

University of Southern Maine

Graduate Course Catalog
2009-2010

University of Southern Maine

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The University

The University of Southern Maine, the most cosmopolitan of Maine's institutions of higher education, is rich in possibilities. It is a major educational force in the overall growth and improvement of the economic, civic, social, and cultural fabric of southern Maine and, as a result, provides students with rich formal and informal learning opportunities inside and outside the classroom.

USM comprises eight academic units: College of Arts and Sciences; School of Applied Science, Engineering, and Technology; School of Business; College of Education and Human Development; College of Nursing and Health Professions; Lewiston-Auburn College; the Edmund S. Muskie School of Public Service; and the University of Maine School of Law. The women and men of the USM faculty have a passion for communicating the excitement of learning and the joy of discovery. USM's faculty members represent a wide range of knowledge and expertise; among them are Fulbright and Guggenheim Fellows and authors of national note in a range of academic disciplines.

USM's location in southern Maine, a region cited as one of the most livable in the country, offers a range of educational, cultural, and recreational opportunities. The student body is the most diverse in Maine—approximately half are full-time students, 59 percent are women, and the average age of an undergraduate is 28 years. This diversity of age, background, and purpose provides a lively, challenging environment for learning—a context in which scholarship and experience gained from living complement one another.

As a member of the University of Maine System, USM offers its 10,000 plus students a host of undergraduate and graduate study options. USM offers over 50 baccalaureate degree programs as well as numerous minors and concentrations that allow students valuable opportunities to shape their undergraduate careers in ways most meaningful to them. In addition, USM offers 27 graduate programs, in which students work side by side with distinguished scholars and researchers who are pushing the boundaries of new knowledge and contributing to the growth and vibrancy of the region, the state, and the nation. USM offers courses at the University Colleges in Saco and Bath, as well as on the Web, over instructional television, and at work sites. The Center for Continuing Education and some of the USM schools and colleges offer a variety of noncredit programs. USM's Osher Lifelong Learning Institute provides intellectually stimulating opportunities and special activities for students 55 years of age or older. USM further addresses the broad range of student interests with its Weekend College, Winter Session, Summer Session, National Student Exchange Program, and Early Studies program for high school juniors and seniors.

The University of Southern Maine is accredited by the New England Association of Schools and Colleges. The nursing programs of the College of Nursing and Health Professions are accredited by the National League for Nursing, and the athletic training program within the College is accredited by the Commission on Accreditation of Allied Health Education Programs. The College of Education and Human Development is accredited by the National Council for Accreditation of Teacher Education. The School of Business is accredited by AACSB International—the Association to Advance Collegiate Schools of Business. Several departments within the College of Arts and Sciences, the College of Education and Human Development, the School of Applied Science, Engineering, and Technology, and the Muskie School of Public Service are accredited through specialized agencies. The University of Maine School of Law is approved by the American Bar Association and the Association of American Law Schools.

USM is a growing, rigorous, and responsive university that reflects the needs and hopes of the southern Maine community. With its proud tradition of working collaboratively with the citizens it serves, the University of Southern Maine will continue to develop as a valued learning-centered academic community.

Graduate Studies

The Office of Graduate Studies is the administrative office that coordinates many student services related to graduate students. These services include the Graduate Assistant Program, the Teaching Assistant Program, academic policies concerning graduate students, and some scholarship programs. The associate provost and dean of Graduate Studies is responsible for the operation of this office.

The Graduate Council works closely with the dean of Graduate Studies. The council, which is made up of chairs of all graduate programs, 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.

All graduate students are invited to visit the Office of Graduate Studies, located at 45 Exeter Street, Portland. The office can be reached by phone at (207) 780-4877 or e-mail at gradstudies@usm.maine.edu. The Web site for the office is www.usm.maine.edu/grad. Graduate students are also advised to maintain close contact with the appropriate director or graduate coordinator in their school, college, or program.

Graduate Admissions

The Graduate Admissions Office oversees the application process for all graduate programs at the University of Southern Maine (except the University of Maine School of Law). The director of Graduate Admissions reports directly to the associate provost and dean of Graduate Studies, and works closely with the dean to assist graduate students from the time of application to graduation. All application materials should be sent directly to University of Southern Maine, Office of Graduate Admissions, P.O. Box 9300, Portland, ME 04104-9300. For more information, visit: www.usm.maine.edu/grad/admission.html. The office is located at 39 Exeter Street and can be reached at (207) 780-4386 or gradstudies@usm.maine.edu. Deadlines for admission vary by program.

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

To be admitted to graduate study, an applicant must have received a baccalaureate degree or the equivalent from a regionally 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. Letters of recommendation.
- C. Official transcript(s) of *all* previous undergraduate and graduate work.
- D. Official score(s) from standardized tests required by the program (e.g., Graduate Record Examination, Miller Analogy Test). Scores must be for tests taken within five years of application deadlines. (Please note that it often takes six weeks for test score reports to be received from the testing agency.) Self-reported test scores, received by the application deadline, may be used for purposes of application review, but no admission decision can be made until official test scores have been received from the testing agency.
- E. Official TOEFL scores of 550 or higher on the paper-based test, 79 or higher on the Internet-based test, or 213 or higher on the computer-based test if the applicant is an international student whose first language is not English. International students who have received their undergraduate degree from an English-speaking institution may apply for a waiver of this requirement.
- F. A nonrefundable \$50 application fee with the application.
- G. A current résumé.
- H. Any other materials as defined by the school or college. Please check the Web site of the program to which you are applying.

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

All documents relating to an application for admission to graduate study are to be sent to the Office of Graduate Admissions on the Portland 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 Admissions. 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 and are postmarked by the application deadline. Criteria for application *review* may be determined by individual schools, colleges, or programs. The Graduate Admissions Office must determine that an application has met the criteria for final admission.

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, 213 or higher on the computer-based test, or 79 or higher on the Internet-based test will be considered for admission to a graduate program.* Individual graduate programs may have higher score requirements. International students who received their undergraduate degree from an English-speaking institution may apply for a waiver of this requirement. Please contact the Graduate Admissions Office for more information on submitting a request for a waiver.

Transcripts from universities outside of the United States must be translated into English and, and must be accompanied by verification that the degree received is equivalent to a United States bachelor's degree. Please see information for international students on the Graduate Admissions Web site at www.usm.maine.edu/grad/international.html for a list of agencies that can provide this verification.

Application Deadlines

Applications for admission and supporting material must be postmarked by the 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 formally made with the program to which he or she has been admitted. The Office of Graduate Admissions must receive written notification of any such arrangements.

Application to Graduate Certificate Programs

Candidates must submit all application materials directly to the Office of Graduate Admission. Candidates for admission must submit:

- a) Application for Certificate Program, including a \$15 nonrefundable application fee;
- b) Official transcripts or copies of official transcripts from all colleges and universities from which you received a degree;
- c) Current resume;
- d) Personal statement;

Additional or other special admission requirements specified by program.

The application for certificate programs is available at the Graduate Studies Web site at www.usm.maine.edu/grad.

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, mumps, rubella, diphtheria, and tetanus before registering for classes.

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

Specific information about immunization requirements is sent with admissions packets, and is also available in most departments and at Student Health Services. The Immunization Hotline number is (207) 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, a fee of \$15.00, and any other relevant or required updated material.

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 withdrawn from the program.

Transfer Credit

Transfer credit is credit earned for coursework prior to matriculation into a graduate program at the University of Southern Maine. Credit may be received for coursework completed at the University of Southern Maine or at another institution. 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) courses that exceed time limits prescribed for a particular degree program; 3) courses in which a grade lower than a B was received; 4) 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. To facilitate the evaluation of transfer credits for courses taken at institutions other than the University of Southern Maine, the applicant should include a copy of the course description taken from the institution's catalog that was in effect the year the course was taken.

Admission of Individuals with Disabilities

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 242 Luther Bonney Hall on the Portland campus. Call (207) 780-4706 (voice) or (207) 780-4395 (TTY) to schedule an appointment.

Appeal of Admissions Decisions

Applicants may appeal an admissions decision by submitting a written appeal to the director of the appropriate program. The appeal will be reviewed by the director, or the appropriate graduate program faculty, and the 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 dean of Graduate Studies. The

applicant's letter should include all information she or he believes should be taken into account in reviewing the decision.

***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 will be recorded on one transcript. The new program will determine which courses will count toward graduation. Typically a maximum of 9 credits may count toward both degrees.

***Professional Licensure
and Certification Notice***

Students who are pursuing degrees leading to application for professional licensure or certification, and/or who will be participating in clinical placements, internships, or practica through their USM program should be aware that their host facility may require a criminal background check, finger printing, or drug screening. In such situations, each student is responsible for obtaining and paying for the background check or other screening process and for delivering required documentation to the facility. Although the University will make reasonable efforts to place admitted students in field experiences and internships, it will be up to the host facility to determine whether a student will be allowed to work at that facility. Students should further be aware that a criminal record may jeopardize licensure by the state certification body. Students may consult the certification body corresponding to their intended occupation for more details. Successful completion of a program of study at USM does not guarantee licensure, certification, or employment in the relevant occupation.

Tuition and Financial Aid

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 Board of Trustees. Courses being audited are included in this calculation.

Tuition

Tuition rates for the 2009-2010 academic year are set by the University of Maine System Board of Trustees.

The charges below are in effect as of July 1, 2009.

	Maine Resident	Non-Resident	NEBHE/Canadian
Graduate*	\$ 347.00 /cr.	\$ 985.00 /cr.	\$ 520.00 /cr.
Law			
Per Credit Hour	\$ 649.00 /cr.	\$ 999.00 /cr.	\$ 914.00 /cr.

*The University reserves the right to adjust these charges to respond to changing cost, state and/or federal legislative action, and other matters. Such adjustment may be made at any time.

In addition to tuition, graduate students are assessed various fees. For more information, visit www.usm.maine.edu/bus0.

Fees

Fees for the 2009-2010 academic year are set by the University of Maine System Board of Trustees. *Fees below are in effect for the 2008-2009 academic year.*

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

Application Fee A mandatory \$50.00 fee is charged when a student applies for admission to a graduate or law degree program.

Community Standards Fee A \$35.00 fee is charged to any student who is sanctioned under the Conduct Code.

Course Fees To defray the costs associated with some courses, additional fees ranging from \$5.00 to \$360.00 are assessed. These fees are associated with courses requiring additional instructional resources.

Distance Learning Course Support Fee Students registering for ITV and video-conferencing courses are assessed a \$7.00 per credit fee to defray mailing costs.

Graduate Student Enrollment Fee A one time \$50.00 fee charged to newly matriculated graduate students.

Graduate Non-Matriculated Student Fee A \$20.00 per semester fee charged to non-matriculated graduate students.

Insufficient Funds Fee A \$25.00 fee is charged when a check is returned due to insufficient funds or when a credit card payment is declined.

Late Payment Fee A \$50.00 fee (to a maximum of \$200.00) is assessed to student accounts not paid when bill is due.

Law Student Activity Fee A \$20 fee is charged to all students registered for 6 or more credit hours.

M.B.A. Orientation Fee An \$80.00 fee is charged to all students admitted to the M.B.A. program. The fee covers the cost of a one-day experiential learning exercise, required during the first year of enrollment.

Online Course Enrollment Fee Students registering for classes offered via the World Wide Web are assessed a \$25 per credit hour fee.

Payment Plan Fee A \$30.00 fee is charged students enrolling in one of the USM installment plans. This fee covers mailing and administrative costs.

Specialty Accreditation Fee A \$50.00 per credit hour fee is assessed to students enrolling in graduate courses offered by the School of Business. The fee will support research and scholarship activities that help assure the school's continued accreditation by an international organization.

Student Health Fee A mandatory \$80.00 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. For more information about the services covered by the health fee, contact University Health Services at (207) 780-4211 or (207) 780-5411.

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

A moderate cost, 12-month basic insurance plan is available to students registered for six or more credit hours. Students who have enrolled in the prior academic year must re-enroll each year and 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 three or more credit hours who want financial coverage for potential severe or catastrophic health problems. The extended care plan reimburses only after the first \$10,000 of health care is already paid by the student or any basic insurance plan. Further information about either policy and coverage is available through University Health Services.

Transportation Fee A mandatory fee assessed to all students registered for courses that are held on the Portland and/or Gorham campuses. It funds parking and other transportation-related projects, as well as busing between campuses. It eliminates the need to pay for required parking decals.

0.1-5.99	\$ 50.00
6.0-11.99	\$ 75.00
12+	\$100.00

Lewiston-Auburn College Parking Fee A \$3.00 per credit hour fee is assessed to students registered for courses being held on the LAC campus.

Unified Fee A mandatory \$26.00 per credit hour fee assessed to cover fixed costs of providing educational services not already supported by tuition charges.

Room and Board

Room University residence halls are located on the Gorham campus. Information about housing is available from the Department of Residential Life, Room 100, Upton Hall, Gorham, (207) 780-5240. Current room and board rates are available at www.usm.maine.edu/reslife.

Board The University offers a variety of meal plans. Information about the meal plans is available from the Department of Residential Life, Room 100, Upton Hall, Gorham, (207) 780-5240.

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 Residential Life 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 this deposit 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 Students can access MaineStreet billing statements, specific semester due dates, and other important Student Billing information at www.usm.maine.edu/buso. The University is not obligated to mail paper billing statements.

It is critical that official University e-mail accounts are checked often by all students. In many cases, it will be the only means of receiving important information from Student Billing and other University departments.

It is the student's responsibility to ensure that all addresses recorded on MaineStreet are correct.

How to Make Payment The University offers a variety of payment options.

- **ACH (electronic check)** ACH payments can be made online on Mainstreet.
- **Cash** Cash payment may be made at the Student Billing Office or at an off-campus center. Cash should not be mailed.
- **Checks** Paper 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 Cards** USM uses an outside vendor to process MasterCard, American Express, and Discover card payments. The student is charged a convenience fee by the vendor.

• **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. Information about these plans is available from Student Billing.

• **Outside Scholarships** Students must notify Student Billing of any non-University scholarships, to be used to pay University charges, prior to the date payment is due. Upon receipt of proper documentation, the University may extend the payment due date.

• **Third Party Payments** A student must give Student Billing written authorization from the agency/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 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 and unpaid charges or fines owed to other University departments.

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. The number of times a class meets is not a factor in this determination. **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, Advising 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 all classes 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 reduced for those 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 reductions, 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)	<i>Refund Percentage</i>
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%

Summer Session Refer to the Summer Session catalog for summer drop/withdrawal policies.

Requests for exemptions to the refund policy must be filed with the executive director for Financial Resources within 90 days of the end of the semester involved.

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, spouse, or domestic partner 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 30 days of the first day of classes, is considered incorrect by the student, the student may appeal that decision in writing, within 30 days, to the chief financial officer of the campus.

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 on the Student Billing Web site at www.usm.maine.edu/buso or at the Student Billing Office, 110 Corthell Hall, Gorham, or the Business Office, 118 Payson Smith, Portland. Completed applications should be returned to the Portland Business Office.

New England Regional Program

In cooperation with the New England Board of Higher Education the University offers certain graduate programs of study to qualified candidates from the New England States. Tuition rates for regional candidates approved by the Board of Trustees will be that of in-state tuition plus a surcharge of 50 percent. Because the listing of available programs varies from year to year, candidates should consult the *New England Regional Student Program Graduate Catalog*. This catalog is available for review in the Office of Graduate Studies (Portland and Gorham). Copies may be obtained from the New England Board of Higher Education, 45 Temple Place, Boston, MA 02111.

Master's Degree Programs

Adult Education	MA, NH, VT
American and New England Studies	CT, MA, NH, RI, VT
Applied Immunology	CT, NH
Community Planning and Development	CT, NH, VT
ETEP Unified Teaching in Regular Classrooms	CT, MA, RI
Health Policy and Management	CT, NH, RI, VT
Music (M.M.)	VT
Music: Education	VT
Music: Composition (M.M.)	CT, RI, VT
Music: Conducting (M.M.)	NH, RI, VT
Music: Jazz Studies (M.M.)	CT, NH, RI, VT
Music: Performance (M.M.)	VT

Occupational Therapy (pre-professional)	CT, RI, VT
School Psychology	NH, VT
<i>Doctoral Degree Programs</i>	
Public Policy	CT, NH, RI, VT
Psychology (school)	NH, VT
<i>Juris Doctor</i>	
Law (JD)	MA, NH, RI, VT

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 in 6 credit hours that can be applied to the graduate program requirements for a semester. Aid can be granted only to U.S. citizens and eligible non-citizens. You must also be registered with the 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, and at the following Web site: www.usm.maine.edu/fin.

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.

Eligibility for Financial Aid During Graduate and Doctoral Studies

To be eligible for federal financial aid (including deferment of student loans) a matriculated graduate or Ph.D. student must meet *one* of the following conditions:

- is enrolled in at least 6 academic graduate credits
- or**
- has obtained a certificate of adequate academic progress from the chair of the committee, indicating that the student is continuing to actively pursue studies leading to the master's or doctoral degree, *and* is registered for GRS 602 or GRS 701. (Note: This applies to students taking anything less than 6 academic credits.)

GRS 602 is a 1-credit course that permits master's degree candidates registered for less than 6 credits to retain eligibility for financial aid, University-funded fellowships, scholarships, graduate assistantships, student health insurance, loan deferment, visa compliance, and access to University services, including USM computers, library, and recreational facilities. This course option is primarily intended for students who have completed coursework for the master's degree, but have not completed their thesis or capstone. Enrollment in GRS 602 requires that students have certification of adequate academic progress by their program faculty advisor or program chair and approval from the Office of Graduate Studies.

GRS 701 is a 1-credit course that permits doctoral degree candidates registered for less than 6 credits to retain eligibility for financial aid, University-funded fellowships, scholarships, graduate assistantships, student health insurance, loan deferment, visa compliance, and access to University services, including USM computers, libraries, and recreational facilities. Prerequisites include passing qualifying exams, receiving certification of adequate academic progress from the program chair and dissertation/capstone chair, and obtaining approval from the Office of Graduate Studies.

Application Procedures

To apply for financial assistance from the University of Southern Maine, you should file your Free Application for Federal Student Aid (FAFSA) or your Renewal FAFSA on the Web at www.fafsa.ed.gov.

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 submit the FAFSA on the Web at www.fafsa.ed.gov 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 students and 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. Graduate assistantships serve three purposes: to provide financial support for students, to enhance students' professional and scholarly development, and to support faculty scholarship and teaching. The assistant is required to pursue graduate studies (at least 6 hours of credit per semester). In compensation, the assistants are paid a yearly grant. Some assistantships are accompanied by a limited tuition waiver. Assistantships are awarded by the Office of Graduate Studies on the recommendation of the individual graduate programs. Interested students should first contact their graduate program director or the Office of Graduate Studies.

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.

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.

PLUS Loans This program sponsored by federal and state governments allows graduate and law students to secure relatively low-cost, credit-based loans. Graduate and law students are able to borrow up to their cost of attendance minus other estimated and actual financial assistance under the PLUS Loan program. Graduate and law students must file a FAFSA and must have their annual loan maximum eligibility under the Stafford Loan program determined before they apply for a PLUS Loan. PLUS Loan request forms for graduate and law students are available at the Student Financial Aid Office or at www.usm.maine.edu/fin/plus.htm.

Alternative Loans 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.

North American Indian 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. For additional information, contact the Wabanaki Center at (207) 581-1417. Visit the Office's Web site at www.naps.umaine.edu/eligibility.html.

University Tuition Waivers A limited number of tuition waivers are granted to outstanding entering graduate students. Students are nominated by faculty admission committees. Applications for admission to graduate study must be completed and received by January 15.

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, potential to make unique contributions to the University community, and USM's commitment to expanding the pluralistic character of its student body. Further information may be obtained from the 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, or online at www.usm.maine.edu/fin.

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.

University Life and Student Services

The following programs and services are dedicated to supporting student learning and success. These programs and services support students during your educational experience. Activities, ranging from intercollegiate sports to résumé preparation, join the academic process in expanding the university experience for all students. More detailed information about student programs and services is available at individual Web sites and /or offices listed below. Questions regarding all areas in this section may be addressed to Craig Hutchinson, vice president for Student and University Life, 780-4035, or craigh@usm.maine.edu.

Gorham Recreation and Fitness Program

The Gorham Recreation and Fitness Center offers many recreational activities regardless of skill level or previous experience. Team sports may include flag football, volleyball, basketball, ultimate frisbee, six on six soccer, softball, volleyball, floor hockey, and arena football. Individual activities may include tennis, table tennis, darts, badminton, three-point shoot-out, free-throw competition, and nine-ball pool tournament. The ice arena has made ice hockey, broom ball, and free skating available to numerous groups. The fitness facility includes universal machines, free weights, and cardiovascular machines. Group exercise classes, personal fitness consultations, and a variety of other workshops are offered as well. White water rafting, deep sea fishing, and whale watching activities as well as trips to see the Red Sox, Bruins, and Celtics are frequently organized. For more information call 780-5649 or stop by the office located in 102 Hill Gym, or visit www.usm.maine.edu/recsports.

Sullivan Recreation and Fitness Complex

The Sullivan Recreation and Fitness Complex 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 two multi-purpose rooms for aerobics, dance, yoga, martial arts, and more. The Fitness Centers offer Selectorized Power circuit stations, free weight equipment, treadmills, exercise bikes, steppers, climbers, elliptical fitness cross trainers, rowers, and stability balls. Equipment for wallyball is available for sign-out. A range of programs designed for busy commuters is available: aerobics, yoga, martial arts, racquetball, introductory dance classes, personal fitness consultations, and relaxation workshops. Outdoor recreation clinics and trips include camping, canoeing, cross country skiing, sea kayaking and more. For more information, call (207) 780-4939 or stop by the office in 104 Sullivan Complex or visit www.usm.maine.edu/sullivancomplex.

