Academic Support, Division of
John W. Bay, executive director
Admissions
David M. Pirani, director
Advising Services
Susan R. Campbell, director
Applied Science, School of
John R. Wright, dean
ARAMARK Dining Services
Brian Wiacek, director
Arts & Sciences, College of
Francis C. McGrath III, interim dean
Athletics
Al Bean, director
Bookstores
Nicole Piaget, director
Business, School of
John W. Bay, interim dean
Career Services and Cooperative Education
Lawrence Bliss, director
Child Care Services
Allyson Dean, program director
Community Services and Interfaith Activities
Andrea Thompson McCall, director
Community Standards, Office of
Stephen Nelson, assistant to the vice president
for student development
Continuing Education, Center for
Stacy Calderwood, co-director
Counseling Services
Ira Hymoff, director
Education and Human Development, College of
Richard E. Barnes, dean

Extended Academic Programs
Terry B. Foster, director
Facilities Management
David J. Early, executive director
Financial Aid, Student
Keith DuBois, director
Gorham Student Life and Resident Student Services
Joseph M. Austin, director
Graduate Studies and Research
Margo Wood, associate provost
Instructional Technology and Educational Media Services
Ronald W. Levere, director
International Exchange, Office of
Domenica T. Cipollone, director
Law, University of Maine School of
Colleen A. Khoury, dean
Law Library, University of Maine School of Law
William W. Wells, director
Lewiston-Auburn College
Betty D. Robinson, dean
Libraries
Stephen C. Bloom, director
Multicultural Programming
Rebecca Sockbeson, director
Muskie School of Public Service
Robert L. Woodbury, Interim Dean
Nursing and Health Professions, College of
Jane M. Kirschling, dean
Pluralism and Equal Opportunity
Kathleen A. Roberts, executive director
Police Department
Lisa Beecher, chief

Portland Student Life

Helen Gorgas-Goulding, director

Registrar's Office

Steven G. Rand, registrar

Student Billing

Virginia Johnson, bursar

Student Leadership and Involvement

Craig Hutchinson, director

Summer/Winter Sessions and

International Programming

John G. LaBrie, director

Telecommunications

Dennis Dunham, director

Testing and Assessment, Office of

Judith L. Johnson, director

University Health Services

Jane Coolidge Young, director

USM Extension

William G. Mortensen, executive director

Graduate Faculty

Allman, Elizabeth S. (2000) Assistant Professor of Mathematics and Statistics; Yale University, B.A., 1987; University of California at Los Angeles, M.A., 1992, Ph.D., 1995

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 and Co-Director/Senior Research Associate, Center for Business and Economic Research; University of Connecticut, B.A., 1967; Polytechnic University, M.S., 1969, Ph.D., 1980

Artz, Nancy (1989) Associate Professor of Business Administration; The Pennsylvania State University, B.S., 1979; Northwestern University, M.M., 1982, Ph.D., 1989

Atkinson, Robert (1987) Associate Professor of Education/Human Resource Development; Long Island University, B.A., 1967; SUNY Cooperstown, M.A., 1969; University of New Hampshire, M.A., 1981; University of Pennsylvania, Ph.D., 1985

Austin, Nancy J. (1987) Associate Professor of Education; SUNY Buffalo, B.S., 1968; Columbia University, M.A., 1974, Ed.D., 1984

Barnes, Richard E. (1989) Dean of the College of Education and Human Development and Associate Professor of Education Administration; 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

Bay, John W. (1965) Interim Dean, School of Business, Executive Director, Division of Academic Support, and Associate Professor of Economics; Saint Ambrose University, B.A., 1961; Boston College, M.A., 1964, Ph.D., 1966

Beaudry, Jeffrey (1995) Assistant Professor of Education; University of Washington, B.A., 1973; University of Illinois at the Medical Center, M.H.P.E., 1981; University of Illinois at Chicago, Ph.D., 1987

Becker, Patricia H. (1999) Assistant Professor of Nursing; William Paterson College, B.S.N., 1977; University of Pennsylvania, M.S., 1982; Columbia University, Ed.D., 1991