Career Services and Professional Life Development

The Career Services and Professional Life Development Centers provide comprehensive career assistance for all matriculated students. Students are encouraged to visit the Centers early in their academic career to begin preparing for the future. They provide assistance with career decision making, interest testing, a part-time job service, a computerized career exploration service, and workshops to help students design résumés and learn how to interview with employers. They bring employers to campus for interviews, informal meetings, and job fairs. They are a participating institution in the Maine Recruiting Consortium and the eRecruiting system—a job database program that draws employers from across the country.

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 in Gorham at 7 College Avenue and in Portland in Payson Smith Hall. For more information please call 780-4220 or 780-5330. Career services are also available at Lewiston-Auburn College (753-6500) or visit www.usm.maine.edu/careers.

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 trans-

portation, escort services and educational programs. The offices are located in Gorham in Upton Hall, and at the Sullivan Gym in Portland (780-5211 or emergency number 911).

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 emergency 911.

For safety concerns in the residence halls, students should contact a residence hall staff member at 780-5240.

For sexual assault or physical or domestic violence, call the USM Police Department (24 hours a day) at 911. Students can call their resident assistant or resident director, 780-5240 the USM Counseling Center, 780-4050, or Sexual Assault Response Services, 774-3613.

Parking and Transportation

Shuttle Bus Service

The University provides a shuttle bus that runs between Portland and Gorham Monday through Saturday during the fall and spring semesters. Schedules are provided upon request from the Parking and Transportation Office at the entrance to the parking garage (Portland), by calling 780-4718, or on our Web site at www.usm.maine.edu/police/bus.htm. USM Police Department, Upton Hall, Gorham (780-5212). Schedules can also be found on our Web site at www.usm.maine.edu/police/parking.htm.

Parking

Anyone parking on campus is required to display a valid USM parking decal or permit. Decals are available at the University Parking and Transportation Office at the USM Police Department, Upton Hall, Gorham and at the Parking and Transportation Office located inside the parking garage on Bedford Street in Portland. Copies of the University motor vehicle rules are available at both locations and on our Web site at www.usm.maine.edu/police/parking.htm.

University Health Services and University Counseling Services

USM students or University of Maine law students paying the student health fee may use the services of USM's convenient, affordable, and accessible on-campus health care and counseling centers. All information gathered in both University Health Centers and University Counseling Centers 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 University Health Services (UHS) and 12 free counseling sessions in University 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. An optional summer health fee or fee-for-service arrangement is also available. The health fee is not health insurance. To purchase health insurance, contact UHS for information about the USM Student Health and Accident Insurance for basic coverage, and the Aetna Health Insurance for catastrophic coverage.

University Health Services

UHS 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 shots; consultations and referrals; travel information; self-care cold clinic and safer sex supplies; health screenings; communicable disease surveillance; and work study or volunteer opportunities.

Hours of operation are generally Monday through Friday, 8:00 a.m. - 4:30 p.m. The Portland center, located beside the Woodbury Campus Center, is open year round; the Gorham center, located on the first floor of Upton Hall, is open when residence halls are open. For information, call the Portland center at 780-4211, the Gorham center at 780-5411, or TTY 780-5646. The immunization hotline is 780-4504. Additional information available at www.usm.maine.edu/health

University Counseling Services

The staff of licensed clinicians and graduate interns at University Counseling Services offer short-term counseling to undergraduate and graduate students. These services include crisis/emergency assistance; personal counseling (individuals, couples, multicultural, and groups); and referral services. Consultation services and workshops are also available to student groups, the faculty, and other staff members.

The offices are located in Room 105 Payson Smith Hall in Portland and Room 110 Upton Hall in Gorham. Hours are Monday through Friday, 8:00 a.m. - 4:30 p.m. For more information, call 780-4050. For information about counseling services at Lewiston-Auburn College, please call 753-6500. Information is also available at www.usm.maine.edu/health.

Dean of Student Life

The Dean of Student Life serves as the first point of contact for all student complaints. The Dean supports and advocates for all students. The Dean also has oversight for the co-curricular programs within the University and a variety of student services within the Division of Student and University Life. The office is located in 100 Payson Smith Hall, 228-8258. Additional information is available at www.usm.maine.edu/studentlife.

Office of Early Student Success

The Office of Early Student Success (ESS) supports students during their transition into the college experience. This time is filled with both opportunities and challenges, often lasting for three to four semesters.

ESS can support students in several ways, including the following: serving as an entryway into USM's student services; providing one-on-one "coaching" sessions to help students establish goals and a path for success; working with students to improve study skills and other academic strategies; serving as a resource for the parents and family members of USM students; connecting students with opportunities for involvement; offering Web-based resources such as informational Web sites and podcasts; and providing an "alcohol checkup" to help students explore if their alcohol use is interfering with life goals. For more information, please visit the ESS Web site at www.usm.maine.edu/ess.

Commuter Services

Support services for commuter students including off-campus housing options, parking and transportation information, and more are available through the office of the Assistant Dean of Student Involvement and Activities, in the Woodbury Campus Center, Portland, 228-8200, and on the Web at www.usm.maine.edu/commuter.

Off-Campus Housing

Listings of available rooms, roommates, and apartments for students who wish to live off-campus are maintained on the Web site at www.usm.maine.edu/commuter.

Woodbury Campus Center

The Woodbury Campus Center serves as the "living room" of Portland campus, with campus dining, bookstore, ATM and many other services available. Also located in the Woodbury Campus Center is the Area Gallery, the Women's Resource Center, the Center for Sexualities and Gender Diversity, the Student Involvement and Activities Center, Student Government Offices, Student Legal Office, and Multicultural Student Center. Contact the Woodbury Campus Center administrative offices at 228-8200 or visit www.usm.maine.edu/commuter.

Residential Life and Resident Education

Residential Life supports the University's educational mission by making sure that students can be successful in their pursuit of an academic degree. We provide clean, safe, and attractive living and learning environments for our students.

Residence Halls

The University provides housing for approximately 1,500 students in seven residential facilities in Gorham. Accommodations are coeducational and offer convenient access to classes and campus events. Students living on campus may choose to apply to live in one of our special interest housing areas or living-learning communities.

For more information, contact the Department at (207) 780-5240, or visit 100 Upton Hall in Gorham; e-mail: reslife@usm.maine.edu, or visit www.usm.maine.edu/reslife.

Brooks Dining Center

The Brooks Student Center (BSC) serves as the “hub” for student life in Gorham. Whether you want to relax and study, grab a snack, or attend an event, BSC has something for you. BSC amenities include 24/7 access ATM and cash-to-card machines, campus bookstore, student mailboxes, computer stations, lounge space, bulletin boards, and three campus dining locations: the Real Food on Campus Dining Hall, the Husky Hideaway, and the Brooks Convenience Store. BSC is also home to the Office of Campus Involvement and Activities. For more information, contact (207) 780-5081.

Dining Services

Dining facilities are located on all campuses. In Gorham, Dining Services are provided in the dining hall and snack bar in the Brooks Student Center as well as the Ice Arena Kiosk, Bailey Hall Kiosk, and the Brooks Student Center Convenience Store. In Portland, options include the Food Court in the Woodbury Campus Center, University of Maine School of Law Café, and the Café, in the lobby of Luther Bonney Hall and lower level of Payson Smith Hall. The Lewiston-Auburn campus features Café-LA.

Honor Societies and University Scholarships and Awards

The University is affiliated with several national honor societies. A partial list follows. For more information contact the academic area indicated. For general assistance call the Division of Student and University Life at 780-4035.

- Beta of Maine Chapter of Alpha Kappa Delta (sociology)
- Phi Kappa Phi (a national interdisciplinary honor society)
- Golden Key International Honour Society (an international interdisciplinary honor society)
- Gamma Theta Upsilon (geography)
- Kappa Zeta-at Large Chapter of Sigma Theta Tau (nursing)
- Psi Chi (psychology)
- Phi Sigma Iota (foreign language)
- Eta Mu Chapter of Phi Alpha National Social Work Honor Society
- Phi Sigma Alpha (political science)
- Phi Alpha Theta Chapter of Alpha Gamma Phi (history)
- Phi Delta Kappa (education)
- Chi Tau (biological sciences)
- Beta Gamma Sigma (business/accounting)

General Scholarships and Awards Each spring, the University awards a substantial number of grants and scholarships to students continuing their studies at USM. Some are specific to a particular area of study, and others are based on students' general achievements both inside and outside of the classroom. For more information, visit www.usm.maine.edu/fin.

Student Involvement and Activities Center

The Student Involvement and Activities Center provides support services for USM students and student organizations. From USM Welcome and Homecoming, to a variety of student clubs and other community-based events, the office helps students get involved in the USM community. Leadership development opportunities are also facilitated through the Centers. Offices are in the Woodbury Campus Center, Portland (780-4090), or Brooks Student Center, Gorham (780-5081).

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, check the Office of Community Standards Web page: www.usm.maine.edu/ocs, or call 780-5242.

Women's Resource Center

The Women's Resource Center 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 Center 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 Resource Center, located in the Woodbury Campus Center in Portland, 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 for women. For more information call 780-4996.

Center for Sexualities and Gender Diversity

The University of Southern Maine's Center for Sexualities and Gender Diversity seeks to ensure a University environment that is positive, safe, and supportive for members of the gay, lesbian, bisexual, transgender, questioning, and allied (GLBTQA) community. Through a series of educational opportunities, support services, and advocacy work, the program works collaboratively with students and student groups, University organizations and departments, and the greater community. The program also oversees the USM Safe Zone Project, a program that conveys an inclusive message to the University community. Safe Zone Project volunteers attend a short orientation program and then display a rainbow-striped sticker with the words "safe zone USM." This shows that they are committed to being identified as safe and supportive contacts for GLBTQA students, faculty, and staff members. For more information on these programs, please call 228-8235 or visit the Web site at www.usm.maine.edu/glbqtqa.

Community Service and Civic Engagement

The Office of Community Service and Civic Engagement is a clearinghouse and a resource for students, faculty, and the community to promote civic engagement, including community service, service-learning, and certain internship opportunities. Students will find support for community service, including current opportunities based on community needs, project development help, connections for service to academic credit, and work-study jobs and leadership opportunities including an AmeriCorps Service Leaders Program. Faculty can receive support in developing service-learning options, ranging from single assignment projects to semester-long projects. Community organizations and agencies work through the office to access volunteers, interns, and service leadership from the USM student community. The office is located in the historic Alumni House at 23 Brighton Avenue in Portland; phone 228-8091, e-mail community@usm.maine.edu, or visit www.usm.maine.edu/studentlife/communityservice.

Interfaith Chaplaincy

The Chaplaincy offers programs and services to support religious and spiritual life in all its expressions. "The Spirit of USM" program series explores a different aspect of spiritual life each year. Associate chaplains sponsored by their respective faith communities offer services to students and student groups in religious or spiritual traditions, and work together to offer programs encouraging spiritual life and interfaith dialogue. A space is provided for reflection, meditation, or prayer for individuals and groups. This space and the office of the interfaith chaplaincy are located in the historic Alumni House at 23 Brighton Avenue in Portland; phone 228-8093, e-mail interfaith@usm.maine.edu or visit www.usm.maine.edu/studentlife/interfaith.

Equity and Compliance

The Office of Equity and Compliance is committed to ensuring that all units of the University foster a respectful, inclusive, and fair campus environment, free from discrimination and harassment. The Office oversees the University's compliance with affirmative action, sexual harassment, disability, and other civil rights statutes and policies and assists search committees in conducting equitable processes in the recruitment of faculty and staff. The goal of the Office is to prevent discrimination or harassment from occurring and to provide an effective means of raising and promptly resolving complaints. If an individual has a question, concern, or complaint about discriminatory harassment they should contact the Office at (207) 780-5510 or by TTY at (207) 780-5646. For a complete copy of the policy, additional information, or to express concern about sexual harassment, call the Office of Equity

and Compliance at (207) 780-5510, the Maine Human Rights Office, 851 State House Station, Augusta, ME 04333-0051, (207) 624-6050 or the Office of Civil Rights, U.S. Department of Education, Region 1, John W. McCormack Post Office and Courthouse Building, Boston, MA 02109, (617) 223-9692.

Multicultural Student Affairs

This office is dedicated to increasing the awareness and appreciation of the many diverse cultures and ethnicities at USM through programming, dialogue, and cultural events. It supports African/African American, Latino/a, Asian/Asian American, and North American Indigenous students to achieve their career and perceived goals. Multicultural Student Affairs is home of the Multicultural Center, the North American Indian Tuition Waiver and Scholarship Program, and the Culture Beat newsletter.

The Multicultural Center is dedicated to providing a supportive and diverse environment for the USM community. The Center helps create community for racially and/or ethnically underrepresented students, where cultural activities and celebrations occur and affiliated student organizations meet. Through its programming, the Center explores critical issues about race, class, ethnicity, nationality, and culture.

The Center is open to the entire USM community. However, the Center has a unique role with regard to the support of students from marginalized communities and cultures. The office is located in the Woodbury Campus Center in Portland. For more information call 780-4006 or visit www.usm.maine.edu/eo/culture.

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 Navigator, the student handbook, available on the Web at www.usm.maine.edu/navigator. In order to review these policies in their entirety, please consult the student handbook or the appropriate department listed.

HIV/AIDS Policy

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

Alcohol and Substance Abuse Policy

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

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

University Counseling Services and University Health Centers provide 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, call University Counseling at 780-4050 or University Health at 780-4211.

Hazing

Injurious hazing is prohibited by Maine state law and University of Maine System policy. No person or organization shall create a situation that recklessly or

intentionally endangers the mental or physical health of a student. Any civil or criminal action shall be in addition to any disciplinary action taken. For more information, contact Office of Community Standards 780-52432 or visit www.usm.maine.edu/ocs.

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 potential conflict of interest by removing himself or herself from decisions affecting the other person in the relationship. Decisions affecting the other person include grading, evaluating, supervising, or otherwise influencing that person's education, employment, housing, or participation in athletics or any other University activity. It is the policy of the System to ensure fair and impartial investigations that will protect the rights of persons filing sexual harassment complaints, the persons 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 Diversity and Equity at 780-5094 (TTY 780-5646), or the Office of Civil Rights, U.S. Department of Education, Region 1, John W. McCormack Post Office and Courthouse Building, Boston, MA 02109, 617-223-9692.

Sexual Assault Policy

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, call the Office of Community Standards, 780-5242 or visit www.usm.maine.edu/ocs/assaultpolicy.html.

When sexual assault has occurred, it is important to tell someone who can be trusted. Campus resources include USM Police, Student and University Life staff and other University faculty and staff, academic advisers, Resident Assistants (RAs), Resident Directors (RDs), Greek Advisor, and athletic coaches. Off-campus community resources include local hospital emergency rooms, rape crisis centers, and local police departments.

Available Resources

University Health Services

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

University Counseling Services

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

USM Police Department

Services: The USM Police, the 24-hour police department. In Portland: 780-5211, and at Lewiston-Auburn 780-5211. In Gorham (Basement, Upton Hall): 780-5211, Emergency: 911.

Office of Community Standards

Services: Consultation and filing complaints of violations of the 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 of Southern Maine

(Cumberland and York Counties) 774-3613/1-800-313-9900
Sexual Assault Support Services of Midcoast Maine 1-800-822-5999
Lewiston-Auburn Sexual Assault Crisis Center 795-2211
Augusta Sexual Assault Crisis and Support Center . . 626-0660/1-800-421-4325
Statewide Sexual Assault Hotline 871-7741
(will route calls to nearest center)

Academic Policies

Courses offered for graduate credit are those listed in the graduate catalog or other official publications of the University. The determination of whether or not a particular graduate course fulfills degree requirements, however, is the responsibility of the individual graduate program. Courses numbered 500 through 599 are intended for graduate students and are also available to undergraduate students who have received permission of the instructor and their advisor. Courses numbered 600 through 699 are restricted to graduate students. Courses numbered 700 and above are intended for doctoral students and are also available to master's-level graduate students who have received permission of the instructor and their advisor.

The following policies apply to all graduate programs.

Grading System

Grades at the University are given in terms of letters, with the option of a plus or minus designation (with the exception of no A+), 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—honors; B—basic competency; C—below competency; D—unsatisfactory; F—failure.

Other letter grades are as follows:

- P Pass with a grade of B- or better in a pass-fail course.
- LP Low Pass with a grade of C+ or C in a pass-fail course.
- F Fail with a grade lower than C 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, the I grade will be converted to an F.
- 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. The grade of INC has no impact on GPA; no credits awarded.
- 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, the MG will be converted to an F.
- W Withdrawal after the add/drop period through 60% of the courses in a given semester. If a student has not officially withdrawn before 60% of the course has been completed, an F will be assigned. The W notation may be obtained after 60% of the course has been completed under unusual circumstances if so determined by the instructor and the dean. A threat of failure is not considered to be an unusual circumstance. The grade of W has no impact on GPA.
- 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. (No impact on GPA.)

Academic Integrity Policy

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

Evidence of a violation of the academic integrity policy will normally result in disciplinary action. A copy of the complete policy may be obtained from the Office of Community Standards, 125 Upton Hall, Gorham, (207) 780-5242.

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 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 each 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 in any program; individual programs may set higher standards. Students receiving such grades will be reviewed for retention in the graduate program.

Add/Drop

Students may add courses during the first week of class with the signature of the instructor. Dropping a course does not require instructor signature. Drops processed during the first two weeks do not have financial penalty. A student dropping a course after the add/drop period through 60% of classes will receive the grade notation of W. A student dropping a course after the 60% period will receive an F. The W notation may be assigned after 60% of the course has been completed under unusual cir-

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

Except for students enrolled in continuous undergraduate/graduate programs with defined articulation agreements, a graduate student may be able to apply up to 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.
- G. Grade of B or better is earned for the coursework.
- H. Coursework meets all existing graduate course requirements except the course number requirement.

Students enrolled in 3+2 or 4+1 programs that have overlapping graduate and undergraduate components should consult their programs for specific policies.

Credit Previously Received for Graduate Coursework

Graduate courses used toward an undergraduate degree cannot be used toward graduate degree requirements unless there is a pre-existing articulation agreement, in which case a maximum of six 500-level credits can be applied toward both undergraduate and graduate degree requirements.

Extramural Course Credit

Courses taken at other institutions and the accompanying grades 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) courses which are inappropriate for inclusion in the student's program of study; 3) courses which exceed time limits prescribed for a particular degree program; 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.

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 master's degree student may earn up to nine hours of independent study or directed study. Students in a Ph.D. program may earn up to 15 hours of independent study or directed study. All independent study or directed study must be approved by the appropriate graduate program. Students are encouraged to consult with their faculty advisor regarding regulations governing independent study for particular

programs. Non-matriculated students are not eligible for independent study or directed study.

Continuous Enrollment and Residency

Continuous enrollment requires that every graduate student must either be enrolled in coursework in his/her program (six credits per calendar year required), enrolled in GRS 601, 602, 701, or 702, or be on a formal leave of absence, approved by the student's program chair and on file with the Office of Graduate Studies. The following courses aid students in maintaining continuous enrollment status. Enrollment in any of these courses requires authorization as noted on the approval form and by the Office of Graduate Studies.

Please Note: Enrollment in these courses will not be reported on official USM student transcripts.

GRS 601 is a noncredit course that allows the student continued access to University services, including USM computers, library, and recreational facilities. Registration for this course incurs applicable University fees for which the student is financially responsible. It is designed for students who are working on a capstone, thesis, or dissertation. GRS 601 does not grant a student part-time or full-time status for financial aid eligibility, University-funded fellowships, scholarships, graduate assistantships, loan deferment, or visa compliance. Enrollment in GRS 601 requires approval from the student's faculty advisor or the program chair and is typically limited to two semesters.

GRS 602 is a 1-credit course that permits master's degree candidates registered for less than 6 credits to retain eligibility for financial aid, University-funded fellowships, scholarships, graduate assistantships, student health insurance, loan deferment, visa compliance, and access to University services, including USM computers, library, and recreational facilities. This course option is primarily intended for students who have completed coursework for the master's degree, but have not completed their thesis or capstone. Enrollment in GRS 602 requires that students have certification of adequate academic progress by their program faculty advisor or program chair and approval from the Office of Graduate Studies.

GRS 701 is a 1-credit course that permits doctoral degree candidates registered for less than 6 credits to retain eligibility for financial aid, University-funded fellowships, scholarships, graduate assistantships, student health insurance, loan deferment, visa compliance, and access to University services, including USM computers, library, and recreational facilities. Requirements include passing qualifying exams, receiving certification of adequate academic progress from the program chair and dissertation/capstone chair, and obtaining approval from the Office of Graduate Studies.

GRS 702 is a 1-credit course for doctoral students who have passed their qualifying exams. GRS 702 allows the student continued access to USM computers, library, and recreational facilities. This course does not qualify the student for financial aid, University-funded fellowships, scholarships, graduate assistantships, loan deferment, visa compliance, or eligibility for USM student health insurance. Approval by the program chair is required for registration.

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. A signed Leave of Absence form must be sent to the Office of Graduate Admissions. Forms are available on the Office of Graduate Studies Web site at www.usm.maine.edu/grad.

Time Limit

The time limit for completion of a master's 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. The time limit for completion of a doctoral program is no more than ten years from the date of first matriculation. In extenuating circumstances a student may petition the director of the graduate program for an extension of the time limit.

Registration Policies

For detailed information regarding registration fees and billing, visit the USM Registrar's Web site at www.usm.maine.edu/reg or contact program offices.

Advance Registration

Matriculated graduate students may register for courses during an advance registration period. Advance registration for the spring semester is conducted in November, and for the fall semester is conducted in April. 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.

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, financial aid, or veterans benefits, credits required for full-time status may differ. Please consult the Office of Graduate Studies, the Student Financial Aid Office, or the Veterans Services 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.

Degree Progress

The definition of satisfactory progress towards completion of a degree is determined by the particular graduate program. However, at the end of any semester in which the cumulative GPA falls below 3.0 (B average) the student will be placed on probation by the Office of Graduate Studies and must bring the cumulative GPA to 3.0 level within the time set by the graduate program (up to two semesters) or the student will be withdrawn from the program.

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.

The case of any student who admits to or is found guilty of a violation of academic integrity will be reviewed by the Student Conduct Code Review Board. The student will be subject to appropriate sanctions, including expulsion from the University. A copy of the USM Student Guide to Academic Integrity and/or a copy of the Student Academic Integrity Policy is available from the Office of Community Standards, 125 Upton Hall, Gorham, (207) 780-5242.

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 academic progress toward fulfilling degree requirements (see above), he or she may be withdrawn from the University.

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.

Student Appeals and Complaints

Non-Academic Complaints

To provide graduate students with assistance in resolving disagreements or complaints of a non-academic nature, the University has designated the Office of the Dean of Student Life (ODSL) to respond to student inquiries. The mission of ODSL is to provide impartial guidance to students in identifying the nature of their disagreement or complaint. ODSL staff will guide students to the appropriate University policy or procedure to utilize in seeking resolution. The academic policies described below are not applicable to student complaints about unlawful discrimination or sexual harassment; however, an ODSL representative can advise the student about the University policies and procedures to follow when student complaints of this nature arise.

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; this policy 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 claim, 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 claim presented to the instructor more than 30 days after a final grade is posted to the student's record. The instructor must respond within 14 days of receiving the appeal.
2. If the student remains aggrieved by the decision of the instructor under step (1), he or she may, within 14 days after formal receipt of the instructor's final decision, appeal, in writing, to the chairperson of the department or program director of the college in which the course or other exercise or activity is offered. The chairperson/program director must respond within 14 days of receiving the appeal.
3. If the student remains aggrieved by the decision of the chairperson or program director of the department under step (2), he or she may, within 14 days after formal receipt of the chairperson's or program director's final decision, appeal, in writing, to the dean of the college in which the course or other exercise or activity is offered.
4. The dean, after discussion with the student and instructor, may resolve the grievance by agreement or render a decision within 21 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.
5. The student or the instructor may, within 14 days of the receipt of the decision of the dean, appeal to the associate provost and dean of Graduate Studies in writing, stating the reason for the appeal and delivering a copy of the writing to the opposing party and the dean. The opposing party may, within 10 days of receipt of the reasons for appeal, reply in writing to the associate provost and dean of Graduate Studies. The associate provost and dean of Graduate Studies shall review the original claim, the written decision of the chairperson or program director and dean, and the written reasons for the appeal and reply. The associate provost and dean of Graduate Studies shall, within 28 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 associate provost and dean of Graduate Studies' decision shall be final and not subject to further review. Copies of the decision of the associate provost and dean of Graduate Studies

shall be delivered to the student, the instructor, and the chairperson or program director and dean. The total time for resolution from the first appeal to the final decision shall be less than 120 days. If a faculty member/administrator fails to address the appeal within the specified time frame, the student may take the appeal to the next level.

Appeals of Dismissal or Withdrawal

All appeals of dismissal or withdrawal must follow the appeals process defined by the program's school or college. The dean of the school or college must be included in this process. Within 14 days following the student's receipt, in writing, of the decision by the department/dean, the student may appeal in writing to the associate provost and dean of Graduate Studies. The decision of the associate provost/dean of Graduate Studies shall be rendered within three weeks and shall be final.

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 associate provost and dean of Graduate Studies.

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; individual programs may set higher standards.

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.

Commencement Ceremony A master's degree candidate may participate in a commencement ceremony only if he or she has applied for graduation and been certified to participate. In certain instances, students may participate in commencement prior to completing all the requirements; please check with your program for specific details. Doctoral students in programs requiring a dissertation may participate in commencement ceremonies and events if a defense has been completed and the dissertation has been approved subject to minor editorial revisions. Doctoral students in programs that do not require a dissertation may participate in commencement ceremonies and events if all requirements for the degree have been completed and approved. Applications for graduation may be obtained through the Registrar's Office.

Students may appeal a decision regarding graduation based on these policies. Contact the Office of Graduate Studies for procedures.

School of Applied Science, Engineering, and Technology

Dean: John R. Wright

The School of Applied Science, Engineering, and Technology offers the master of science degree in computer science, the master of science degree in manufacturing systems, and the master of science degree in applied medical sciences. Faculty in the Department of Applied Medical Sciences collaborate with faculty at the University of Maine Graduate School of Biomedical Sciences in offering a Ph.D. degree in biomedical disciplines. Students may elect to take most of their classes at USM and to have a USM faculty member as their primary research advisor.

Master of Science in Applied Medical Sciences

Chair: W. Douglas Thompson

Professors: Ng, Thompson, Wise; *Associate Professors:* Duboise, Pelsue; *Assistant Research Professors:* Meyer, Lichter, Paulu, Xie; *Adjunct Professors:* Ault, Rhodes, Rice; *Adjunct Associate Professors:* Allan, Chandler, Craig, Davidoff, Fletcher, Follansbee, Friesel, Liaw, Lindner, Smith, Vary; *Adjunct Assistant Professor:* Beckett

Program Description

The M.S. program in applied medical sciences is designed to prepare students for careers in basic research, clinical diagnosis, industrial research, and teaching. Graduates of the applied medical science program are competitive for further graduate studies at the doctoral level (Ph.D., M.D., D.O., D.V.M., and D.D.S.) as well as for research positions in biotechnology companies and academic or private research laboratories. The program is an interdisciplinary biomedical graduate program with coursework and research opportunities in diverse disciplines such as: immunology, microbiology, toxicology, virology, cancer biology, epidemiology, and applied biostatistics. The program is a combination of challenging coursework, specialized readings, and research. Students will be given the opportunity to tailor their program of study to specific interests by choosing a concentration in toxicology and cancer biology, immunology and infectious disease, epidemiology, or biotechnology. In addition, students will learn general skills required of all scientists, namely: critical evaluation and presentation of the current scientific literature, reading and writing of technical material, problem solving, experimental design, logic, and ethics.

Admission

Applicants for admission to the M.S. program in applied medical sciences should have a baccalaureate degree from an accredited institution, preferably in biology or chemistry, with a minimum GPA of 3.0. It is highly recommended that the applicant have completed courses in the following subjects: organic chemistry, biochemistry, microbiology, genetics, and cell biology.

The applied medical sciences graduate admissions committee is responsible for evaluating applicants and recommending candidates for admission. Interviews by members of this committee may be required of applicants. Qualified applicants who have deficiencies in background courses that the committee considers essential for success in the program may be conditionally admitted, with full admission dependent on satisfactory completion of recommended courses.

Application Materials

In addition to materials described in the Admissions chapter of this catalog, applicants must submit the following information:

1. *Test scores:* Official scores from the general test of the Graduate Record Examination (GRE) are required. Official scores from the GRE subject test in biology or chemistry are recommended but not required.
2. *Transcripts:* Official undergraduate and graduate transcripts are required from all colleges or universities attended.

3. *Essay*: The essay should discuss your academic and professional goals as well as identify research interests in the applied medical sciences program.

4. *Letters of Recommendation*: Three letters of recommendation are required for all applicants. Each letter must address the applicant's academic and/or professional record and potential for success in a master's graduate program in biomedical science.

Application Deadline

Application and supporting materials must be received by *March 1* for maximum consideration for fall semester admission and consideration for financial support. Applications and supporting materials must be received by *October 15* for spring semester admission. Spring semester applicants are unlikely to obtain financial support in their first semester.

Program Policies

In addition to the general policies described in the Academic Policies chapter, this program also has the following policies:

1. *Transfer Credits*: Students may transfer a maximum of 9 credits earned within the past 5 years with a grade of B- or better. Approval of transfer credits must be requested at the time of application and approval is at the discretion of the applied medical sciences graduate admissions committee.

2. *Time Limit*: All courses for the M.S. degree must be completed within six years from the time of matriculation. Students may apply for an extension through the program coordinator and must be approved by Department faculty.

3. *Grade Policy*: Students must earn a C or better for courses to count towards the M.S. degree. If the cumulative GPA drops below 3.0, the student will be placed on probation; the terms and conditions of the probation will be determined by the student's advisory committee.

Eligibility for Financial Aid During Thesis Completion Stage

To be eligible for federal financial aid (including deferment of student loans), a student must be enrolled in a minimum of 6 graduate credits in the master's degree program. However, a student who has completed coursework and is engaged in finishing his/her thesis will be considered eligible if he/she meets *one* of the following conditions:

- Is enrolled in at least 6 graduate credits

or

- Is enrolled in less than 6 graduate credits, has obtained certification of satisfactory progress from the chair of his/her thesis committee, indicating that the student is actively progressing in the work leading to completion of the master's degree, *and* is registered for GRS 602.

GRS 602 is a 1-credit course that permits students to retain eligibility for financial aid including University-funded fellowships, scholarships, and graduate assistantship, and access to University services, including USM Libraries and Internet.

Program Requirements

Forty credits are required for the M.S. degree in applied medical sciences: 30 credits of coursework (lectures, labs, and readings), 4 credits of Journal Club and Seminar, and 6 credits of thesis or externship research. Students will have to enroll in a specific concentration by the completion of their first year. The four concentrations are: toxicology and cancer biology, immunology and infectious disease, epidemiology, and biotechnology. Each student will be assigned an academic committee that will be responsible for ensuring that the student fulfills all requirements for the program.

All students will be required to take the following core courses (16 credits):

AMS 530	Molecular Biology
AMS 531	Molecular Biology Lab
AMS 535	Introduction to Epidemiologic Research
AMS 545	Applied Biostatistical Analysis
AMS 595	Seminar: Journal Club
AMS 691	Seminar: Advanced Seminar in Biomedical Sciences

In addition students must complete the requirements for their chosen concentration:

A. Toxicology and Cancer Biology Concentration

AMS 590	Introduction to Toxicology I
AMS 591	Introduction to Toxicology II
AMS 698	Thesis

Electives (6 credits to be approved by the advisory committee)

Two of the following:

- AMS 674 Neurotoxicology
- AMS 675 Developmental Toxicology
- AMS 694 Genetic Toxicology
- AMS 695 Chemical Carcinogenesis
- AMS 696 Metal Toxicology

B. Immunology and Infectious Disease Concentration

- AMS 551 Immunology Lab
- AMS 552 Immunology
- AMS 560 Virology or AMS 565 Molecular Microbiology
- AMS 698 Thesis

Electives (6 credits to be approved by the advisory committee)

One of the following:

- AMS 692 Advanced Readings in Biomedical Sciences
- AMS 693 Advanced Research Techniques in Biomedical Sciences

C. Epidemiology

- AMS 578 Epidemiology of Infectious Disease
- AMS 579 Epidemiology of Chronic Disease
- AMS 677 Regression Models in the Health Sciences
- AMS 698 Thesis

Electives (6 credits to be approved by the advisory committee)

One of the following:

- AMS 635 Applications of Epidemiology in Public Health Agencies
- AMS 636 Environmental Epidemiology
- AMS 638 Practicum in Epidemiologic Research
- AMS 673 Epidemiology and Prevention of Cancer

D. Biotechnology

- AMS 551 Immunology Lab
- AMS 552 Immunology
- AMS 540 Interdisciplinary Biomedical Science and Biotechnology
- AMS 698 Thesis or AMS 697 Externship

Electives (6 credits to be approved by the advisory committee)

One of the following:

- AMS 560 Virology
- AMS 565 Molecular Microbiology
- AMS 680 Molecular Basis of Disease

One of the following:

- AMS 541 Independent Study in Biotechnology Strategies
- MMS 520 Quality System
- MMS 525 Manufacturing Strategies

Laboratory Fees

Laboratory fees are assessed in all AMS laboratory courses to cover the cost of supplies.

AMS 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. Prerequisites: undergraduate biology, biochemistry, or permission of the instructor. Cr 3.

AMS 531 Molecular Biology Laboratory

This laboratory course introduces the student to basic molecular biology research methods using a project-based approach that emphasizes development of knowledge, laboratory skills, and accurate record keeping. The course includes fundamentals of molecular cloning, nucleic acid isolation and analysis, polymerase chain reaction, DNA sequencing, hybridization-based methods, site-directed mutagenesis, eukaryotic and bacterial expression of selected gene products, and basic bioinformatics. Prerequisites: undergraduate biology, biochemistry, and permission of the instructor. Cr 3.

AMS 535 Introduction to Epidemiologic Research

This course is 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, 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 540 Interdisciplinary Biomedical Science and Biotechnology

This course surveys new development in biomedical science and introduces students to the principles of biotechnology. It emphasizes the recent trend of integration of multiple disciplines of science and technology to advance the fields of biomedical science and biotechnology. This concept of scientific cross-pollination will be demonstrated by lecture series to be delivered individually or through teamwork by experts in a range of scientific fields that cover immunology, infectious disease, cancer research, environmental health and epidemiology, genomics and proteomics, development and production of diagnostics and therapeutics, animal models of human diseases, and bioethics. Lecturers include USM faculty, adjunct faculty, and other invited speakers from local research institutions and biotech industries. Prerequisites: undergraduate biology, biochemistry, or permission of the instructor. Cr 3.

AMS 541 Independent Study in Biotechnology Strategies

This course is designed to help students develop an understanding of the manufacturing, quality control, and management aspects of the biotechnology industry. This will be accomplished by developing and completing a project in association with a local biotechnology company. The project will be developed in conjunction with and approved by the student's advisor and/or advisory committee. Prerequisite: permission of the instructor. 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, hypothesis testing, 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 551 Immunology Laboratory

This course consists of a series of comprehensive laboratories in which students learn basic immunoassays (e.g. enzyme-linked immunosorbent assay, immunofluorescence assay, immunoelectrophoresis, immunoprecipitation, and immunoblot assay) as well as techniques for the isolation, identification, and functional analysis of immune cells and their products such as antibodies and cytokines. The roles of T cells, B cells, NK cells, macrophages, and neutrophils in the immune response are examined through assays such as cell proliferation assay, cytotoxicity assay, and flow cytometry. The techniques of monoclonal antibody production will also be introduced. Course emphasis will be on experimental design, and the clinical and research applications of the procedures used. Prerequisite: permission of the instructor. Cr 3.

AMS 552 Immunology

This graduate immunology course stresses both the cellular and the molecular components of the immune system. It covers basic topics including cells and tissues of the immune system, inflammation, generation of diverse immune responses, molecules with immune functions, immune tolerances, autoimmunity, immune-mediated diseases, infection and immunity, transplantation immunology, tumor immunology, immune deficiencies, and other immune disorders. This course will also discuss practical aspects of antibody production, immunoassays, and other immunological techniques. Prerequisite: undergraduate biology, biochemistry, or permission of the instructor. Cr 3.

AMS 560 Virology

This is a graduate-level survey of virology with a biomedical emphasis that is also suitable for advanced undergraduate biology and biochemistry students. Virus structure, molecular biology, evolution, epidemiology, pathogenesis, 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 viruses and their host interactions are emphasized. Prerequisites: undergraduate biology, biochemistry, and permission of the instructor. Cr 3.

AMS 565 Molecular Microbiology

This graduate-level molecular microbiology course emphasizes the fundamental importance of the microbial world in human health and disease and current understanding of selected topics in the biology and molecular genetics of bacterial and eukaryotic microbes and their viruses. The molecular foundations of microbial pathogenesis and host-pathogen interactions and co-evolution are explored in the context of important human and animal diseases. Prerequisites: undergraduate biology, biochemistry, and permission of the instructor. Cr 3.

AMS 578 Epidemiology of Infectious Disease

This course will provide an introduction to the epidemiologic basis for the prevention and control of communicable diseases through the study of specific infections including HIV/AIDS, tuberculosis, viral hepatitis, rabies, influenza, and Lyme disease. The course will also include exercises on the investigation of acute disease outbreaks and discussions of immunization, institutional infection control, foodborne illnesses, and emerging infectious diseases. Cr 3.

AMS 579 Epidemiology of Chronic Disease

This course examines empirical human evidence concerning the genetic, environmental, and behavioral determinants of some of the most common and debilitating chronic diseases, including several of the following: coronary heart disease, stroke, diabetes, selected forms of cancer, chronic obstructive pulmonary disease, asthma, neurological diseases, musculoskeletal conditions, and psychiatric disorders. Relevance of the following tools are considered: descriptive epidemiology, experimentation on humans, observational cohort studies, case-control studies, and formal meta-analysis. Strategies for the prevention of each of the diseases considered are critically evaluated in the context of epidemiologic evidence for causation. Prerequisite: AMS 545. 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. Cr 3.

AMS 590 Introduction to Toxicology I

This course introduces students to the principles and practice of toxicology. The major focus of the course is on basic principles, mechanisms, and common methods underpinning the science of toxicology. Selected target organ systems (e.g. respiratory, nervous, and immune systems) are studied with respect to understanding how representative chemicals damage and impair their ability to function. Students will develop a fundamental understanding of how chemicals may exert toxic effects and gain insight into the importance of organ specific effects. Prerequisite: molecular biology, biochemistry, or permission of the instructor. Cr 3.

AMS 591 Introduction to Toxicology II

This course continues to introduce students to the principles and practice of toxicology. The course continues to focus on basic principles, mechanisms, and common methods underpinning the science of toxicology. Selected toxicants are studied with respect to their source of exposure and mechanisms of effect. Selected disease processes (e.g. mutagenesis, carcinogenesis, and teratogenesis) are studied with respect to understanding their basic pathways and common mechanisms. Selected fields are presented to give students insight into the applications of toxicology and its relationship with other fields. Prerequisites: AMS 590, molecular biology, biochemistry, or permission of the instructor. Cr 3.

AMS 595 Seminar: Journal Club

The Journal Club is intended to keep the participants current in biomedical science, to instruct them in the techniques of evaluating scientific literature critically, and to clearly present 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.

AMS 633 Interdisciplinary Collaboration in Research and Education

This course is primarily for bioscience graduate students and teachers participating in USM science education outreach through programs such as the Maine ScienceCorps. The course provides collaborative interdisciplinary professional development opportunities for participating graduate students, secondary school teachers, and science faculty. Active participation is required in scientific seminar presentations, in discussions of readings, and in collaborative development of research based laboratory activities for scientific education at all levels. Prerequisite: permission of the instructor. Cr 1-3.

AMS 635 Applications of Epidemiology in Public Health Agencies

This course focuses on the role of epidemiologic principles and methods in the practice of public health. Topics include surveillance of the health status of populations, vital records, disease registries, special-purpose population-based surveys, responses to public concern about perceived clusters of disease, evaluation of the efficacy of public health interventions, the roles of state and federal government in collecting and interpreting epidemiologic data, and the uses of epidemiology in the formulation of policy in public health. Students will work on individual or group projects that involve hands-on participation in the application of epidemiologic methods within a public health organization. Prerequisite: AMS 545 or permission of the instructor. Cr 3.

AMS 636 Environmental Epidemiology

This course focuses on the effects of the physical environment on human health. Among the risk factors examined are a variety of pollutants found in outdoor air, indoor air, surface water, ground water, and food. Special attention is given to heavy metals, ionizing radiation, pesticides, flame retardants, carbon dioxide, and others of current public concern. Effects on human development, on the nervous system, and on respiratory disease and cancer receive particular attention. Topics include: environmental monitoring, quantification of exposure at the individual level, hazards in occupational settings, time-space clustering of disease, use of ecologic studies to estimate risks at the individual level, interactive effects of exposure to multiple environmental risk factors, perceptions of risk, integration of laboratory science with population-based studies, and the role of epidemiologic evidence in setting environmental standards. Prerequisites: AMS 545 or permission of the instructor. 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 AMS 545 or permission of the instructor. Cr 3.

AMS 641 Flow Cytometry

This course will cover the theory and principles of flow cytometry and cell sorting, applications of flow cytometry, introduction to the use of the flow cytometer, and analysis of flow cytometric data. Prerequisites: undergraduate biology and biochemistry, or permission of the instructor. Cr 2.

AMS 651 Electron Microscopy

This course will provide training and appropriate technical support for student research projects

requiring transmission electron microscopy. Prerequisite: permission of the instructor. Cr 3.

AMS 654 Hybridoma Methodology

This laboratory course covers basic concepts and techniques in tissue culture and hybridoma production. Intensive laboratory work will include immunogen preparation, immunization, cell hybridization, hybridoma screening by immunoassay, cell cloning, scale-up hybridoma production, and antibody purification. Prerequisite: permission of the instructor. Cr 1.

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 674 Neurotoxicology

Prerequisites: AMS 572, molecular biology, biochemistry, or permission of the instructor. Cr 3.

AMS 675 Developmental Toxicology

Prerequisites: AMS 572, molecular biology, biochemistry, or permission of the 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 SAS software for conducting analyses. Cr 3.

AMS 680 Molecular Basis of Disease

This course focuses on the 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 heritable diseases. Prerequisite: AMS 530 or permission of the instructor. Cr 3.