Bernotavicz, Freda (1985) Director, Institute of Public Sector Innovation, and Adjunct Associate Professor of Public Policy and Management; Nottingham University (England), B.A., 1963; Syracuse University, M.S., 1966

Black, Roxie (1997) Director and Associate Professor, Occupational Therapy Program; Boston University, B.S., 1968; University of Southern Maine, M.S., 1989

Bolda, Elise J. (1995) Assistant Research Professor, University of Vermont, B.A., 1974; University of North Carolina at Chapel Hill, M.S.P.H., 1986, Ph.D., 1995

Boothe, Robert (1993) Associate Professor of Computer Science; University of California at San Diego, B.S., 1985; University of California at Berkeley, M.S., 1989, Ph.D., 1993

Brady, E. Michael (1984) Professor of Education and Senior Research Associate; 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

Brown-Chidsey, Rachel (2000) Assistant Professor of School Psychology; Whitman College, B.A., 1987; University of Massachusetts, M.A., 1989; Smith College, M.A.T., 1991; University of Massachusetts, Ph.D., 2000

Broyles, India L. (1986) Associate Professor of Education; Georgia College, B.S., 1968; M.Ed., 1975; University of Georgia, Ed.D., 1983

Burson, Janet Z. (1978) Associate Dean and Associate Professor of Nutrition; Syracuse University, B.S., 1964; Oregon State University, M.S., 1975; Vanderbilt University, Ed.D., 1990

Cameron, Ardis (1988) Director and Associate Professor of American and New England Studies; Western College for Women, Miami University, B.A., 1970; Stetson University, M.A., 1973; Boston College, Ph.D., 1987

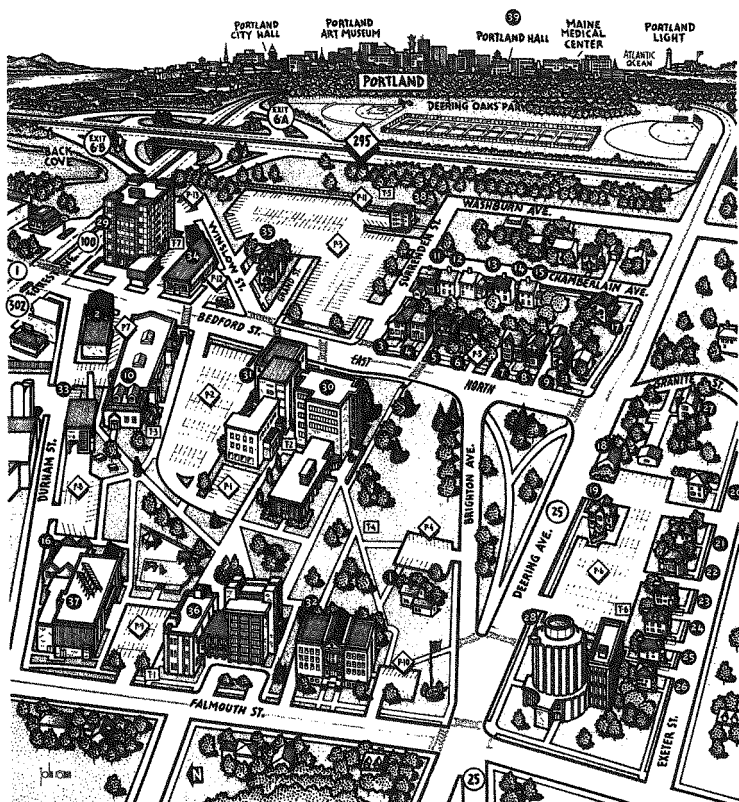
Capelluti, Joseph (1988) Professor of Education; University of Maine, B.S., 1970; University of Southern Maine, M.S., 1972; Virginia Polytechnic Institute and State University, Ed.D., 1975