AMS 691 Advanced Seminar in Biomedical Sciences

The student participates in a weekly seminar on biomedical sciences. The seminar focuses on current topics in biomedical research. Prerequisite: AMS 590 or permission of instructor. Seminar is offered in both fall and spring semesters. Cr 1.

AMS 692 Advanced Readings in Biomedical Sciences

The student participates in directed readings on a topic in biomedical sciences under the guidance of a faculty member. Readings on specific topics in carcinogenesis, epidemiology, immunology, molecular genetics, neuroscience, parasitology, toxicology, and virology are offered. Prerequisite: permission of instructor. Cr 2.

AMS 693 Advanced Research Techniques in Biomedical Sciences

The student learns laboratory techniques used as tools in biomedical research. The term is spent under the direction of a faculty member. Methods in epidemiology, immunology, molecular genetics, parasitology, toxicology, and virology are offered. This is a hands-on course with close supervision by technically trained personnel. For those sections in laboratories working with biohazards, laboratory safety and use of biosafety hoods are emphasized. Prerequisite: permission of instructor. Cr 2.

AMS 694 Genetic Toxicology

This course is an intensive review of the principles and practice of genetic toxicology. The major focus of the course is on basic principles, mechanisms, and common methods used to study chemical and radiation-induced damage to DNA and its repair. Selected types of damage and repair systems are studied with respect to understanding mechanisms of how representative chemicals or radiation damage and how the cell responds to impair their ability to function. Students will develop a fundamental understanding of how chemicals damage DNA and how human cells repair DNA and gain insight into the state-of-the-art of this field. Prerequisites: AMS 591, molecular biology, biochemistry, or permission of the instructor. Cr 3.

AMS 695 Chemical Carcinogenesis

This course is an intensive review of the principles of chemical carcinogenesis. The major focus of the course is on basic principles, mechanisms, and common methods involved in the neoplastic transformation of cells. Selected models of carcinogenesis are studied with respect to understanding mechanisms of how representative chemicals transform cells. Students will develop a fundamental understanding of the major theories in chemical carcinogenesis and gain insight into the state-of-the-art of this field.

Prerequisites: AMS 591, molecular biology, biochemistry, or permission of the instructor. Cr 3.

AMS 696 Metal Toxicology

This course is an intensive review of the principles of metal toxicology. The major focus of the course is on basic principles, mechanisms, and common methods involved in how metals induce toxicity in major organ systems. Selected systems are studied with respect to understanding mechanisms of how metals induce cellular and systemic toxicity. Students will develop a fundamental understanding of the major theories in metal toxicology and gain insight into the state-of-the-art aspects of this field. At each session, a doctoral student will present a lecture on the topic including a review of required readings and directed activities. Offered in the fall of even-numbered years. Prerequisites: AMS 590, AMS 591, either AMS 694 or AMS 695, and permission of the instructor. Cr 3.

AMS 697 Externship

Under the stewardship of the student's graduate advisory committee, an externship will be arranged for a student to gain research training at a laboratory outside the University (e.g. industry, research institute, and government affiliates). Similar arrangement can be designed with some modifications for students who are already employed at the laboratory where an externship will be conducted. A written project on the work experience, similar to a dissertation, to be presented and approved by the advisory committee, is required. Prerequisite: permission of the instructor. Cr var.

AMS 698 Thesis

Under the stewardship of the student's thesis advisor and committee, a hypothesis-driven research project will be developed for a student to gain research training in biomedical science. A written project proposal will be presented to and approved by the thesis advisory committee and upon completion of the research a dissertation will be written and presented to the advisory committee for final approval. Prerequisites: permission of the instructor. Cr var.

GRS 602 Thesis Completion

See the complete course description in the "Continuous Enrollment and Residency" section of the Academic Policies chapter. Cr 1.

Master of Science in Computer Science

Graduate Director: Suad Alagic

Professors: Alagic, Welty; *Associate Professors:* Boothe, Briggs, MacLeod;

Assistant Professor: Congdon; *Adjunct Faculty:* Bantz, El-Taha, Heath, Houser

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.

If pursuing the software development or computer systems track:

COS 280	Discrete Mathematics II
COS 285	Data Structures
COS 350	Systems Programming
COS 360	Programming Languages

Note: Students with little or no computing background may need to take some or all of the following courses that are prerequisites to the courses listed above: MAT 145, COS 160/COS 170, COS 161, COS 250/COS 255.

If pursuing the computer engineering track:

MAT 152D	Calculus A
MAT 153	Calculus B
COS 250	Computer Organization and
COS 255	Computer Organization Laboratory
	or
ELE 172	Digital Logic and
ELE 271	Introduction to Microprocessors
COS 280	Discrete Mathematics II
COS 350	Systems Programming
ELE 314	Linear Signals and Systems
ELE 342	Electronics I

Note: Students with little or no computing or electrical engineering background may need to take some or all of the following courses that are prerequisites to the courses listed above: MAT 145, COS 160/COS 170, COS 161, COS 285, ELE 211, ELE 262.

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 550 on the paper-based TOEFL, 79 on the Internet-based TOEFL, or 213 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.

cies. 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 section, applicants for this program must submit three letters of recommendation attesting to the candidate's academic and/or professional accomplishments.

Application Deadline

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 in writing 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 12 credits of graduate-level computer science courses (computer engineering track requirements differ; see below), excluding COS 598. Students must also take either a 6-credit master's thesis, COS 698, or a 3-credit master's project, COS 698, and an additional graduate course in computer science. Approved 400-level computer science courses can be used to fulfill the remaining credit requirements. At most two courses from other departments may be used toward the graduate degree (computer engineering track requirements differ; see below). The Computer Science Department faculty must approve these in advance.

If a student does not have the equivalent of a specific course from the following list in her/his previous studies, she/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.

- COS 450 Operating Systems
- COS 485 Design of Computing Algorithms **or**
- COS 480 Theory of Computation

The culminating work in the M.S. program must take 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. *Project*: the student works on an application of computer science. This could be in the form of a piece of software, a report on a problem, design of an application, etc. The project may be the solution of a problem at the student's place of employment. In this case, a representative of the employer may serve as an additional committee member.

The first option requires a committee of at least three members. The second option requires a committee of at least one faculty member. Both options require that a project proposal addressing a topic in the student's chosen track be approved by the committee. They also require a written final summary document describing the results of the project. This document must be approved by the committee and published according to Departmental guidelines. Oral presentation of the completed project is encouraged.

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, computer engineering, or an area designed by the student. For details of student designed emphases, see Departmental guidelines.

Specific course requirements of each are as follows:

1. *Master of science degree in computer science* with emphasis in computer systems. Some of these courses have MAT 281 or MAT 380 among their prerequisites.

Complete four of the following courses:

COS	450	Operating Systems
COS	455	Computer Architecture
COS	460/540	Computer Networks
COS	465/542	Distributed Systems
COS	467/567	Performance Analysis of Distributed Systems
COS	485	Design of Computing Algorithms
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

2. *Master of science degree in computer science* with emphasis in software development.

Complete four of the following courses:

COS	420	Object Oriented Design
COS	430	Software Engineering
COS	444/544	Software Project Management
COS	452	Computer Graphics
COS	457	Database Systems
COS	469/569	Compiler Construction
COS	476/576	Advanced Object-Oriented Design
COS	485	Design of Computing Algorithms
COS	495/595	Advanced Web Architectures
COS	558	Database Management
COS	565	Software Design and Development
COS	571	Advanced Database Systems
COS	574	Advanced Computer Graphics
COS	578	Advanced Java Technology
COS	579	Object-Oriented Software Technology

3. *Master of science degree in computer science* with emphasis in computer engineering. Candidates in this track must take a minimum of 30 credits, at least 12 credits of which must be graduate-level courses from the lists below. The minimum of 12 credits of graduate courses should include at least 6 credits of computer science courses and at least 6 credits of electrical engineering courses. The balance of courses may be electrical engineering courses from the list below, or approved computer science courses, subject to the following distribution requirements.

- a. Complete two of the following courses:

COS	450	Operating Systems
COS	455	Computer Architecture
COS	460/540	Computer Networks
COS	465/542	Distributed Systems
COS	467/567	Performance Analysis of Distributed Systems
COS	472	Artificial Intelligence
COS	543	Distributed Systems: A Second Course
COS	550	Advanced Operating Systems
COS	552	Advanced Computer Networks
COS	555	Advanced Computer Architecture
COS	562	Performance Analysis
COS	572	Advanced Artificial Intelligence

- b. Complete two of the following courses:

ELE	417/517	Robot Modeling
ELE	418	Robot Intelligence
ELE	442/542	Digital VLSI Circuits and Design
ELE	444/544	Analog Integrated Circuits and Design
ELE	445/545	Special Topics in CMOS Integrated Circuit Design
ELE	464	Microelectronic Fabrication
ELE	467	Optoelectronics
ELE	486/586	Digital Signal Processing
ELE	489/589	Digital Image Processing

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 544 Software Project Management

Students will learn how to lead and participate in significant software projects. The course will cover the project life cycle, including developing the charter, plans, and justification; outsourcing and other procurement decisions, management of scope, time, cost, quality, personnel, and risk, and the critical role of communications inside and outside the project. Experts from industry will present case studies of success and failure. Prerequisite: previous bachelor's degree and COS 420 or COS 430. 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: MAT 380 and COS 460/540 or permission of instructor. Cr 3.

COS 555 Advanced Computer Architecture

This course presents topics from research areas in computer architecture as well as advanced and emerging technologies. Possible topics are parallel machines, content addressable memories, VLSI systems. Prerequisite: COS 455. 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 567 Performance Analysis of Distributed Systems

The objective of the course is to learn techniques to assess the performance of applications running in a distributed manner. Such assessment is important for developers to understand the behavior of the distributed applications they create, and to identify aspects of the applications that are determining performance. The course presents a variety of evaluation tech-

niques, including queueing theory, simulation, and availability and performance modeling. Other techniques will be introduced as needed. Prerequisite: Previous bachelor's degree, COS 450 or COS 460, and MAT 281 or MAT 380. Cr 3.

COS 569 Compiler Construction

Definition of languages via context-free grammars. Organization of a compiler into phases of lexical analysis, parsing, code generation, and optimization. Students will implement a compiler for a Pascal-like language. Prerequisite: graduate standing. 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 571 Advanced Database Systems

This course covers object-oriented and XML database technologies, their interfacing and integration. Object-oriented topics include developments from industrial standards such as ODMG and Java Data Objects, query languages such as OQL, Java database technology, object-relational systems and language integrated queries such as LINQ. The XML technology is represented by schema languages such as XML Schema and query languages such as XQuery. Object-oriented interfaces to XML include DOM, LINQ to XML, LINQ to XSD, as well as other industrial developments. The course includes hands-on experience with advanced database management systems. The requirements include an object-oriented software and database development project, addressed by teams, and a term paper. Prerequisite: Permission of the instructor. 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 permission of instructor. Cr 3.

COS 576 Advanced Object-Oriented Design

This course considers developing object-oriented, multi-tier, Web-based applications. Topics will include object-oriented design patterns in distributed environments, software components, and software frameworks. The course also has a significant hands-on implementation component, and, after completing this course, students will have practical experi-

ence with several leading-edge distributed object technologies, including AJAX, Web Services, Enterprise JavaBeans, JDBC, and Servlets. The course is structured so that students will work in teams to develop a medium-sized, multi-tier application that incorporates several of the technologies mentioned above. Lectures will provide an introduction to the technologies and discuss principled ways to apply these technologies. Prerequisites: COS 420 or permission of instructor. Cr 3.

COS 578 Advanced Java Technology

The goal of this course is to provide an in-depth study of the most important and the more advanced components of the Java technology. The course covers topics such as concurrent object-oriented programming in Java, Java Core Reflection, the underlying virtual platform (the Java Virtual Machine), genericity (parametric polymorphism), persistence, and assertions. Programming assignments include concurrent programming, programming with parametric collection types, dynamic loading and compilation, usage of the Java reflective capabilities, and usage of persistent capabilities available in Java and in its extensions. The outcome of this course is a high-level of professional expertise in the overall Java technology. Prerequisite: COS 360. Cr 3.

COS 579 Object-Oriented Software Technology

This course combines formal and practical object-oriented software techniques in developing the following main themes of object-oriented software technology: (i) Object-oriented software systems that provide efficiency and reliability based on an advanced type system (ii) Correctness and behavioral compatibility in software reuse based on object-oriented assertion languages and programming by contract methodology. Practical implications and usage of the general notions such genericity, self typing and reflection in complex software systems will be based on type systems of major object oriented languages such as Java, C# and Eiffel. The assertion languages demonstrating the main themes in this course are JML (Java Modeling Language) and Spec# (an assertion language for C#). The programming assignments are based on a pragmatic methodology for object-oriented software construction (programming by contract) along with the associated tools including program verification techniques and systems. Prerequisites: COS 360. 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 of 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 595 Advanced Web Architectures

The focus of communication over the Internet is shifting to "computer-to-computer" interaction. Standards for this interaction (ebXML, SOAP, WSFL) are now in place and maturing, and commercial use is exploding. We will survey these standards and critically evaluate their security, efficiency, and completeness. We will construct several case studies, including Web-based commerce. As a team we will acquire and learn how to use available tooling, and we will put together working Web services and test their ability to interact with each other. Prerequisite: graduate standing. 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 Thesis/Project

A six-credit thesis or a three-credit project is required of all students. The appropriate member(s) of the computer science faculty must approve the project in advance. Offered only as a pass/fail course. Prerequisites: full graduate standing and faculty approval. Cr 3-6.

ELE 517 Robot Modeling

This course focuses on the concepts of kinematics, statics, and the dynamics of serial manipulators, as well as on the analysis and design of robotic structures. Students will conduct case studies of multiple platforms in the Robotics and Intelligence Systems Laboratory. This course complements ELE 418. Prerequisites: ELE 210, COS 160 or permission of instructor. (Lecture 3 hrs.) Cr 3.

ELE 542 Digital VLSI Circuits and Design

This course will examine the principles of internal circuit and layout design of digital VLSI circuits, with an emphasis on CMOS technology. Topics

include NMOS and CMOS processes, device physics and SPICE models, logic circuits, electrical and physical design of logic gates, dynamic CMOS circuits, memory, chip layout principles, parasitics, and performance estimation. Simulation, layout, and electronic design automation tools are demonstrated and used. Prerequisites: ELE 172, ELE 342. (Lecture 3 hrs; Lab 1 hr.) Cr 3.

ELE 544 Analog Integrated Circuits and Design

This course will examine the principles of internal circuit operation and design of analog integrated circuits, with emphasis on CMOS technology. Topics include analog CMOS processes, devices and device models, bias and reference sources, differential and high gain amplifiers, OTAs and operational amplifiers, frequency response, feedback, stability, and internal compensation with emphasis on the design of CMOS operational amplifiers, power stages, and dc regulators. SPICE simulation, layout, and electronic design automation tools are demonstrated and used in homework assignments and design projects. Prerequisite: ELE 343 or permission. (Lecture 3 hrs; Lab 1 hr.) Cr 3.

ELE 545 Special Topics in CMOS Integrated Circuit Design

This course will cover special topics, such as, high performance operational amplifiers, silicon integrated sensors and sensor interface circuits, switched capacitor circuits, oscillators and integrated waveform generators, phase-locked-loop circuits, and memory, among others. Three chosen topics will be emphasized and students will conduct instructor-guided projects that will culminate with chip level design of these circuits. SPICE simulation verifications, layout, and electronic design automation tools will be used extensively. Prerequisite: ELE 442/542 or ELE 444/544. (Lecture 3 hrs; Lab 1 hr.) Cr 3.

ELE 586 Digital Signal Processing

This course will cover the basic principles of processing digital signals. Other concepts covered will include sampling and quantization; time and frequency domain representation; analysis of discrete-time signals and systems; FIR and IIR systems; digital filter design; review of classic analog filter design (Butterworth, Chebyshev); quantization and finite-precision effects; and DSP hardware. Computers will be used to design and realize various signal processors. Prerequisites: ELE 314 and COS 160 or equivalent. (Lecture 3 hrs.) Cr 3.

ELE 589 Digital Image Processing

This course will focus on the theory and practice of digital processing of images by computer. Students will be introduced to two-dimensional signal processing theory, including sampling, transforms, and filters. Image acquisition and representation; enhancement methods; image coding; image analysis; and image processing hardware also will be covered. Prerequisites: ELE 314 and COS 160 or equivalent. (Lecture 3 hrs; Lab 1 hr.) Cr 3.

Certificate of Graduate Study, Manufacturing Systems

The Certificate of Graduate Study, Manufacturing Systems, at USM includes 21 credits allocated as follows: 18 credits M.M.S. core and 3 credits of electives.

M.M.S. Core

The core includes the following courses (18 credits):

MMS	515	Engineering Economy
MMS	520	Quality Systems
MMS	525	Manufacturing Strategies
MBA	504	Probability and Statistics for Business Decision Making
MBA	508	Management Science
MBA	642	Leadership

M.M.S. Electives

The elective courses include, but are not limited to, the following (3 credits):

MMS	553	Automated Systems for Materials Processing
MMS	555	Advanced Control Applications for Automated Systems
MMS	557	Advanced Applications of Computer Integrated Manufacturing
MMS	570	Project Management
MMS	580	Special Topics in Manufacturing Systems
MBA	675	Production/Operations Management

MMS 510 Applied Research Methods

This course will prepare students to engage in a systematic method of inquiry when investigating problems commonly encountered in operational manufacturing environments. Topics include: formulating/defining problems, gathering data as related to similar problems encountered in the larger context of a manufacturing industry, gathering data as related to a specific problem of interest within a specific company, methods for organizing and displaying data, formulating research questions, integrating quantitative methods with the research process, data analysis, and decision making. Additional topics include: cost justification of applied research, presentation techniques, and manuscript preparation. Cr 3.

MMS 515 Engineering Economy

This course will expose students to a variety of topics related to financial resources as used in manufacturing operations. Topics include the time value of money, sources and costs of capital, project/alternative selection, and capital budgeting. Additional advanced engineering economy topics including project/asset valuation using real options, competition, project selection under risk and uncertainty, multi-attribute decision making, and sensitivity analysis. Prerequisite: MBA 604. Cr 3.

MMS 520 Quality Systems

This course will cover the functional requirements of quality systems as applied to manufacturing operations. Quality systems components commonly associated with assurance, control, and improvement functions will be a primary focus of the course. Applications of applied research methodology using quantitative methods to solve problems related to quality will be emphasized. Prerequisite: MBA 604. Cr 3.

MMS 525 Manufacturing Strategies

This course will explore issues impacting the com-

petitive posture of a variety of manufacturing industries. Topics include: operating and organizational structures, use of financial resources for competitive advantage, risk assessment, technology management, global operations, and emerging trends in operating policy. Cr 3.

MMS 530 DOE Applications in Manufacturing

This course will expose students to experimental design applications most commonly encountered in manufacturing. Topics include practical experimentation strategy, one-way designs, full and fractional factorial designs, selected screening and characterization designs, and use of JMP 5.1 software. Particular attention will be directed toward model selection and refinement, appropriate hand and computer-based calculation, analysis and interpretation of results, and using quantitative input in decision-making processes. Cr 3.

MMS 590 Thesis

The thesis is a study focused on solving a problem in an operational manufacturing environment. Theses for the M.M.S. degree must be quantitative in nature and be based on the application of an experiment design. Prerequisite: successful completion of all M.M.S. coursework and approval from the graduate advisor. Cr 6.

MBA 504 Probability and Statistics for Business Decision Making

An introduction to the concepts and use of probability and statistics as tools for business decision making. Prerequisite: computer proficiency, ABU 190, or ITT 181. *Students matriculated into the M.M.S. program have already met the prerequisites.* Cr 3.

MBA 508 Management Science

This course examines the role, perspective, and

commonly used tools of quantitative analysis in operational decision making. Emphasis is placed on 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, ABU 190, or ITT 181. 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 675 Production/Operations Management

An examination of the role of operations within manufacturing and service organizations. Emphasis is placed on 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.

College of Arts and Sciences

Master of Arts in American and New England Studies

Director: Ardis Cameron

Professors: Cameron, Cassidy, Conforti, Edney; *Associate Professors:* 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, art and architectural history, 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 students 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). Only students with an M.A. degree in the humanities or social sciences, or those holding a J.D., are exempt from this requirement.

2. Three letters of recommendation on standard application forms or stationery.

Application Deadline

Applications for the spring semester must be received by October 15. Applications for the fall semester must be received by January 15 to be considered for tuition waivers and by February 15 to be considered for graduate assistantships.

Applications received after these deadlines may be considered on a space-available basis through the end of March. 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-credit program that includes a thesis or project or they may follow a 36-credit program that does not include a thesis or project. Students who elect the 36-credit program must complete two research papers in elective courses. A third option is also available in Public Culture and History. Students take 27 credits in ANE and 9 credits in nonprofit management and internship. Students in this track also must complete two research papers in elective ANES courses.

30-Credit Program

Required Courses			Credits
ANE 600	Creating New England I		3
ANE 610	Creating New England II		3
ANE 675	Workshop in Research and Writing		3
ANE 690	Project		
	or		
ANE 695	Thesis		<u>6</u>
			15
Elective Courses			
Five courses chosen from ANE offerings			<u>15</u>
			30

36-Credit Program

Required Courses			Credits
ANE 600	Creating New England I		3
ANE 610	Creating New England II		<u>3</u>
			6
Elective Courses			
Ten courses chosen from ANE offerings			<u>30</u>
			36

Public Culture and History (36 credits)

Required Courses			Credits
ANE 600	Creating New England I		3
ANE 610	Creating New England II		3
ANE 670	Museums and Public Culture		<u>3</u>
			9

Elective Courses			
Six courses chosen from ANE offerings			18
One of the following 9-credit tracks:			<u>9</u>
			36
Track A			
ANE 687	Internship		3
2 courses in nonprofit management			6
	or		
Track B			
ANE 687*	Internship		3
ANE 687*	Internship		3
1 course in nonprofit management			3

*Internships must be at different institutions or in different areas of museum work (e.g., curatorial, educational).

Both the 30-credit and the 36-credit 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.

ANE 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: the invention of New England as a second England; the Yankee character; the New England town; the creation of regional traditions; and the perspectives of Native Americans and African Americans on narratives of New England identity. Cr 3.

ANE 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.

ANE 612 Documenting America: Ethnography and 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 film making, and oral history. Students will 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. Field work required. Cr 3.

ANE 615 Folklore and Region

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

ANE 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 com-

parative perspectives on the sense of place in other American regions. Cr 3.

ANE 622 Food: History, Culture, Politics

This course will explore the history, culture, and politics of food in America with a special emphasis on New England and regional differences. The course will examine colonial food ways including diet, food theft, trade patterns, and regional diversity; 19th-century health, sanitation, and temperance reforms; the rise of cooking schools, food writing, and regional cuisine; and contemporary issues such as fast and slow food, terminator seeds, organic farming, and the diet industry. Cr 3.

ANE 625 The West and the American Imagination

A prominent historian has observed that for the last 100 years the "West has been America's most strongly imagined region." This course will examine the 19th- and 20th-century West as an historic place and as an imagined region. It will explore the historical, cultural, geographic, political, and economic patterns that define the West as a distinctive region and look at the West in relation to other regions, particularly New England. Students will also analyze the place of the West in the American imagination, focusing on how popular culture, in varied forms, has shaped our understanding of this region. Cr 3.

ANE 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.

ANE 629 Ethnicity in New England and America

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.

ANE 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.

ANE 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.

ANE 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.

ANE 638 Reading the Cultural Landscape

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.

ANE 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.

ANE 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.

ANE 645 Women and Popular Culture

The relationship between women and the public realm has always been a source of intense controversy and debate. This course will explore these controversies as they unfolded over the nineteenth and twentieth centuries, beginning with efforts by white and African-American women to speak in public and concluding with debates over female consumption of romance fiction and daytime television. Topics include: prostitution and commercialized leisure, vaudeville and the female spectacle, working class girls and popular culture, youth culture and courtship, celebrity culture, television, women in sports, and the gendered automobile age. Cr 3.

ANE 648 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.

ANE 650 Topics in American and New England Studies

An in-depth study of a significant aspect of New England or American culture from an interdisciplinary perspective. Topics will vary from year to year. Recent topics have included: Native People of North America, Landmarks in American Nature Writing, and Women’s Captivity Narrative: Traditions and Transformations. Cr 3.

ANE 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.

ANE 657 Language and Print Culture in America

This course will examine 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, while also examining the specific nature of print as a medium of communication. Cr 3.

ANE 658 Visual Culture of 20th-Century America

This course will examine the production and circulation of visual images in twentieth-century American society, with a focus on the years 1900-1960. Students will examine varied image types, with an emphasis on painting, photography, advertising, and film, and how these images shaped the knowledge, experience, and culture of both New England and America. Cr 3.

ANE 660 New England Autobiography

This course examines 19th- and 20th-century New England autobiography; it focuses on works that illuminate aspects of regional experience. The readings represent diverse forms of autobiographical expression as well as essays that introduce contemporary approaches to the study of autobiography. The course emphasizes a historical-cultural reading of autobiography, relating issues of style, self-representation, the life cycle, gender, class, ethnicity, and place to particular historical contexts and cultural needs. Cr 3.

ANE 665 Sex in New England

This course will explore changes in the meaning and place of sexuality in American life and in the shaping of New England's identity and culture. Exploring primary and secondary sources, we will look at Puritan family life (and not so "puritanical" sexual behaviors), the sexual politics of witchcraft, divorce in colonial society, Utopian free love campaigns, same-sex intimacy and the conjoined emergence of homosexuality and heterosexuality, gay urban culture, the Boston marriage and the female world of love and ritual, commercialized sex and antiprostitution activity, rural vice campaigns, youth culture, literary sexology, the sexual revolution, and contemporary sexual politics. Cr 3.

ANE 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.

ANE 670 Museums and 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.

ANE 675 Workshop in Research and Writing

This course explores various modes of critical writing as they relate to contemporary practices and debates in American studies. It is run as a collaborative workshop; students will read and comment on drafts of each other's papers as a central element of the process of revision. By semester's end, students will have produced an extensive research paper or a thesis chapter. This course is required for students writing a thesis or project, but is also open to all students who have completed at least 15 hours of coursework. Prerequisite: 15 credits completed in the ANES program, including ANE 600 and ANE 610. Cr 3.

ANE 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 ANES Curriculum Committee is required. This course may be taken only once. Cr 3.

ANE 687 Internship

Open to qualified students with exceptional records in the program; required for students in the Public Culture and History track. Internships are by application to the ANES Curriculum Committee. Participating organizations include, but are not limited to, the Portland Museum of Art, Old York Historical Society, Pejepscot Historical Society, and Maine Historical Society. Pass/fail. Cr 3-6.

ANE 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.

ANE 695 Thesis

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

Master of Science in Biology

Coordinator: Jeffrey A. Walker

Professors: Gainey, Mazurkiewicz, Weber; *Associate Professors:* Champlin, Knight, Maher, Moore, O'Mahoney-Damon, Theodose, Walker; *Assistant Professor:* Currie; *Adjunct Professors:* Dionne, Duboise, Evers, D. Harris, Incze, Levine, Ng, Stockwell, Wilson, Wise

Program Description

The M.S. program in biology at USM is designed to meet diverse student interests and to provide additional preparation for careers in biology. The program is aimed at three groups: 1) students who wish to continue the scholarly pursuit of biology and possibly continue with a Ph.D. or M.D.; 2) students desiring laboratory or field experience to make them more competitive for employment; and 3) students who teach, or wish to teach, at the secondary, community college, or technical college levels.

To meet these needs, the M.S. program in biology offers a breadth of coursework, and a thesis requirement with an individualized approach. Coursework and research opportunities span the subdisciplines of cell and molecular biology, developmental biology, evolutionary genetics, physiology (animal, plant, and microbial), ecology (animal, plant, and microbial), and environmental science.

The student master's thesis, tailored to individual interests and falling within the research subdiscipline of a faculty mentor, is intended to provide experience in scientific investigation. Students are exposed to the current state of knowledge within the subdiscipline, and learn skills necessary for creative scientific inquiry. These include exploration and evaluation of the scientific literature, experimental design, implementation of original laboratory or field-based research, statistical analysis of data, and the writing of a publishable scientific paper.

Admission

Admission to the M.S. program in biology is competitive and has two basic requirements. First, applicants should have earned a baccalaureate degree from an accredited institution, preferably in some area of biology, with a minimum GPA equivalent to 3.0. Second, admission is also dependent upon a faculty member agreeing to serve as the primary faculty advisor to the student. Therefore, before applying to the program, students must become acquainted with the research interests of individual faculty in or adjunct to the Department of Biological Sciences (www.usm.maine.edu/bio) and contact those faculty members to discuss the possibility of working with them in the M.S. program in biology and identify the faculty member(s) in their essay.

Students who do not meet the first criterion, but who demonstrate exceptional promise, may be granted conditional admission, during which time they must compensate for any specific deficiency as determined by the Biology Graduate Admissions Committee. Upon successful completion of the conditions, conditional students can be granted regular admission status.

Application Materials

In addition to the materials described in the Admissions chapter of this catalog, applicants must submit the following information:

1. *Test scores* Official scores from the General Test of the Graduate Record Examination (GRE) are required. Official scores from the GRE Subject Test in Biology are recommended.
2. *Transcripts* Official undergraduate and graduate transcripts are required from any college or university attended.
3. *Essay* The essay should discuss your academic goals and anticipated research interests, and should include the name(s) of specific faculty members with whom you might like to work.
4. *Letters of recommendation* Three letters of recommendation are required from people who can evaluate your potential for success in a master's program in the biological sciences.

Application Deadlines

Applications and supporting materials must be received by February 1 in order to receive priority status for fall admission and consideration of departmental financial support. The application deadline for spring admission is October 15. Students applying for spring admission are less likely to obtain graduate assistantships in their first semester, because most financial aid will be distributed during fall admissions.

Program Policies

In addition to the general policies described in the Academic Policies chapter, this program also includes the following policies.

Transfer credits Graduate students may transfer a maximum of 9 graduate credits, earned within the past 5 years, with a grade of B- or better. Approval of transfer credits must be requested at the time of admission.

Time limit All courses for the M.S. degree must be completed within 5 years from the time of first matriculation. Students may apply to the program graduate coordinator for an extension, which must be approved by the Department graduate faculty.

Grade policy Students must earn a grade of B- or better for courses to count toward the M.S. degree. If the cumulative GPA drops below 3.0, the student will be placed on probation. Terms and conditions of probation will be determined by the student's Advisory Committee in consultation with the Office of Graduate Studies.

Eligibility for Financial Aid During Thesis Completion Stage

To be eligible for federal financial aid (including deferment of student loans), a matriculated student must be enrolled in a minimum of 6 graduate credits in the master's degree program. However, a student who has completed coursework and is engaged in finishing his/her thesis will be considered eligible if he/she meets *one* of the following conditions:

- Is enrolled in at least 6 graduate credits
- or**
- Is enrolled in less than 6 graduate credits, has obtained certification of satisfactory progress from the chair of his/her thesis committee, indicating that the student is actively progressing in the work leading to completion of the master's degree, *and* is registered for GRS 602 (*see course description at the end of this chapter*).

Program Requirements

During the first semester, students are required to declare a research topic and to arrange an Advisory Committee, with guidance from their primary faculty advisor. The Advisory Committee consists of the student's primary faculty advisor and at least two other faculty members, of which at least one must be a member of the Department of Biological Sciences.

The degree provides two thesis options: research and literature review. Most students are expected to produce a research thesis, based on an original research project. However, with approval of the student's Advisory Committee, a student may undertake the literature review thesis option, which requires writing a comprehensive analysis of a specific topic. All master's candidates preparing a research thesis must complete a minimum of 24 credits of coursework and 6 credits of thesis research. Candidates completing the literature review thesis option must complete 32 credits of coursework, which must include at least one laboratory course, and 3 credits of literature review. Coursework is determined individually for each student in consultation with the student's Advisory Committee.

All students must take four required courses (15-18 credits):

AMS 545	Applied Biostatistical Analysis
or	
STA 588	Introduction to Biostatistics
BIO 601	Research Methods in Biology
BIO 621	Graduate Seminar (minimum of 2 required)
BIO 698	Thesis Research
or	
BIO 699	Literature Review

Students also choose electives. To maintain breadth, electives are required in at least two of three areas (selecting from Genetics and Molecular Biology, Physiology, and Ecology and Evolution). Upon approval of the Advisory Committee, students also may take graduate-level courses in other departments.

At the end of the program, the thesis or literature review must be written in a form satisfactory to the Advisory Committee and suitable for submission to a peer-reviewed scientific journal, and the results must be presented in a seminar open to faculty, students, and the public. After the presentation, the student and Advisory Committee will meet to discuss details of the project, paper, and seminar.

The following courses satisfy the three program areas. Also, courses from other departments, specifically the Chemistry Department and Applied Medical Sciences Department, may satisfy some of the program areas.

Genetics and Molecular Biology

- BIO 507 Molecular Mechanisms of Animal Development
- BIO 508 Experimental Genetics
- BIO 509 Cell and Molecular Biology
- BIO 510 Cell and Molecular Biology Laboratory

Physiology

- BIO 501 General Physiology
- BIO 502 General Physiology Laboratory
- BIO 503 Comparative Physiology
- BIO 504 Comparative Physiology Laboratory
- BIO 545 Advanced Pathophysiology
- BIO 611 Endocrinology
- BIO 615 Plant Metabolism

Ecology and Evolution

- BIO 505 Animal Behavior
- BIO 506 Animal Behavior Laboratory
- BIO 511 Estuarine Ecology
- BIO 515 Microbial Ecology
- BIO 516 Microbial Ecology Laboratory
- BIO 517 Issues in Evolution

Laboratory Fees

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

BIO 501 General Physiology

A study of physiological processes and their regulation in animals. Cr 3.

BIO 502 General Physiology Laboratory

Laboratory examination of physiological mechanisms in animals. Cr 2.

BIO 503 Comparative Physiology

Physiological and biochemical basis of environmental adaptation. Cr 3.

BIO 504 Comparative Physiology Laboratory

Laboratory experiments on the physiological basis of environmental adaptation. Emphasis is on marine organisms. Cr 2.

BIO 505 Animal Behavior

This course is a study of the principles of behavioral organization in vertebrate and invertebrate animals, with emphasis on behavior under natural conditions. Cr 3.

BIO 506 Animal Behavior Laboratory

This course is a laboratory and field examination of behavioral principles in animals. Cr 2.

BIO 507 Molecular Mechanisms of Animal Development

A molecular genetic analysis of animal development focusing on an integrative approach toward understanding the evolution of developmental mechanisms. Cr 3.

BIO 508 Experimental Genetics

This course includes both lectures and laboratory exercises in human and fruit fly genetics. Cr 2.

BIO 509 Cell and Molecular Biology

A study of the eukaryotic cell at the level of organelles and molecules. The biochemical aspects of cell growth and reproduction are emphasized. Cr 3.

BIO 510 Cell and Molecular Biology Laboratory

A course in which the techniques of cell fractionation and biochemical analyses are applied to the eukaryotic cell. Cr 2.

BIO 511 Estuarine Ecology

Integrated lecture/field laboratory course focused on interactions determining the distribution and abundance of life in estuaries. Cr 3.

BIO 515 Microbial Ecology

This course is a continuation of the basic microbiology course (BIO 311). The course begins with an examination of microbial evolution and biodiversity, and explores the interactions of microorganisms in populations and communities, with other organisms, and with the environment, including an examination of physiological adaptations and biogeochemical cycles. Cr 3.

BIO 516 Microbial Ecology Laboratory

This companion lab course to BIO 515 Microbial Ecology is designed as a hands-on project lab to introduce students to a variety of methods used in microbial ecology. There are field, lab, and written components to the projects that will be carried out over the semester. Microscopic, cell culture, and molecular methods will be employed. Cr 2.

BIO 517 Issues in Evolution

This course surveys major issues that motivate current research in evolutionary biology, providing a historical analysis of active areas of controversy and alternative points of view. The course is based on selected readings in the theoretical and experimental literature of the field, from primary and classical sources. Cr 3.

BIO 545 Advanced Pathophysiology

This course is a study of physiological, genetic, biochemical, and environmental basis of diseases. Systems to be covered include reproductive, gastrointestinal, respiratory, cardiovascular, nervous, and skeletomuscular. Cr 3.

BIO 601 Research Methods in Biology

This course introduces students to faculty members' research. Students will study the philosophy of science, experimental design, data analysis and interpretation, and writing and assessment of scientific papers. Cr 3.

BIO 602 Ethical Issues in Biology

This course examines a variety of ethical issues arising in biology today, including those related to general scientific research, biotechnology, medicine, and the environment. Cr 2.

BIO 611 Endocrinology

This course examines hormone action in animals and plants at the molecular, cellular, organ, and organismal levels. Topics will include the endocrine control of development, behavior, and physiological processes. Cr 3.

BIO 615 Plant Metabolism

This is an advanced course on the regulation and integration of metabolism as viewed from a whole plant perspective. The course deals with primary metabolic pathways such as respiration, photosynthesis, nitrogen metabolism, and carbohydrate and lipid biosynthesis. Compartmentation of metabolic pathways and communication between cells, tissues, and organs via transport systems are discussed. Cr 3.

BIO 621 Graduate Seminar

This course reviews the literature pertinent to topics of biology. It may be repeated for credit as topics vary. Graduate students must complete at least two different seminars. Cr 1-3.

BIO 650 Internship

In this course, students apply their learning to a

practical context under supervision of a faculty member. Cr 1-3.

BIO 660 Graduate Independent Study

Independent work on a special topic as arranged by the student, advisor, and committee. Cr 1-6.

BIO 698 Thesis Research

This course involves thesis research and preparation. It may be repeated for credit, but no more than 6 cred-

its will apply to the degree. Enrollment is required each term in which the thesis is in progress. Cr 1-6.

BIO 699 Literature Review

This course involves preparation of a review paper based on current biological literature. Prerequisite: permission of the graduate advisor. Cr 1-6.

GRS 602 Thesis Completion

See the complete course description in the "Continuous Enrollment and Residency" section of the Academic Policies chapter. Cr 1.

Stonecoast Master of Fine Arts in Creative Writing

Director: Annie Finch

Associate Director: Robin Talbot

The Stonecoast low-residency M.F.A. program in creative writing draws on a faculty of nationally known writers of creative nonfiction, fiction, poetry, and popular fiction from across the United States. The M.F.A. is a two-year program, alternating intensive 10-day residencies with six-month independent writing projects supervised by faculty writers/mentors. The M.F.A. offers an interdisciplinary curriculum, including creative nonfiction, novel, poetry, popular fiction, and short story, with possibilities for elective work in such areas as writing for stage and screen, performance, writing about nature, and writing for young adults.

Low-residency programs give students significant flexibility in pursuing graduate work as they do not require a day-to-day presence on campus. The master of fine arts requires attendance at two 10-day residencies per year for two years. These residencies are considered the beginning of each semester. Residencies are held at the historic Stone House on the Maine coast and taught by faculty and visitors of national reputation who meet with students for a series of workshops, presentations, conferences, and readings. The winter residency will be held in January and the summer residency in July.

The Stonecoast M.F.A. also requires students to complete four semesters of intensive long-distance work with a faculty mentor/writer. Each semester following the residency, at prearranged intervals, students send packets of creative writing and critical essays to their mentors by mail or e-mail. Faculty respond with extensive, in-depth critiques of the student work.

Students complete a third-semester project in one of six emphases (craft, creative collaboration, publishing, social action, teaching, and theory) and write a creative thesis in their third and fourth semesters. Students must also attend a final graduation residency at which they give a reading of their work and participate in a panel or teach a class. Occasionally, leaves of absence will be approved for a maximum of two semesters.

Admission is highly selective; students will be accepted on the basis of manuscript samples and past educational experience in creative writing. Applications for the two annual admissions cycles are due on September 1 and February 1. Later applications may be considered in exceptional cases or until all places are filled.

The cost of the low-residency graduate writing program is \$5,998 per semester plus USM's unified fee and room and board. Tuition is subject to change without notice; however, we will post information about tuition changes as soon as it is available. There are openings in the program for commuter students. The fee structure for this long-distance learning program is separate from the usual USM graduate tuition. The M.F.A. does not charge a higher rate for out-of-state students. Some scholarships are available.

For further information, contact the Office of Graduate Admissions at (207) 780-4386 or gradstudies@usm.maine.edu, or the Stonecoast M.F.A. office at (207) 780-5262.

Each student must complete four workshop residencies and four semester projects along with a fifth graduation residency.

CRW 501 Residency Course I

An advanced workshop that focuses on the development of the student's writing through the use of faculty-guided workshops and topical seminars, round tables, panels, and readings, and discussion of major traditional and contemporary work in the genre. Workshop tracks include poetry, fiction, nonfiction, or popular fiction. Students are expected to submit an "in-progress" manuscript in advance of the residency. The manuscript(s) submitted will be analyzed during the faculty-guided workshops. Cr 6.

CRW 510 Poetry Semester Project I

The focus of this course, which immediately follows the first residency, is on the completion of a negotiated study plan developed between the student and the faculty member. As part of the study plan, students will be expected to exchange five packets of manuscripts with the faculty mentor. The packets will vary depending on the study track, but should include both creative work and critical annotations of readings. The faculty mentor will then respond with constructive critiques for revision as well as additional reading suggestions and relevant observations on craft and theory. Prerequisite: CRW 501. Cr 9.

CRW 520 Fiction Semester Project I

The focus of this course, which immediately follows the first residency, is on the completion of a negotiated study plan developed between the student and the faculty member. As part of the study plan, students will be expected to exchange five packets of manuscripts with the faculty mentor. The packets will vary depending on the study track, but should include both creative work and critical annotations of readings. The faculty mentor will then respond with constructive critiques for revision as well as additional reading suggestions and relevant observations on craft and theory. Prerequisite: CRW 501. Cr 9.

CRW 530 Creative Nonfiction Semester Project I

The focus of this course, which immediately follows the first residency, is on the completion of a negotiated study plan developed between the student and the faculty member. As part of the study plan, students will be expected to exchange five packets of manuscripts with the faculty mentor. The packets will vary depending on the study track, but should include both creative work and critical annotations of readings. The faculty mentor will respond with constructive critiques for revision as well as additional reading suggestions and relevant observations on craft and theory. Prerequisite: CRW 501. Cr 9.

CRW 540 Popular Fiction Semester Project I

The focus of this course, which immediately follows the first residency, is on the completion of a negotiated study plan developed between the student and the faculty member. As part of the study plan, stu-

dents will be expected to exchange five packets of manuscripts with the faculty mentor. The packets will vary depending on the study track, but should include both creative work and critical annotations of readings. The faculty mentor will respond with constructive critiques for revision as well as additional reading suggestions and relevant observations on craft and theory. Prerequisite: CRW 501. Cr 9.