- 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
- Childs, Janis C.** (1994) Assistant Professor of Nursing and Director of Learning Resources; University of Delaware, B.S.N., 1971, M.S.N., 1980; George Mason University, Ph.D., 1993
- Clark, Lisa L.** (1996) Clinical Instructor, Field Work Coordinator; University of New Hampshire, B.S., 1980, M.S., 2000
- Clary, Bruce B.** (1987) Professor of Public Policy and Management and Senior Research Associate, Muskie School; University of California, Santa Barbara, B.A., 1968; University of Southern California, M.A., 1970, Ph.D., 1974
- Cluchey, David P.** (1979) Professor of Law and Associate Dean; Yale University, B.A., 1968; State University of New York, M.A., 1970; Harvard University, J.D., 1973
- Coburn, Andrew F.** (1981) Associate Dean, Muskie School, and Research Professor of Health Policy and Management; Brown University, A.B., 1972; Harvard Graduate School of Education, Ed.M., 1975; Brandeis University, Ph.D., 1981
- Cohen, Libby G.** (1980) Professor of Special Education; University of Connecticut, B.A., 1967; Russell Sage College, M.S., 1971; Boston University, Ed.D., 1977
- Colgan, Charles S.** (1989) 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; 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, M.A., 1977; Yale University, Ph.D., 1994
- Duff, John A.** (1999) Associate Research Professor of Law; University of Lowell, B.A., 1985; Suffolk University Law School, J.D., 1990; University of Washington, L.L.M., 1995; University of Mississippi, M.A., 1997
- Dutt-Doner, Karen** (1998) Assistant Professor of Education; SUNY Geneseo, B.S., 1988; Fordham University, M.S.Ed., 1990; Syracuse University, Ph.D., 1993
- Edney, Matthew H.** (1995) Associate Professor of American and New England Studies and Anthropology/Geography; University College London, University of London, B.Sc., 1983; University of Wisconsin at Madison, M.S., 1985, Ph.D., 1990
- Ellis, Julie R.** (1991) Associate Professor of Electrical Engineering; Georgia Institute of Technology, B.S.E.E., 1980, M.S.E., 1982; Duke University, Ph.D., 1993
- El-Taha, Muhammad A.** (1987) Professor of Mathematics; Haigazian College (Lebanon), B.S., 1978; American University of Beirut, M.S., 1980; North Carolina State University, Ph.D., 1986
- Fall, Marijane E.** (1995) Associate Professor of Human Resource Development; Nasson College, B.S., 1963; University of Southern Maine, M.Ed., 1986; University of Maine, Ed.D., 1991
- Fishkind, Donniell E.** (1998) Assistant Professor of Mathematics, Ner Israel Rabbinical College, B.T.L., 1989; University of Maryland, B.S., 1991, M.S., 1993; Johns Hopkins University, M.S., 1995, Ph.D., 1998
- Friedman, James** (1980) Professor, School of Law; Brown University, A.B., 1971; University of Chicago, J.D., 1974
- Goettel, Robert J.** (1981) Executive Assistant to the President and Associate Professor of Public Policy and Management; SUNY Fredonia, 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
- Gould, L. Scott** (1998) Associate Professor of Law; Stanford University, B.A., 1966; University of Northern Colorado, M.A., 1974; University of Idaho College of Law, J.D., 1983
- Gregory, David D.** (1972) Professor of Law; Duke University, B.A., 1964; University of Maine, LL.B., 1968; Harvard University, LL.M., 1972
- Grover, Richard A.** (1988) Associate Professor of Business Administration; University of Connecticut, B.S., 1976; The Ohio State University, M.S., 1980, Ph.D., 1984
- Guay, Merle D.** (1969) Professor of Mathematics; Tufts University, B.S., 1958; University of Maine, M.A., 1960; Michigan State University, Ph.D., 1967
- Gupta, Bhisham C.** (1985) Professor of Applied Mathematics; Punjab University (India), M.A., 1964; University of Windsor (Canada), M.S., 1969, Ph.D., 1972
- Gupta, Sat** (1986) Director of Graduate Program in Statistics and Professor of Mathematics; University of Delhi (India), B.A., 1970, M.S., 1972, Ph.D., 1977; Colorado State University, Ph.D., 1987
- Guvench, Mustafa G.** (1989) Professor of Electrical Engineering; Middle East Technical University, Ankara, Turkey, B.S.E.E., 1968, M.S.E.E., 1970; Case Western Reserve University, M.S., 1975, Ph.D., 1975