CRW 502 Residency Course II

This course is considered to be the completion of the first year's residency requirements. See description of Workshop Residency I. Prerequisites: CRW 501 and completion of Semester Project I in student's chosen genre. Cr 3-6.

CRW 512 Poetry Semester Project II

The focus of this course, which immediately follows the second residency, is on the completion of a negotiated study plan developed between the student and the faculty member. As part of the study plan, students will be expected to exchange five packets of manuscripts with the faculty mentor. The packets will vary depending on the study track, but should include both creative work and critical annotations of readings. The faculty mentor will respond with constructive critiques for revision as well as additional reading suggestions and relevant observations on craft and theory. Prerequisite: CRW 502. Cr 9.

CRW 522 Fiction Semester Project II

This course immediately follows the second residency. The course focus is on the completion of a negotiated study plan developed between the student and the faculty member. As part of the study plan, students will be expected to exchange five packets of manuscripts with the faculty mentor. The packets will vary depending on the study track, but should include both creative work and critical annotations of readings. The faculty mentor will respond with constructive critiques for revision as well as additional reading suggestions and relevant observations on craft and theory. Prerequisite: CRW 502. Cr 9.

CRW 532 Creative Nonfiction Semester Project II

The focus of this course, which immediately follows the second residency, is on the completion of a negotiated study plan developed between the student and the faculty member. As part of the study plan, students will be expected to exchange five packets of manuscripts with the faculty mentor. The packets will vary depending on the study track, but should include both creative work and critical annotations of readings. The faculty mentor will respond with constructive critiques for revision as well as additional reading suggestions and relevant observations on craft and theory. Prerequisite: CRW 502. Cr 9.

CRW 542 Popular Fiction Semester Project II

The focus of this course, which immediately follows the second residency, is on the completion of a negotiated study plan developed between the student and

the faculty member. As part of the study plan, students will be expected to exchange five packets of manuscripts with the faculty mentor. The packets will vary depending on the study track, but should include both creative work and critical annotations of readings. The faculty mentor will respond with constructive critiques for revision as well as additional reading suggestions and relevant observations on craft and theory. Prerequisite: CRW 502. Cr 9.

CRW 601 Residency Course III

This course is considered to be the first half of the second year's program. See description of Workshop Residency I. Prerequisite: CRW 502 and completion of Semester Project II in the student's chosen genre. Cr 3-6.

CRW 610 Poetry Semester Project III

The focus of this course, which immediately follows the third residency, is on the completion of a negotiated study plan developed between the student and the faculty member. Each student undertakes a special project under the guidance of the mentor in one of five concentrations: craft, literary theory, interdisciplinary artistic collaboration, publishing, or literacy/community services. Prerequisite: CRW 601. Cr 9.

CRW 620 Fiction Semester Project III

The focus of this course, which immediately follows the third residency, is on the completion of a negotiated study plan developed between the student and the faculty member. Each student undertakes a special project under the guidance of the mentor in one of five concentrations: craft, literary theory, interdisciplinary artistic collaboration, publishing, or literacy/community services. Prerequisite: CRW 601. Cr 9.

CRW 630 Creative Nonfiction Semester Project III

The focus of this course, which immediately follows the third residency, is on the completion of a negotiated study plan developed between the student and the faculty member. Each student undertakes a special project under the guidance of the mentor in one of five concentrations: craft, literary theory, interdisciplinary artistic collaboration, publishing, or literacy/community services. Prerequisite: CRW 601. Cr 9.

CRW 640 Popular Fiction Semester Project III

The focus of this course, which immediately follows the third residency, is on the completion of a negotiated study plan developed between the student and the faculty member. Each student undertakes a special project under the guidance of the mentor in one of five concentrations: craft, literary theory, interdisciplinary artistic collaboration, publishing, or literacy/community services. Prerequisite: CRW 601. Cr 9.

CRW 602 Residency Course IV

This course is considered to be the second half of the second year's program. See description of Workshop Residency I. Prerequisite: CRW 601 and completion of Semester Project III in the student's chosen genre. Cr 3-6.

CRW 612 Poetry Semester Project IV

The focus of this course, which immediately follows the fourth residency, is on the completion of a negotiated study plan developed between the student and the faculty member. Each student completes a book-length creative thesis, and prepares for the student reading and for the teaching of a seminar or panel presentation during the fifth and final graduation residency. Prerequisite: CRW 602. Cr 9.

CRW 622 Fiction Semester Project IV

The focus of this course, which immediately follows the fourth residency, is on the completion of a negotiated study plan developed between the student and the faculty member. Each student completes a book-length creative thesis, and prepares for the student reading and for the teaching of a seminar or panel presentation during the fifth and final graduation residency. Prerequisite: CRW 602. Cr 9.

CRW 632 Creative Nonfiction Semester Project IV

The focus of this course, which immediately follows the fourth residency, is on the completion of a negotiated study plan developed between the student and the faculty member. Each student completes a book-length creative thesis, and prepares for the student reading and for the teaching of a seminar or panel presentation during the fifth and final graduation residency. Prerequisite: CRW 602. Cr 9.

CRW 642 Popular Fiction Semester Project IV

The focus of this course, which immediately follows the fourth residency, is on the completion of a negotiated study plan developed between the student and the faculty member. Each student completes a book-length creative thesis, and prepares for the student reading and for the teaching of a seminar or panel presentation during the fifth and final graduation residency. Prerequisite: CRW 602. Cr 9.

CRW 603 Graduation Residency

This residency is the culmination of the M.F.A. in creative writing degree program. Prior to the residency, a student must have submitted a creative thesis deemed by a faculty committee to be of publishable quality. At the residency, the student must lead a presentation or participate in a panel on an issue of craft, theory, publishing, teaching/pedagogy, interdisciplinary artistic collaboration, or literacy/community services. The student must also give a public reading from the creative thesis. Prerequisite: completion of Semester Project IV in the student's chosen genre. Cr 0.

Master of Music in Composition

Master of Music in Conducting

Master of Music in Jazz Studies

Master of Music in Music Education

Master of Music in Performance

Director, School of Music: E. Scott Harris

Professors: Fithian, Kargul, Martin, Russell; *Associate Professors:* Chickering, Harris, Kaschub, Keef, Parchman; *Assistant Professors:* Christiansen, Lehmann, Oberholtzer, Owens, Sonenberg

The University of Southern Maine School of Music offers music degrees in composition, conducting, jazz studies, music education, and performance. The School of Music is a fully-accredited member of the National Association of Schools of Music. With more than 55 full-time, part-time, and artist faculty, its impact on the cultural life of New England can be found in all areas of musical activity, from the elementary teacher to the professional performer. One will find USM School of Music graduates teaching on every level from pre-school to graduate school. Their expertise as teachers and/or performers is highly regarded and in great demand.

Admission

Contact the USM Office of Graduate Admissions for an application and instructions. Visit Graduate Admissions online at: www.usm.maine.edu/grad.

Every applicant for admission must submit:

- An application form.
- The application fee.
- Official transcripts of all previous college and university work.
- An essay of 300-500 words on your professional goals
- A professional résumé

In addition applicants to the School of Music graduate program must fulfill the following requirements prior to enrollment:

- A baccalaureate degree or its equivalent in music or music education
- An audition (by invitation only; see details below). Music education applicants submit additional materials in lieu of an audition.
- For studies in music education or conducting, one year or its equivalent of full-time teaching or conducting experience.

Applicants in *composition* must also submit:

- Scores of three representative works from three different performance media showing originality and technical competence.
- Recordings (CD, cassette, and/or VHS videotape) of three representative works (to correspond with scores above if possible).
- Complete list of works with first performances arranged chronologically.

Applicants in *conducting* must also submit:

- A videotape which contains at least 15 minutes of conducting, at least one-half of which should be of a performance.
- A representative repertoire of works performed.

Applicants in *jazz studies* must also submit:

- A representative repertoire of works performed.
- A recent recording that contains at least fifteen minutes of a live performance including a demonstration of your improvisational abilities.

Applicants in music education must also submit:

- A videotape that contains a 10-15 minute teaching sequence from a classroom or rehearsal setting. Videotapes of concert performances will not be accepted.
- A written, critical analysis of the teaching episode on the videotape.

- An essay of 1,000 words on a current topic in music education.
- Evidence of a baccalaureate degree or its equivalent in music education.

Applicants in performance must also submit:

- A complete repertoire, specifying those works that have been performed.
- A recent recording of a live performance.
- *Voice only* Show evidence of completion of two semesters or equivalent of undergraduate Italian and two semesters or equivalent of either undergraduate French or German; show evidence of completion of undergraduate courses in Italian, French, and German diction.

Music Audition

Once the Office of Graduate Admissions application is complete, the School of Music Graduate Studies Committee will review the materials and make a recommendation to the School's coordinator of graduate studies. The coordinator of graduate studies will contact applicants selected for an audition. Applicants will take a sight singing exam at the time of the audition. Each degree program has specific audition requirements outlined below. Acceptance into an area of study is exclusive to that area, and a separate application and audition is required for each area. Due to the intensive and individualized nature of a graduate program in music, admission in specific areas will be limited.

The *composition* audition:

A test of keyboard skills, ear training, and score reading is required.

The *conducting* audition:

Required

Choral: prepare a musical score(s) of at least 10 minutes duration, know its musical structure and be able both to conduct it, and to sing any musical line.

Orchestral: prepare the first movement of a Beethoven symphony, know its structure, and be able to conduct it.

Wind: prepare the Ralph Vaughan Williams "Folk Song Suite," know its musical structure, and be able to conduct it and to sing any musical line

Optional

Choral: play at the piano the following: a five-minute piece of at least the level of difficulty of a Clementi sonatina; all major and minor scales, hands together, two octaves; a Bach chorale at sight; "My country 'tis of Thee" in all keys with an improvised accompaniment of I, IV, V chords; sing two art songs, one in Italian and one in English.

Instrumental: perform a five-minute piece on an instrument of the applicant's choice that demonstrates a level of competence equivalent to a BM on that instrument.

Preference will be given to conductors who have performance expertise.

The *jazz studies* audition:

Prepare a 15-minute performance of jazz repertoire that is diverse in style and that shows improvisational abilities.

The *performance* audition:

Organ: perform three major works: one of J. S. Bach and one each from the 19th and 20th centuries; sight read an organ composition at the level of a Rheinberger trio.

Percussion: Timpani: play either an étude from Solo Timpanist (Vic Firth) or March (Carter); Drum: play an étude from First 12 Études for Snare Drum (Deleceuse); Mallets: play a 4-mallet solo and 3 orchestral excerpts.

Piano: perform from memory a major work of J. S. Bach (such as a suite, toccata, or prelude and fugue from the Well Tempered Clavier); a complete sonata by either Haydn, Mozart, or Beethoven; a major work from the 19th or 20th century; sight read a piano composition at the level of a Haydn sonata.

Strings: perform the first movement (or equivalent) of a standard concerto (with cadenza); perform one movement from a 19th or 20th century sonata; perform two contrasting movements from an unaccompanied work by Bach. It is recommended that at least one of the three excerpts be memorized.

Harp and guitar performers may substitute an advanced étude of their choice for one of the above categories.

Winds: perform a complete concerto or sonata from the Classical era; perform one composition each from the 19th and 20th centuries; perform six standard orchestral excerpts.

Voice: perform a 20-minute memorized recital of repertoire from various stylistic periods, including selections in Italian, French, German, and English; play at the piano the following chord progression: I, IV, V, I in all keys up to three sharps and three flats.

Information for Matriculated Students

Graduate Competency Exams

All incoming School of Music graduate students must pass competency exams in music theory, eartraining, and music history and literature. Composition majors will take an additional exam in orchestration. These exams will be graded pass/fail. Each exam may be taken no more than three times. Students unable to pass after three attempts must withdraw from the program.

Exit Requirements

Exit requirements are specific to each program. Please consult the faculty advisor in these programs for a list of requirements.

Special Requirements and Standards

All music graduate programs must be completed within six years from the date of matriculation.

Students must maintain a B average in all course work and must have no grade lower than B-. Students who receive grades lower than B- will be reviewed for retention in the graduate program. Jury reviews are scheduled each semester for majors in performance and jazz studies. Consult the School of Music for policies on jury review.

Each program requires that students demonstrate mastery in their primary area of study. Master of Music in music education students meet this requirement through the preparation of a professional portfolio or thesis. All other students meet this requirement through the presentation of one or more recitals. Consult the individual requirements below for more details.

The following conditions will apply to all recitals:

- Required recitals must be performed prior to taking the comprehensive exams
- Grading of the recital will be by a committee of no less than three jurors. The jurors will be drawn from the graduate faculty, the degree candidate's graduate advisor, and the degree candidate's private instructor.
- The candidate must receive a grade of B or higher on each recital. If the grade of B is not achieved, the candidate must perform another recital that contains at least 50 percent new material. If the grade of B or higher is not achieved at this recital retake, the candidate must petition the faculty to remain in the degree program.

Transfer credit Six graduate credits may be transferred to USM from another NASM-accredited college or university.

Admissions credit Additionally no more than six graduate credits for work earned at USM in the five years prior to matriculation may be credited to the master's degree.

Residency A one-year residency is required for wind and orchestral conducting, jazz, and most performance programs. Composition requires a two-year residency. Residency is not required in music education and choral conducting.

Programs of Study

Graduate Music Core Courses

All master of music students are required to take the following courses:

			<i>Credits</i>
MUS	520	Seminar in Music History	3
MUS	530	Seminar in Music Theory	3

All master of music students except those in music education are required to take the following course, and are advised to take it early in their course of study:

MUS	510	Bibliography and Research in Music	3
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Composition

Requires a minimum of 30 credit hours

MUP	603	Applied Music (composition)	12
MUP	690	Recital	0

MUS 526	Composition (20th Century Survey)	3
	Graduate music core courses	9
	Electives—Any MUS, MUP or MUE 500- or 600-level courses.	6

A two-year residency is required.

In addition to the general competency exams in history and theory, students in composition will be tested in all aspects of orchestration.

Composition majors must present one 60-minute lecture/recital in which program notes and compositional process are shared with the audience as verbal introductions to each work. The recital comprises 40 minutes of original music for a variety of mixed media composed while in residency for the degree. The composer will participate as performer on at least one work on the recital. In addition to the recital, the composer is encouraged to seek performances for his/her work elsewhere; only in exceptional cases might any part of this recital be substituted for outside work.

Conducting—Choral

Requires a minimum of 31 credit hours		<i>Credits</i>
MUP 603	Applied Music (choral conducting)	9
MUP 690	Recital	0
MUS 501	Chorale (2 sem.) or	1
MUS 505	Chamber Singers (2 sem.)	1
MUS 533	Advanced Analysis of Tonal Music	3
MUS 535	Advanced Aural Skills	3
	Graduate music core courses	9
	Electives—Any MUS, MUP, or MUE 500- or 600-level courses	6

Nine credits of applied music in choral conducting (three 3-credit courses) will be scheduled as private lessons and will be supplemented by rehearsal time with one of the University choral ensembles or other appropriate ensemble. Three substantial topics will be covered during the course of the applied study: choral-orchestral conducting, a research project to create a detailed program note, and a repertoire list.

The culmination of applied study in choral conducting will be a recital or its equivalent of at least 40 minutes of music. The ensemble for the recital and the recital program must be approved by the major advisor.

Conducting—Orchestral

Requires a minimum of 31 credit hours		<i>Credits</i>
MUP 603	Applied Music (orchestral conducting)	9
MUP 690	Recital	0
MUS 500	Orchestra (2 sem.)	1
MUS 533	Advanced Analysis of Tonal Music	3
MUS 535	Advanced Aural Skills	3
	Graduate music core courses	9
	Electives—Any MUS, MUP, or MUE 500- or 600-level courses	6

Nine credits of applied music in orchestral conducting (three 3-credit courses) will be scheduled as private lessons and will be supplemented by rehearsal time with the University Orchestra or other appropriate ensemble. A one-year residency is required.

The culmination of applied study in orchestral conducting will be a recital or its equivalent of at least 40 minutes of music. The ensemble for the recital and the recital program must be approved by the major advisor.

Conducting—Wind

Requires a minimum of 31 credit hours		<i>Credits</i>
MUP 603	Applied Music (wind conducting)	9
MUP 690	Recital	0
MUS 502	Concert Band (2 sem.) or	1
MUS 508	Wind Ensemble (2 sem.)	1
MUS 533	Advanced Analysis of Tonal Music	3
MUS 535	Advanced Aural Skills	3
	Graduate music core courses	9
	Electives—Any MUS, MUP, or MUE 500- or 600-level courses	6

Nine credits of applied music in wind conducting (three 3-credit courses) will be scheduled as private lessons and will be supplemented by rehearsal time with the Concert Band, Wind Ensemble or other appropriate ensemble. A one-year residency is required.

The culmination of applied study in wind conducting will be a recital or its equivalent of at least 40 minutes of music. The ensemble for the recital and the recital program must be approved by the major advisor.

Jazz Studies

Requires a minimum of 30 credit hours			<i>Credits</i>
MUP	603	Applied Music (jazz studies)	9
MUP	690	Recital	0
MUS	506	Chamber Music (jazz)	1
MUS	507	Jazz Ensemble	1
MUS	682	Chamber Jazz Ensemble Evolution and Analysis	2
MUS	683	Large Jazz Ensemble Evolution and Analysis	2
Graduate music core courses			9
Electives—Any MUS, MUP or MUE 500- or 600-level courses.			6

Nine credits of applied music in jazz studies (three 3-credit courses) will be scheduled as private lessons. These studies will be supplemented with two semesters of performance in a chamber jazz ensemble and two semesters of performance in a large jazz ensemble.

Students must present one recital for completion of their degree program. The recital will be comprised of no less than 60 minutes of repertoire which features the candidate as a soloist. The ensemble and the repertoire must be approved by the program advisor and/or the private instructor.

In addition to the general exit examinations in music history and music theory, candidates will be tested on topics in jazz studies. Sample questions are available for review and study.

Music Education

Requires a minimum of 32 credit hours			<i>Credits</i>
MUE	611	Introduction to Research in Music Education	3
MUE	612	Philosophical Bases of Music Education	3
MUE	613	Psychology of Music Teaching and Learning	3
MUE	614	Curriculum Development and Assessment	3
MUE	615	The Professional Portfolio	2
or			
MUS	695	Thesis	2
Graduate music core courses			6
Electives—Any MUS, MUP, or MUE 500- or 600-level courses			9

The music education program is designed to be completed in three summers with the exception of the Seminar in Music History and Seminar in Music Theory, which will be offered as evening courses during the academic year. Students are required to assemble a Professional Portfolio (MUE 615) or Thesis (MUE 695) as a capstone project for the degree. There is no residency requirement.

Music Education Professional Portfolio Requirements All students entering the master's program in music education are required to develop and maintain a portfolio based on their master's degree experiences. Portfolios are a way to focus on higher order thinking processes such as finding and solving problems, generating hypotheses, determining adaptations and applications, and relating learning to larger contexts. Furthermore, portfolios function as an extraordinary tool for increasing the efficiency of learning as each entry represents not only accomplishment, but directions for future study.

As such, portions of the portfolio may be viewed at various points throughout the program as individual components are created within core music education courses. The portfolio will be presented in its totality during the final oral examination.

The portfolio will be comprised of three sections:

I. Oral Examination

The oral examination will be scheduled through the coordinator of graduate studies within the School of Music. The student will present the milestones and domain

project portions of the portfolio to the examination committee as the capstone experience of the degree program.

II: Milestones

The milestones portion of the portfolio is designed to encourage students to reflect on all coursework completed as part of the masters program. Students are encouraged to review all coursework and identify three experiences that have been particularly meaningful in shaping a personal understanding of music or music education and in influencing future study and practice. Students should create a 1-2 page description of each milestone and be prepared to discuss the significance of the milestones with the oral examination committee.

III: Domain Projects

In this section students are encouraged to draw upon their experiences within the master of music program to create a set of question and essay projects that evidence knowledge from three different domains of study. Each domain project is organized as a 10-15-page answer to a question designed by the student in conjunction with their major advisor. Questions should be created and approved during the second summer of study for students following the three-summer master's plan.

Question 1 must cover some topic related to one or more of the four core music education courses. Question 2 must draw on MUE 595 coursework and relate to the student's area of professional emphasis (i.e., general music, choral music, instrumental music, technology, composition, conducting, etc). Question 2 material must relate to at least one MUE 595 course and may relate to other coursework as well. Question 3 will address a topic that is of particular interest to the student and which demonstrates the student's ability to apply knowledge gained in the master of music program to good teaching practice. Each project should be thoroughly researched, organized, and presented in a professional manner.

Music Education Thesis Requirements Students completing thesis work as the capstone project for the M.M. in Music Education degree will formulate a research plan with the program advisor.

Performance—Brass/Percussion

Requires a minimum of 30 credit hours

			<i>Credits</i>
MUP	603	Applied Music (brass/percussion performance)	12
MUP	690	Recital (2)	0
MUS	521	Literature of the Major Instrument	2
MUS	500/501/ 508	Orchestra/Chorale/Wind Ensemble	1
		Graduate music core courses	9
		Electives—Any MUS, MUP, or MUE 500- or 600-level courses	6

Performance majors in the areas of brass and percussion must present two full-length recitals for completion of their degree program. The recitals will include at least 60 minutes of solo repertoire. Chamber music may be included and must be approved by the graduate advisor (and/or the private instructor). The candidate must be a featured soloist in the repertoire.

Performance—Organ

Requires a minimum of 30 credit hours

			<i>Credits</i>
MUP	603	Applied Music (organ performance)	12
MUP	690	Recital	0
MUS	506	Chamber Music and/or Accompanying	1
MUS	518	Organ Literature I*	2
MUS	519	Organ Literature II*	2
		Graduate music core courses	9
		Electives—Any MUS, MUP, or MUE 500- or 600-level courses	4

*Organ Literature I and II must be taken unless equivalent courses have already been taken at the undergraduate level.

12 credits of applied music in organ (four semesters of 3 credits each) will be scheduled as private lessons. Students are required to take jury examinations in each semester of enrollment in organ until the recital is successfully completed. A one-year residency is required.

Students must present two complete recitals. One must be a lecture-recital, with a 30-minute lecture and 30 minutes of solo repertoire. The other must include 60 minutes of solo repertoire. Recital programs must be approved by the private instructor and/or the program advisor.

In addition to the general exit examinations in music history and theory, students must pass a proficiency exam in sight reading.

Performance—Piano

Requires a minimum of 30 credit hours			<i>Credits</i>
MUP	603	Applied Music (piano performance)	12
MUP	690	Recital	0
MUS	506	Chamber Music and/or Accompanying	2
MUS	524	Piano Literature I*	2
MUS	525	Piano Literature II*	2
Graduate music core courses			9
Electives—Any MUS, MUP, or MUE 500- or 600-level courses			3

*Piano Literature I and II must be taken unless equivalent courses have already been taken at the undergraduate level.

12 credits of applied music in piano (four semesters of 3 credits each) will be scheduled as private lessons and will be supplemented with studio class participation. Students are required to take jury examinations in each semester of enrollment in piano until the recital is successfully completed. A one-year residency is required.

Students must present one full-length solo recital from memory. The program, which must be approved by the program advisor, must include a minimum of 60 minutes of solo repertoire.

In addition to the general exit examinations in music history and theory, students must pass a proficiency exam in sight reading.

Performance—Strings

Requires a minimum of 30 credit hours			<i>Credits</i>
MUP	500	Orchestra	1
MUP	603	Applied Music (strings performance)	12
MUP	690	Recital	0
MUS	521	Literature of the Major Instrument	2
Graduate music core courses			9
Electives—Any MUS, MUP or MUE 500- or 600-level courses			6

Performance majors in the area of strings must present two full-length recitals for completion of their degree program. Each recital must include at least 60 minutes of music, one portion of which may include a collaborative ensemble, and must show a range and variety of historical styles (at least one piece must be from the 20th century). At least one major work on the program must be memorized. This is a graded recital in which a grade of B or better must be earned for credit.

Guitarists and harpists may, in consultation with their program advisor and studio teacher, fulfill the one-credit ensemble requirement by enrolling in other appropriate ensembles.

Performance—Voice

Requires a minimum of 32 credit hours			
MUP	603	Applied Music (voice performance)	12
MUP	690	Recital	0
MUS	522	Music Literature: Voice I	2
MUS	523	Music Literature: Voice II	2
MUS	535	Advanced Aural Skills	3
MUS	501	Chorale	1
or			
MUS	505	Chamber Singers	1
Graduate music core courses			9
Electives—Any MUS, MUP, or MUE 500- or 600-level courses			3

Students are required to take jury examinations in each semester of enrollment in voice until the recital is successfully completed. A one-year residency is required.

During the final semester of graduate study, the student will be required to present one complete recital from memory (minimum requirements: 60 minutes of music with no more than 12 minutes of ensemble performance) demonstrating evidence of interpretive skill and vocal technique in English, French, German and Italian repertory.

In addition to the general exit examinations in history and theory, students must pass Italian, French or German diction at the graduate level; pass a written comprehensive exam in vocal literature; an examination in sight singing ability; be able to sight read a simple choral accompaniment to a song; and accompany a singer with songs from a prepared list.

Minimum proficiencies

- Completion of 2 semesters of undergraduate Italian and 2 semesters of undergraduate French or German
- Diction pronunciation proficiency exam in French, Italian and German
- Ability to play at the piano: I, IV, V, I chord progression in keys up to 3 sharps and flats
- Ability to sight read a hymn or similar choral song accompaniment

Performance—Woodwinds

Requires a minimum of 30 credit hours

MUP 603	Applied Music (woodwinds performance)	12 cr.
MUP 690	Recital (2)	0 cr.
MUS 521	Literature of the Major Instrument	2 cr.
MUS 500/501/ 508	Orchestra/Chorale/Wind Ensemble	1 cr.
Graduate music core courses		9 cr.
Electives—Any MUS, MUP, or MUE 500- or 600-level courses		6 cr.

Performance majors in the area of woodwinds must present two full-length recitals for completion of their degree program. The recitals will include at least 60 minutes of solo repertoire. Chamber music may be included and must be approved by the graduate advisor (and/or the private instructor). The candidate must be a featured soloist in the repertoire.

In addition to the general final examinations in history and theory, candidates must pass an exam on woodwind literature and performance practice.

Certificate of Graduate Study

Composing Together is a 9-credit certificate of graduate study in teaching music composition. The certificate requires the completion of three courses and may stand alone or may constitute a sub-concentration with the M.M. in music education. The courses within the certificate program, *Composing Together: Level I* (MUE 621), *II* (MUE 622), and *III* (MUE 623), will develop the teacher as a composer and as a facilitator of children's composition in K-12 music classrooms, private and group lessons, computer laboratories, and rehearsal settings. Teachers will learn to design, implement, and assess composition units that they will be able to teach within their own school systems. *See course descriptions below.*

Admission

This certificate program is open to any student possessing an undergraduate degree in music. Applicants are required to submit an application and supporting documents. Please contact the USM Office of Graduate Admissions for an application and instructions.

MUE 595 Topics in Music Education

Course content will vary to represent the strengths of nationally recognized visiting guest faculty. Cr 3.

MUE 611 Introduction to Research in Music Education

Systematic research methods in music applied to individualized descriptive and experimental music research topics and critical evaluation of music research. Study of measurement theory, standardized tests, test construction and interpretation for music aptitude, achievement, performance, aesthetic response, preference, and appreciation. Cr 3.

MUE 612 Philosophical Bases of Music Education

Investigation of historical and current views on the art of music, the role of music in society, and the role of music in human experience. Cr 3.

MUE 613 Psychology of Music Teaching and Learning

Detailed study of topics concerning differential music behavior and perception. This course includes the mechanics of hearing, music memory, learning, and response, as well as an overview of researched teaching practices. Cr 3.

MUE 614 Curriculum Development and Assessment

Detailed study of catalysts for curricular change throughout all aspects of music education: reform, content and objectives, evaluation, human rights, multiculturalism, technology and development of a systematic approach to curriculum design and implementation. Cr 3.

MUE 615 The Professional Portfolio

Oral examination in music education. The oral examination will be scheduled after the completion of all coursework for the MUE master's degree. The student will present the milestones and domain project portions of his/her professional portfolio to a master's examination committee. See details on page 66. Cr 2.

MUE 621 Composing Together: Level I

This course assumes no prior experience in composing music and is designed for teachers who would like to learn the basics of music composition and composition instruction. Participants will learn how to design and implement beginner-level composition activities for students of all ages participating in music in general classroom, computer laboratory, lessons, and rehearsal settings. Cr 3.

MUE 622 Composing Together: Level II

For those who have taken Level I (or want to repeat Level II and desire reinforcement in the principles of teaching the intermediate-level composer). Participants will learn how to design and implement composition activities for students who already have some compositional skills and who are participating in music in general classroom, laboratory,

and rehearsal settings. The Level II course assumes prior experience in teaching music composition to students at the beginner level. This course will prepare teachers to introduce compositional techniques appropriate for students at the intermediate level. Participants will learn how to guide intermediate composers in the study of master composers through active analytical listening. Cr 3.

MUE 623 Composing Together: Level III

For those who have taken Level I and II (or want to repeat Level III and desire reinforcement in the principles of teaching the advanced-level composer). Participants will learn how to design and implement composition activities for students with advanced compositional skills who are participating in music in general classroom, laboratory, and rehearsal settings. The Level III course assumes prior experience in teaching music composition to beginner- and intermediate-level student composers. This course will prepare teachers to introduce compositional techniques appropriate for students at the advanced pre-college level. Participants will learn how to guide advanced composers in the creation of larger scale works. Cr 3.

MUS 510 Bibliography and Research in Music

A study of music reference and research tools, use of library resources and networks, and bibliographic style and technique. Cr 3.

MUS 516 Organ Improvisation I

This course will cover the basics of improvisation at the organ. The goal is to equip students with the skills needed in church situations. Hymns, chorales, and plainsong melodies will form the basis for learning to improvise preludes, postludes, and interludes in a variety of styles. This course will be scheduled as additional applied music time with an organ specialist. Cr 1.

MUS 517 Organ Improvisation II

This course is the continuation of MUS 516. It will be scheduled as additional applied music time with an organ specialist. Prerequisite: MUS 516. Cr 1.

MUS 518 Music Literature: Organ I

A survey of organ literature up to 1800. For organ majors only, others with permission of the School. Cr 2.

MUS 519 Music Literature: Organ II

A survey of organ literature from 1800 to present. For organ majors only, others with permission of the School. Prerequisite: MUS 518. Cr 2.

MUS 520 Seminar in Music History

In-depth study of one or more topics in music history. A substantial final project will be the culmination of both individual research and a synthesis and application of historical studies and approaches. Cr 3.

MUS 521 Literature of the Major Instrument

Advanced study of the literature for solo instrument. Chamber music will be considered when the performer is a featured soloist. Cr 2.

MUS 522 Music Literature: Voice I

Advanced indepth study of vocal literature to be determined by the teacher in the areas of German, French, Italian, Russian, or Spanish repertory. For voice majors only or with permission of the instructor. Cr 2.

MUS 523 Music Literature: Voice II

Advanced indepth study of vocal literature to be determined by the teacher in a contrasting area of study from Music Literature I. For voice majors only or with permission of the instructor. Cr 2.

MUS 524 Music Literature: Piano I

A survey of keyboard literature up to 1830. For piano majors only, others with permission of the School. Cr 2.

MUS 525 Music Literature: Piano II

A survey of keyboard literature from 1830 to the present. For piano majors only, others with permission of the School. Cr 2.

MUS 526 Composition (20th Century Survey)

This survey will cover the major trends, movements, styles, and philosophies that influenced the creation of contemporary concert music in the last century with an overview of current fashion. Cr 3.

MUS 530 Seminar in Music Theory

Advanced study of one or more topics in music theory, including both a reading and an analytical component, and the pedagogy of music. A substantial final project is required. Cr 3.

MUS 532 Counterpoint

Analysis and writing of tonal counterpoint. Emphasis is given to the study of canon, invention, fugue, chorale prelude, and continuous variations, using 18th-century works as models for composition. Cr 3.

MUS 533 Advanced Analysis of Tonal Music

Advanced study of analytical approaches to tonal music: parametric analysis, the analysis of phrase rhythm and hypermeter, and Schenkerian analysis. Cr 3.

MUS 535 Advanced Aural Skills

Advanced development of aural skills and the pedagogy of aural skills through the use of contextual listening examples, performance drills, and other ear training and sight singing techniques. Cr 3.

MUS 537 Jazz Composition/Arranging

Detailed study and analysis of music for small and large jazz ensembles including composing and arranging for a variety of instrumental combinations. Cr 3.

MUS 544 Instrumental Conducting

Stylistic study of scores from a variety of periods, advanced baton and left hand techniques, rehearsal

techniques, and conducting experience with instrumental ensembles. Cr 3.

MUS 545 Choral Conducting

Advanced development of non-verbal gestures through the art of choral conducting. The course includes musical analysis of choral scores, rehearsal techniques, and performance preparation. A research paper is required. Cr 3.

MUS 560 Advanced Keyboard Skills I

This course provides practical instruction in the advanced keyboard skills of score reading, transposition, harmonization of melodies, and realization of continuo. These performance skills will be taught with emphasis on the preparation of examples outside the class as well as the active participation by students in class. Cr 2.

MUS 561 Advanced Keyboard Skills II

The second semester continuation of Advanced Keyboard Skills I. Prerequisite: MUS 560. Cr 2.

MUS 562 Topics in Brass Studies

Critically and analytically pursue a topic of brass instrument study or performance either independently or in a group. Cr 3.

MUS 563 Topics in Keyboard Studies

Critically and analytically pursue a topic of keyboard study or performance either independently or in a group. Cr 3.

MUS 564 Topics in String Studies

Critically and analytically pursue a topic of string study or performance either independently or in a group. Cr 3.

MUS 565 Topics in Vocal Studies

Critically and analytically pursue a topic of vocal study or performance either independently or in a group. Cr 3.

MUS 566 Topics in Woodwind Studies

Critically and analytically pursue a topic of woodwind study or performance either independently or in a group. Cr 3.

MUS 567 Topics in Percussion Studies

Critically and analytically pursue a topic of percussion study or performance either independently or in a group. Cr 3.

MUS 570 Topics in Contemporary Music Technology

Intensive study of one or more areas of music technology in the context of producing music compositions, creating pedagogical multimedia applications, performing music with interactive applications, or recording and editing digital audio/video. A substantial final project is required. Cr 3.

MUS 572 Vocal Pedagogy

A study of the teaching methods and materials for

voice. Normally the voice sessions will be offered in alternate years. For performance majors. Other music majors only with permission of the School. Cr 2.

MUS 574 Jazz Pedagogy/Program

Administration

Pedagogical approaches to the analysis of jazz ensemble scores, rehearsal techniques, concert planning, public relations, recruiting, promotion, grant writing and other aspects of the development of a Jazz Studies program. Cr 2.

MUS 575 Pedagogy of the Major Instrument

A study of the teaching methods and materials for instruments, excluding piano. This class will be scheduled as additional applied music time with an instrumental specialist. For performance majors only. Other music majors with permission of the School. Cr 2.

MUS 576 Class Piano Teaching I

This course provides an overview of teaching group piano to adult beginners. Students spend the semester observing the teaching of MUS 150 Piano Class I and meet with the teacher weekly for discussion and additional instruction. Piano majors or permission of the School. Cr 2.

MUS 577 Class Piano Teaching II

This course is the second semester continuation of MUS 576 Class Piano Teaching I. Students observe the teaching of MUS 151 Piano Class II and meet with the teacher weekly for discussion and additional instruction. Students have the opportunity to teach the class under the instructor's supervision. Piano majors or permission of the School. Cr 2.

MUS 578 Pedagogy of the Major Instrument: Piano I

A study of the teaching methods and materials for piano. This class will be scheduled as additional applied music time with an instrumental specialist. For performance majors only. Other music majors with permission of the School. Cr 2.

Ensembles

MUS 500 Orchestra

A full symphonic ensemble open to all University students and community members through audition. The ensemble focuses on the skills required for ensemble performance through a variety of literature. The orchestra performs at least one major concert per semester. Cr 0.5.

MUS 501 Choral

A large choral ensemble of mixed voices open to all University students by audition. Cr 0.5.

MUS 502 Concert Band

A wind and percussion ensemble open to all University students through audition. The ensemble focuses on the fundamentals of ensemble performance dealing with a variety of literature. Prerequisite: audition. Cr 0.5.

MUS 579 Pedagogy of the Major Instrument: Piano II

This course is the second semester continuation of MUS 578. Students will observe weekly lessons, research and prepare repertoire and lesson plans, and evaluate their peers' teaching. Each student teaches at least one group lesson. This class will be scheduled as additional applied music time with an instructor. For performance majors only. Other music majors with permission of the School. Cr 2.

MUS 596 Topics in Jazz

Critically and analytically pursue a topic of interest independently or in a group. Cr 3.

MUS 598 Independent Study

A project requiring directed research and readings, culminating in a final document. Consent of the instructor required. Cr 3.

MUS 675 Jazz Chamber Music Coaching

Pedagogical approaches to coaching a chamber jazz ensemble. The ensemble will be under the direct coaching responsibility of the student. Cr 3.

MUS 682 Chamber Jazz Ensemble Evolution and Analysis

Advanced analysis and examination of the historical evolution of the chamber jazz ensemble, including detailed listening and critical discussion. Cr 2.

MUS 683 Large Jazz Ensemble Evolution and Analysis

Advanced analysis and examination of the historical evolution of the large jazz ensemble, including detailed listening and critical discussion. Cr 2.

MUS 694 Internship

A field application of theory and practice. The project will be jointly defined by student, professor, and employer. Graded CR/NC. Cr 3.

MUS 695 Thesis

Credit given on acceptance of thesis. Cr 0-3.

MUS 503 Percussion Ensemble

A percussion ensemble open to all University students through audition. Prerequisite: audition. Cr 0.5.

MUS 504 Opera Workshop

This ensemble will focus on the union of musical ideas with dramatic situations and will explore the ways in which singers must convey the essence of a dramatic situation. Performances of scenes from operas, operettas, and musical theater. Prerequisite: audition. Cr 0.5.

MUS 505 Chamber Singers

A small choral ensemble of mixed voices, selected by audition, specializing in a cappella singing. Cr 0.5.

MUS 506 Chamber Music

A performance course open to all qualified students

interested in forming chamber groups under faculty supervision. Cr 0.5.

MUS 507 Jazz Ensemble

An instrumental ensemble specializing in the study and performance of jazz for large and small groups from early jazz to the present. Open to all students by audition. Prerequisite: audition. Cr 0.5.

MUS 508 Wind Ensemble

The Wind Ensemble, based upon the solo performer premise, has established a tradition of performing chamber and large instrumentations, traditional or experimental combinations, and early through contemporary literature. Prerequisite: audition. Cr 0.5.

MUS 509 Harp Ensemble

A harp ensemble open to all University students by

audition. The ensemble focuses on the fundamentals of ensemble performance and plays literature of contrasting musical periods and styles. Prerequisite: audition. Cr 0.5.

MUS 511 Collegium

An early music ensemble dedicated to the performance of music from the Medieval through the Baroque period. This ensemble is open to singers and instrumentalists from the University and the general community. Prerequisite: audition. Cr 0.5.

MUS 552 Accompanying

A workshop course in applied accompanying, either under faculty supervision or by applied faculty approval. A half credit is awarded for each 20 hours of University-approved accompanying with a maximum of two credits per semester. Cr 0.5-2.

Applied Music

MUP 603 Applied Music, Major Area

Private instruction in the major area of study. May be repeated for credit. Fee assessed. Cr 3.

MUP 604 Applied Music, Secondary Area

Private instruction in a secondary area of study. May be repeated for credit. Fee assessed. Cr 2-3.

MUP 690 Recital

Public performance in the area of applied study. May be repeated. Cr 0.

Master of Social Work

Director: Vincent Faherty; *M.S.W. Coordinator:* Jeanette Andonian; *Field Work Coordinator:* Leslie Richfield; *Field Work Associate:* Pamela Murton
Professors: Faherty, Healy, Wagner; *Associate Professors:* Andonian, Fineran, Johnson, Kohli, Lazar, Moyo, Rich; *Lecturer:* Belicose

Mission Statement

The University of Southern Maine's School of Social Work is committed to educating culturally competent generalist social work practitioners prepared for multi-level, strengths-based practice that values the centrality of community in enhancing the well-being of diverse individuals, families, groups, organizations, and communities.

Program Description and Requirements

The M.S.W. program is accredited by the Council on Social Work Education (CSWE). The School of Social Work graduate program description and requirements contained in this online catalog are supplemented by two additional documents (i.e., the M.S.W. Handbook and the M.S.W. Field Work Manual) that can also be accessed online at www.usm.maine.edu/swo/manuals.htm and www.usm.maine.edu/swo/handbooks.htm. The Field Work Manual is also available for purchase at the campus bookstore. It is important to recognize that students will be held to the policies and standards in this catalog, the M.S.W. Handbook, and the Field Work Manual.

The first-year curriculum provides a broad-based introduction to the social work profession. Students take 31 credits of study. During the first semester, students complete the course, SWO 501 Multicultural Social Work, which provides a framework for integrating and centering the issue of diversity within the profession of social work. Courses taken during the foundation year are:

SWO	501	Multicultural Social Work
SWO	502	Critical Thinking about Human Behavior I
SWO	503	Generalist Social Work Practice I
SWO	504	Social Welfare Policy I
SWO	505	Social Work Research I
SWO	552	Critical Thinking about Human Behavior II
SWO	553	Generalist Social Work Practice II
SWO	554	Field Work and Field Seminar I
SWO	555	Field Work and Field Seminar II
		One Elective Course

During the second-year (i.e. concentration year), students deepen their competency for multi-level professional practice within the advanced generalist community social work curriculum. Increased emphasis is placed on the development of creativity, critical thinking, valuing diversity, social and economic justice, and leadership. Students are prepared to work with individuals and families as well as organizations and communities. During the concentration year, students complete 33 additional credits including two additional semesters of field work and three electives. In consultation with their advisor, students can select graduate electives in the School of Social Work and/or other University programs. No more than six graduate credits can be taken outside the School and elective courses should support the concentration in advanced generalist community practice and the individual student's career goals. Concentration year courses are:

SWO	603	Social Work Practice III: Organizations and Communities
SWO	604	Social Welfare Policy II
SWO	605	Social Work Research II: Social Data Analysis
SWO	651	Social Work Practice IV: Individuals and Families
SWO	652	Social Work Research III: The Research Project (or SWO 695 Thesis Option)
SWO	654	Field Work and Field Seminar III
SWO	655	Field Work and Field Seminar IV
		Two Elective Courses

Time Requirements

The graduation requirement for the M.S.W. degree is 61 credits, which can be taken in a two-year sequence or a four-year sequence. Students will be admitted as a cohort group either to the two-year or four-year sequence. In rare extenuating circumstances, an extension of the time requirement for completing the M.S.W. program may be granted (see the M.S.W. Student Handbook). The foundation year(s) field placement includes 500 hours and the concentration year(s) placement 600 hours.