- Hamilton, Nathan D.** (1987) Associate Professor of Archaeology; University of Southern Maine, B.A., 1977; University of Pittsburgh, Ph.D., 1985
- Hart, Valerie A.** (1999) Associate Professor of Nursing; Boston College, B.S.N., 1976; Columbia University, M.S.N., 1977; University of Maine, Ed.D., 1994
- Hartley, David** (1994) Director of Rural Health Research Center and Associate Research Professor of Health Policy and Management; University of Minnesota, B.S., 1972, M.H.A., 1986, Ph.D., 1993.
- Healy, Phyllis F.** (1980) Associate Professor of Nursing and Chair of Graduate Nursing Program; Hunter College, B.S.N., 1971; University of California at San Francisco, M.S.N., 1972; University of Texas at Austin, Ph.D., 1990
- Heath, John R.** (1976) Professor of Computer Science; University of Maine, B.A., 1968, M.A., 1970; University of Minnesota, M.S., 1976, Ph.D., 1982
- Hillard, Michael** (1987) Associate Professor of Economics; University of Massachusetts, B.A., 1980, Ph.D., 1988
- Hitchcock, Jan L.** (1989) Associate Professor of Social and Behavioral Sciences and Adjunct Associate Professor of Public Policy and Management; Pitzer College, B.A., 1977; Harvard University, M.A., 1982, Ph.D., 1984
- Hodgkin, Brian C.** (1976) Professor of Electrical Engineering; University of Maine, B.S., 1963, B.S., 1964; Johns Hopkins University, Ph.D., 1969
- Houlihan John J.** (1975) Professor of Business Law; Holy Cross College, A.B., 1969; Harvard Law School, J.D., 1972
- Howard, H. Cabanne** (1997) Assistant Professor of Law and Public Policy; Cornell University, B.A., 1964; Georgetown University Law Center, J.D., 1970
- Jackson, Steven R.** (1996) Assistant Professor of Accounting; University of Montana, B.S., 1973; Arizona State University, Ph.D., 1993
- Jankowski, Mariusz** (1990) Associate Professor of Electrical Engineering; The City College of New York, B.E.E., 1980, M.E.E., 1982; City University of New York, Ph.D., 1989
- Jensen, John B.** (1994) Co-director and Chair of MBA Faculty and Associate Professor of Business Administration; University of Southern Maine, B.S., 1983, M.B.A., 1990; University of South Carolina, Ph.D., 1994
- Johnson, Paul** (1999) Assistant Professor of Social Work; Teesside University, B.A., 1983; Anglia University, M.S.W., 1986; Yeshiva University, D.S.W., 1996
- Johnson, Rosemary** (1987) Associate Professor of Nursing; McGill University, B.N., 1972; University of Rochester, M.S., 1976; University of Colorado, Ph.D., 1987
- Kartez, Jack D.** (1995) Professor of Community Planning and Development; Middlebury College, B.A., 1974; University of Oregon at Eugene, M.U.P., 1976; University of North Carolina at Chapel Hill, Ph.D., 1990
- Katsekas, Bette** (1993) Assistant Professor of Counselor Education; University of New Hampshire, B.A., 1974, M.Ed., 1975; University of Maine, Ed.D., 1980
- Keith, Anne B.** (1990) Associate Professor of Nursing; Radcliffe College, B.A., 1964; Harvard University, M.S., 1971, M.P.H., 1983, D.P.H., 1991
- Khonry, Colleen** (1985) Dean and Professor of Law, University of Maine School of Law; Colby College, B.A., 1964; Illinois Institute of Technology/Chicago-Kent College of Law, J.D., 1975
- Kilbreth, Elizabeth H.** (1985) Research Associate and Director of the Division of Health Services Research, and Associate Research Professor of Health Policy and Management; Radcliffe College, B.A., 1973; Johns Hopkins University, M.H.S., 1979; Brandeis University, Ph.D., 1996
- Kimball, Walter** (1988) Associate Professor of Education; Centre College, B.A., 1975; University of Kentucky, M.S., 1978; The Ohio State University, Ph.D., 1983
- Kirschling, Jane M.** (1999) Dean of the College of Nursing and Health Professions, and Professor of Nursing; Viterbo College, B.S.N., 1980; Indiana University, M.S.N., 1982, D.N.S., 1984
- Kissen, Rita M.** (1990) Associate Professor of Education; Cornell University, B.A., 1964, M.A., 1965; University of Massachusetts, Ph.D., 1986
- Kuech, Robert K.** (1999) Assistant Professor of Teacher Education; University of Vermont, B.A., 1975; Central Connecticut State College, M.S., 1981; Pennsylvania State University, Ph.D., 1999
- Lambert, David** (1986) Research Associate III, Muskie School, and Assistant Research Professor of Health Policy and Management; Tulane University, B.A., 1972; Indiana University, M.A., 1974; Brandeis University, Ph.D., 1986
- Lamont, Valerie C.** (1987) Director, Institute for Real Estate Research and Education, Director, Center for Entrepreneurship and Small Business, Co-Director, MBA Program; University of Maine, B.S., 1968; University of Illinois, M.S., 1969, Ph.D., 1974
- Lang, Michael B.** (1983) Professor of Law; Harvard University, A.B., 1972; University of Pennsylvania, J.D., 1975
- LaPlante, Josephine M.** (1985) Associate Professor of Public Policy and Management; Syracuse University, B.A., 1973, M.A., 1983, Ph.D., 1984
- Lapping, Mark B.** (1994) Professor of Public Policy and Management and Director of Ph.D. Program in Public Policy and Management; SUNY New Paltz, B.S., 1967; Emory University, Ph.D., 1972
- Larson, Deborah H.** (1997) Assistant Professor of Adult Education; Waynesburg College, B.A., 1984; Cornell University, M.S., 1996, Ph.D., 1997
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- Wriggins, Jennifer** (1996) Associate Professor of Law; Yale University, B.A., 1980; Harvard Law School, J.D., 1984
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Portland Campus

1. Alumni House
2. 25 Bedford St.
3. 92 Bedford St.
4. 94 Bedford St.
5. 98 Bedford St.
6. 102 Bedford St.
7. 118 Bedford St.
8. 120 Bedford St.
9. 126 Bedford St.
10. Woodbury Campus Center
11. 1 Chamberlain Ave.
12. 7 Chamberlain Ave.
13. 11 Chamberlain Ave.
14. 15 Chamberlain Ave.
15. 19 Chamberlain Ave.
16. Child Care
17. 209 Deering Ave.
18. 222 Deering Ave.
19. 228 Deering Ave.
20. 39 Exeter St.
21. 45 Exeter St.
22. 47 Exeter St.
23. 49/51 Exeter St.
24. 55/57 Exeter St.
25. 59/61 Exeter St.
26. 65 Exeter St.
27. 11 Granite St.
28. Law Building

29. Albert Brenner Glickman Family Library
30. Luther Bonney Hall
31. Masterton Hall
32. Payson Smith Hall
33. Physical Plant
34. Police and Safety Office (46 Bedford Street)
35. Powers House
36. Science Building
37. James Sullivan Gymnasium
38. 13-15 Surrenden St.
39. 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

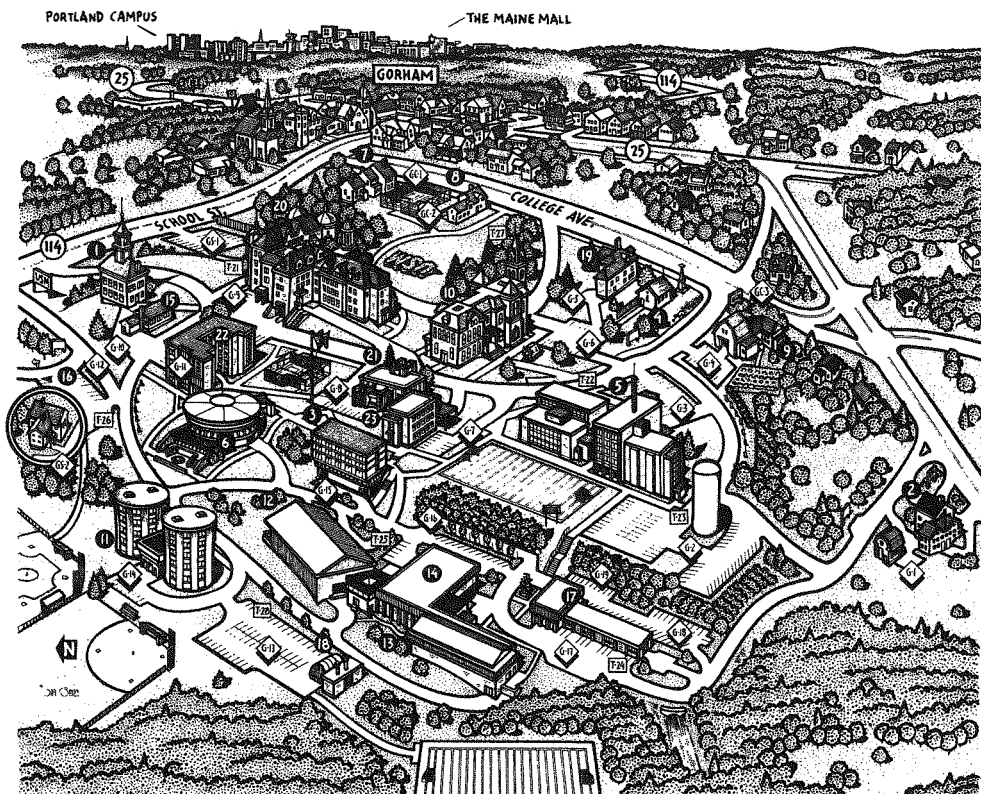
- *P10. Meters
- *P11. Meters
- *P12. Student Commuter/Resident/Faculty/Staff
- *P13. Faculty/Staff/Meters
- *P14. Student Commuter/Resident/Faculty/Staff (not illustrated on map, location is on Marginal Way)
- *Handicap Parking

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 the south, take the Maine turnpike to Exit 6A. Follow I-295 to Exit 6B (Forest Ave. North). Turn left at second traffic light onto Falmouth Street. The campus is on your left.



Gorham Campus

1. Academy Building
2. Admissions Office
3. Anderson Hall
4. Art Gallery
5. Bailey Hall
6. Kenneth Brooks Student Center
7. 7 College Ave.
8. 19 College Ave.
9. 51 College Ave.
10. Corthell Hall
11. Dickey-Wood Hall
- Costello Sports Complex:
 12. Field House
 13. Ice Arena
 14. Warren Hill Gymnasium
15. Mechanical Maintenance Shop
16. McLellan House
17. John Mitchell Center
18. Physical Plant
19. President's House
20. Robie-Andrews Hall
21. Russell Hall
22. Upton-Hastings Hall
23. Woodward Hall

Parking

- P1. Ice Arena Parking Lot
 P2. Faculty/Staff Parking, M-F, 7:30 a.m.-7:30 p.m.
 P3. Visitor Parking (Metered)
 University Parking Permit needed for on-campus parking. Meters available for visitor parking. Information available at Police and Safety in Upton-Hastings Hall.

Emergency Telephone Key

- T21. P-22 School Street
 T22. Bailey Bus Stop
 T23. P-16 Bailey Hall
 T24. John Mitchell Center
 T25. Warren Hill Gym
 T26. P-23 Parking Lot
 T27. 19 College Avenue
 T28. P-34 Towers

Directions to the Gorham Campus

From the north, take the Maine Turnpike to Exit 8. Follow Route 25 west to Gorham. At Gorham Center, turn right onto Route 114. Take the first left onto College Avenue. The campus will be on your right. From the south, take the Maine Turnpike to Exit 6 and turn left after the toll booth. At the second traffic light turn left onto Route 114 north. Follow Route 114 to the village of Gorham. Turn left after the first traffic light onto College Avenue.

Directions to the Lewiston-Auburn Campus

From either the north or south, take the Maine Turnpike to Exit 13. Coming from the south, take a left at the stop sign; if you're coming from the north, go straight. Follow the signs for Lisbon Falls and Brunswick. Proceed to the second stop light and turn left onto Westminster Street. Lewiston-Auburn College is the cedar-shingled building at the top of the hill on the right.

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