The advanced standing program is 33 credits which is the concentration year of the M.S.W. program. Advanced standing students will be admitted either to the one-year or the two-year sequence. The field placement requirement for the advanced standing program is 600 hours.

Once enrolled in the program, a change in sequence requires approval of the M.S.W. coordinator. It should be noted that the two-year sequence and the one-year sequence in the advanced standing program are highly demanding and work other than part-time is discouraged.

Field Work

Field education is the heart of the M.S.W. program. Professional social work education provides the necessary opportunity for students to apply and integrate classroom learning with social work practice in the community. A range of challenging field work placements exists in innovative and well-established social service agencies throughout Maine. Any decision about the suitability of a proposed placement rests with the School of Social Work.

The field work component of the M.S.W. policies and procedures are detailed in the Field Work Manual that is available through the School of Social Work Web site or may be purchased at the campus bookstore. All M.S.W. students are responsible for following the policies outlined in the manual.

Application and Admission

All application materials must be sent directly to the Office of Graduate Admissions.

The graduate program in social work seeks candidates whose baccalaureate preparation, scholastic achievement, professional experience, interest, motivation, and references are predictive of successful completion of the M.S.W. program. Only candidates who have earned a bachelor's degree are admitted to the M.S.W. program. In addition to the materials described in the Admissions section of this catalog, the M.S.W. Admissions Committee's review of applications for admission will be based on a composite of the following standards:

1. Completion of a bachelor's degree with a GPA of 3.0 or above in undergraduate study and a student's major;
2. GPA of 3.0 or above in any previous graduate work in social work;
3. Personal statement of 4-6 pages following the outline provided by the School of Social Work and available through the Graduate Admissions Office Web site at www.usm.maine.edu/grad;
4. Three recent letters of reference reflecting on both academic achievement and paid or volunteer work experience relating to social services;
5. For advanced standing students, applicants must submit their previous final field evaluation received from a B.S.W. program accredited by the Council on Social Work Education. For students currently enrolled in accredited B.S.W. programs, mid-year evaluations must be submitted with the applications. Acceptance into the M.S.W. program will be conditional upon the receipt of the final field work evaluation.

In addition, the M.S.W. Admissions Committee will review each applicant's undergraduate coursework to determine whether any one or more of the areas specified below are under-represented:

1. At least 18 credit hours in liberal arts such as literature, math, history, philosophy, performing arts, and humanities,
2. At least 6 of the 24 credits must be in the social sciences, and
3. A statistics course.

Applicants who lack the above liberal arts courses can be accepted into the program conditionally. The expectations for meeting the conditions will be explained in the acceptance letter.

Advanced Standing

Applicants with a B.S.W. degree from a social work program accredited by the Council on Social Work Education may apply for advanced standing within 6 years of completing a B.S.W. degree. For example, a student graduating with a B.S.W. in May 2007 must be accepted into and begin the M.S.W. advanced standing program at USM no later than September 2014. Once in the program, advanced standing students are expected to follow the grade policy as delineated in the Grade Policy: Course Grades and GPA section below.

Admission Appeals

Applicants may appeal an admission decision by submitting a written appeal to the M.S.W. coordinator within 10 business days.

Graduate Assistantships and Scholarships

A limited number of graduate assistantships are available to M.S.W. students. Graduate assistants must carry a minimum of 6 credits of course work per semester. Duties may involve research and other projects for assisting faculty. Information on various types of scholarships and financial aid is available online at the School of Social Work Web site at www.usm.maine.edu/swo.

Transfer Students

Matriculated students who have earned graduate credits in a Council on Social Work Education accredited M.S.W. program may transfer up to 30 credits. To transfer credits, students must enroll in the graduate program at USM within 7 years of initially earning credits from another M.S.W. program. In order to transfer credits, the student must have received a grade of B or above.

Application Review Cycle

The School of Social Work instituted rolling admissions for the M.S.W. program effective during the 2009-10 admissions cycle. The following policy is constructed to guide this process.

Individuals may apply to the M.S.W. program at any time, and completed application files will be reviewed as they are received beginning on October 15. All applicants are strongly urged to apply as early as possible. Later applicants, if accepted, are more likely to be placed on a wait list.

Full Time Program Applicants

The Admissions Committee will continuously review applications for the full-time M.S.W. program, including advanced standing, from the beginning of the review cycle until February 20. Accepted students will need to begin the field placement process as early as possible in order to secure internships for the fall semester. If accepted, they must contact the M.S.W. field coordinator promptly to begin the field placement process in order to have access to the widest selection of field sites. Delaying this process may limit field placement options.

Part-time Program Applicants

Applications for the part-time program, including advanced standing, will be reviewed from the beginning of the review cycle until April 15. Applications completed after April 15 may be reviewed and considered should there be openings available, but this is not guaranteed. Applicants whose files are completed after April 15 should expect that review will most likely occur during the next application cycle.

Admissions Committee Decision and Applicant Response Timeline

Individuals with completed applications received between October 15 and April 15 can expect that their materials will be reviewed within four weeks from the date they are received by the Admissions Committee. Once applicants are notified of acceptance, they will have two weeks from the date on the acceptance letter to respond to the Graduate Admissions Office about attending. To secure a seat in the program, a \$200 deposit must be submitted with the notification form and sent to the Graduate Admissions Office. It is the responsibility of the applicant to respond within this time period and submit a deposit in order to reserve a seat in the program.

Program Policies

The following academic policies supplement and clarify academic policies detailed in the beginning of this catalog.

Advisement

Each student will be assigned a faculty advisor upon admission to the program. Students should maintain regular contact with their faculty advisors throughout their course of study. Additionally, students are required to meet with their advisors each semester before registering courses for a new semester. The advisement session includes discussion of career goals, progress in the program, elective course selection, and change of student status.

Grade Policy: Course Grades and GPA

All students must achieve a minimum of a B- grade for all prerequisites and all graduate courses. If students earn a grade lower than a B-, they may retake the course one more time to earn a passing grade. Students who earn a grade lower than a B- in more than one course may not progress in their studies without permission of the director of the School of Social Work. Students are required to earn a grade of B or above in social work practice and field work courses. If satisfactory completion of social work practice and field work courses is not achieved, an academic review process will be initiated according to the M.S.W. Student Handbook. Advanced standing students who receive a B- or lower grade in a social work practice course will be withdrawn from field placement and advanced standing status. The student may be permitted to continue in the program as a regular two-year student. A grade of F in a field work course will result in withdrawal from the University (see USM Withdrawal Policy).

If the cumulative GPA falls below a 3.0 (i.e. B average) in any semester, the student will be placed on probation. The student on probation will have the following semester to raise the GPA. A student on academic probation may not begin a field placement. If, after one semester the student's GPA has not improved to a 3.0, the student will be withdrawn from the program. A minimum GPA of 3.0 is required for graduation. Students may count only 3 credits of C in an elective course toward graduation. A cumulative GPA below 2.0 will result in withdrawal from the University (see USM withdrawal policy). Additionally, any advanced standing student whose GPA drops below 3.0 will not be able to register for field work until they raise their GPA to 3.0 or above. Students who receive a grade lower than B- or whose GPA drops below a 3.0 must contact their advisor or the School's director (if advisor is unavailable) within one week of receiving their grades.

Grade Policy: Incompletes

An incomplete grade must be changed to a full grade prior to progression to the next sequential course, unless an arrangement involving the student and the faculty has been agreed upon in writing. Students who do not complete the required work by the designated time will be ineligible for field practicum placement in September.

Academic Grade Appeal Policy

Refer to USM Grade Appeal Policy.

Leave of Absence and Deferment

Graduate students in the School of Social Work must be continuously enrolled in the M.S.W. program, with at least 6 credits every semester. Students who have completed all coursework and have opted to complete a thesis are required to register for GRS 601, a non-credit course that carries a fee and entitles the student to continued access to USM computers, library, and recreational facilities. In extenuating circumstances, a student may petition for a waiver of the continuous enrollment policy; the petition must obtain the approval of the student's advisor and M.S.W. coordinator. A waiver notification will then be sent to the Office of Graduate Admissions. Students who have been accepted into the program may apply to the M.S.W. coordinator to defer the admission for *one year only*. A deferment notification will be sent to the Office of Graduate Admissions. In order to maintain student status, all students must be enrolled in at least 6 credits toward the degree program, be enrolled in GRS 601, or on a formal approved leave of absence in each semester.

Non-Matriculated Status

Students may take up to 9 credits at USM on a non-matriculated basis. Non-matriculated students must register for SWO 501 as their first course. Other cours-

es non-matriculated students can select from are SWO 502, SWO 504, SWO 505, SWO 552, or an elective course with permission of the instructor.

It is especially important to note that non-matriculated students who are accepted into the M.S.W. program at a later date can receive credits for a total of 9 credits from USM and/or graduate schools including the School of Social Work. The School of Social Work also reserves the right to approve all courses taken outside of the USM School of Social Work to be counted toward the M.S.W. degree.

Program Scheduling

While the School of Social Work will make every effort to maintain consistency in its course offerings, it is important to note that the scheduling of courses are subject to change at any time without advance notice.

SWO 501 Multicultural Social Work

This introductory course provides content on culturally diverse populations and serves as the basis for the infusion of cultural diversity issues throughout the graduate curriculum. The premise of this course asserts that the United States is a multicultural society in which social work cannot function effectively unless there is an understanding of how diversity strengthens and enriches us all. Open to non-matriculated graduate students. Cr 3.

SWO 502 Critical Thinking about Human Behavior I

This course examines the theories which address human behavior in mezzo and macro systems. The cultural context of behavior at all levels is an integral and underlying theme of the course. Systems theories, conflict theories, and social constructionist theories are presented. Open to non-matriculated graduate students. Cr 3.

SWO 503 Generalist Social Work Practice I

This course provides the student with an opportunity to acquire beginning generalist practice knowledge and skills in working with individuals, families, groups, and communities. Emphasis is placed on the development of basic practice, interpersonal, self-reflection, and communication skills. Corequisite or prerequisite: SWO 501. Cr 3.

SWO 504 Social Welfare Policy I

This introductory policy course provides an overview of the history of social welfare as well as an introduction to current social policy issues and dilemmas. Emphasis is placed on historical continuities in analyzing the American system of social welfare provision and lack of provision. Corequisite or prerequisite: SWO 501. Open to non-matriculated graduate students. Cr 3.

SWO 505 Social Work Research I

This course introduces a body of knowledge, skills, and attitudinal perspectives designed to produce a high level of competence in the use of social scientific methods of knowledge building. Structured, analytical processes of inquiry are introduced, as well as a rigorous adherence to social work values and ethics. Both qualitative and quantitative methods of inquiry are discussed. Prerequisite: SWO 501. Open to non-matriculated graduate students. Cr 3.

SWO 552 Critical Thinking about Human Behavior II

The course is designed to locate the interplay of biological, psychological, and sociological influences on human behavior within the broader context of culture. Cultural diversity and oppression are seen as central to understanding human behavior and evaluating human behavior theories. The course explores a range of psychological theories such as psychodynamic, narrative, cognitive, and behavioral to understand the person within the complexity of his/her life circumstances. Prerequisites: SWO 501, SWO 502. Open to non-matriculated graduate students. Cr 3.

SWO 553 Generalist Social Work Practice II

The knowledge, values, and skills for community social work are integrated throughout this course. Ecosystems and social construction theories provide the overarching framework. Within this context, methods for intervening with individuals, families, groups, organizations, and communities are introduced. Prerequisite: SWO 503. Cr 3.

SWO 554 Field Work and Field Seminar I

A graduate internship in an approved community agency, designed to relate social work theory to practice under professional supervision. Fall semester. Corequisite or prerequisite: SWO 503. Cr 3.5.

SWO 555 Field Work and Field Seminar II

A continuation of SWO 554. Spring semester. Corequisite or prerequisite: SWO 553. Cr 3.5.

SWO 561 Sexual Diversity and Gender Identity in Social Work Practice

This course examines the sensitivity and skills needed to achieve constructive interaction between the social work professional and persons who are lesbian, gay, bisexual, transgender, or questioning their sexual identity. This course will explore the many controversial theoretical and practice issues related to sexual orientation, gender identity, and human sexuality. This course is an elective in both the undergraduate and graduate social work programs. Cr 3.

SWO 563 Social Work with Groups

This course incorporates knowledge building regarding the conceptual base and practice skills of social group work. There is a focus on the uses of groups to bring about change in the individuals, change in the social environment, or change in the larger social system. The range of group models from treatment/growth oriented to task/action oriented groups are addressed. Prerequisite: SWO 553. Cr 3.

SWO 575 Gender and Aging

A theoretical and practical course that informs students about aging issues affecting women and men differentially. Students will analyze the manifestations of aging and apply concepts drawn from the behavioral and social sciences. Service learning experience may be available. This course is an elective in both the undergraduate and graduate social work programs. Cr 3.

SWO 585 Sexual Abuse of Children and Adolescents

This course introduces the specialized knowledge and skills needed for social work practice relative to child sexual abuse, with a strong focus on understanding the dynamics when sexual abuse occurs in trusted relationships within families, organizations, and institutions. The course provides students the opportunity to integrate current research and theories around etiology, impact, and treatment within issues of resiliency, family strength, social support systems, diversity, value dilemmas, and social justice. This

course stresses the need to base a practice approach on the holistic strengths-risks-based assessment of the child and the family and highlights the collaborative roles various providers play at all levels of the response systems including investigation, validation, intervention, and prevention. Cr 3

SWO 591 Mind/Body/Spirit Connections in Social Work Practice

Examines mind/body/spirit connections in social work practice with regard to stress and its management (meditation, breath-control, other relaxation techniques), stress-related illnesses and personalities; complementary therapies (mainstream and culturally specific); and spirituality. This course is an elective in both the undergraduate and graduate social work programs. Cr 3.

SWO 596/696 Topics in Diversity

A variety of elective courses under this title are offered to facilitate students' development of competency in working with different population groups such as those oppressed by race and ethnicity, language, nationality, social class, gender, sexual orientation, mental and physical ability, spiritual and religious affiliation, and other factors. Prerequisite: SWO 501 or equivalent as determined by the instructor. Additional prerequisite may be required for some elective courses. Cr 3.

SWO 597 Independent Study

This is an individualized course of study, during the foundation year, on some aspect of social work or social welfare to be selected as a result of consultation between a student and a faculty member. Cr 1-3.

SWO 598/698 Topics in Community Social Work Practice

A variety of elective courses under this title are offered to cover a wide spectrum of micro and macro practice issues. These courses facilitate students' exploration of new practice areas or enhancement of advanced practice skills. Prerequisite: SWO 503 or equivalent as determined by the instructor. Additional prerequisite may be required for some elective courses. Cr 3.

SWO 603 Social Work Practice III: Organizations and Communities

This course builds on the concepts presented in Practice I and II. This course further develops students' generalist values, knowledge, and skills for planned change with a particular focus on work with populations of special concern to social work. The course content emphasizes practice within communities and organizations. Prerequisites: SWO 553, SWO 555. Cr 3.

SWO 604 Social Welfare Policy II

This course provides a theoretical and critical model of analyzing policy processes. It contains an overview of policy analysis with particular emphasis on social conflict theory and social construction-

ist theories of policy formation. Prerequisites: SWO 504, SWO 554, SWO 555. Cr 3.

SWO 605 Social Work Research II: Social Data Analysis

This course provides an interactive learning environment in which students learn to analyze quantitative and qualitative existing social data. The goal of this course is to increase the analytical competencies of students in the planning, and eventual execution, of a community-based research project. Prerequisite: SWO 505. Cr 3.

SWO 651 Social Work Practice IV: Individuals and Families

This course contextualizes the facilitation of change with individuals and families within organizations and communities. Approaches to social work practice are taught within an ecosystems, strengths-based framework that reflects a commitment to the values of social and economic justice, cultural diversity, and individual and collective self-determination. Corequisite or prerequisite: SWO 603. Prerequisite: SWO 555. Cr 3.

SWO 652 Social Work Research III: The Research Project

This course involves the utilization of the research knowledge and skills learned in SWO 505 Social Work Research I and SWO 605 Social Work Research II, and their application to selected social problems or issues of relevance to the needs of special populations or to the social work profession. Prerequisite: SWO 605. Cr 3.

SWO 654 Field Work and Field Seminar III

A graduate internship during the concentration year at an approved community agency, designed to relate social work theory to practice under professional supervision. Fall semester. Corequisite or prerequisite: SWO 603. Cr 4.5.

SWO 655 Field Work and Field Seminar IV

A continuation of SWO 654. Spring semester. Corequisite or prerequisite: SWO 651. Prerequisite: SWO 654. Cr 4.5.

SWO 660 Advanced Biopsychosocial Assessment

This course is designed to facilitate the acquisition of practice skills specific to in-depth biopsychosocial assessment. Assessment is viewed as the process of understanding a person in order to formulate a practice approach rather than a fixed descriptive category. This course relies heavily upon theories presented in SWO 502 and SWO 552. Consideration of persons within a cultural context is emphasized throughout. Cr 3.

SWO 695 Thesis Option

In lieu of SWO 652, students may apply to the Research Sequence Curriculum Committee for permission to take the Thesis Option. This option pro-

vides structure and assistance to students wishing to complete a formal thesis rather than a research project. Upon completion, the student will present a verbal summary of the thesis at a formal thesis defense meeting. This option may be especially attractive for those students contemplating advanced doctoral-level education in social work or in other social sciences. Cr 6.

SWO 697 Independent Study

This is an individualized course of study, during the concentration year, on some aspect of social work or social welfare to be selected as a result of consultation between a student and a faculty member. Cr 1-3.

Master of Science in Statistics

Director: Muhammad El-Taha

Professors: El-Taha, Guay, Gupta; *Associate Professors:* Peng, Valdés; *Assistant Professors:* Aboueissa, McCormick; *Adjunct Professor:* Thompson

The graduate program in statistics is designed to provide students with a broad knowledge of the concepts and practice of statistics and related fields. Students are prepared to assume positions of responsibility and expertise. Graduates may find employment involving diverse statistics-related activities in business, industry, government, regulatory agencies, insurance companies, biotechnology firms, and marketing research firms. Graduates possess a good foundation to pursue further advanced studies in statistical sciences and allied disciplines.

Program Description

The graduate program is offered in a flexible 4+1 format where currently enrolled undergraduate students in mathematics and other disciplines at USM may earn both an undergraduate degree and the M.S. degree in statistics in five years. Candidates planning to earn both the undergraduate and the graduate degrees in five years are advised to take MAT 281 Probability and MAT 282 Statistical Inference in the sophomore year, take upper-level undergraduate courses in relevant concentrations in the junior year, and take graduate-level courses in the senior year. The student will receive graduate standing (full matriculation) after satisfactory completion of all requirements for the undergraduate degree. Candidates holding baccalaureate degrees from accredited institutions may join the program directly at the master's level.

Admission Requirements

Applications from students with undergraduate degrees in business, computer science, education, mathematics, statistics, engineering, or one of the behavioral or social sciences are encouraged. It is required that the applicant has completed the following USM courses: MAT 153 Calculus B, MAT 281 Probability, and MAT 282 Statistics or their equivalents. Conditional admission status may be granted to students who do not fully meet these requirements, but have a good working knowledge of statistical methods. Upon successful completion of preparatory coursework, the student will be granted regular admission status.

Currently enrolled students at USM may apply for admission anytime after attaining junior standing by applying directly to the Office of Graduate Admissions. Additional requirements include copies of all transcripts, current vitae, a personal statement, a GPA of 2.75 or better, and two letters of recommendation.

A student already holding a baccalaureate degree from an accredited institution may apply directly to the Office of Graduate Admissions. Additional requirements include copies of all transcripts, current vitae, a personal statement, a GPA of 3.0 or better, GRE scores, and three letters of recommendation. Applicants whose first language is not English are required to submit TOEFL scores.

Application Deadlines

The program has a rolling admission policy. However, deadlines for candidates seeking financial support are March 15 for the fall semester and October 15 for the spring semester. Students applying to the graduate program by January 15 are eligible to apply for a tuition waiver for the next academic year.

Degree Requirements

The graduate program has three tracks. The highlight of the program is the new Professional Science Master's Program in Biostatistics. The other two tracks are Applied Statistics and Operations Research/Applied Mathematics.

Program Tracks

The graduate program is truly interdisciplinary, providing the student with the opportunity to tailor programs specifically to individual interests. Students may customize their program of study. A list of possible concentrations and relevant courses is listed below:

1. Track One: Professional Science Master's Program in Biostatistics

The University of Southern Maine is offering a new Professional Science Master's (PSM) program as part of the Master's of Science in Statistics. The PSM is a new

type of two-year graduate program in the sciences and mathematics that equips students for work in public and private business sectors.

This track provides formal training in applied statistical methods that are commonly used in biomedical, bioinformatics, environmental, and health-related fields. The program emphasizes solving real-world problems that influence health by focusing on up-to-date statistical methodologies and their implementation with strong statistical programming capability. The areas of study include biostatistical study designs, modeling, and the reporting of rigorous statistical results for scientific decision making. Statistical areas of study include clinical trials, experimental design, categorical and longitudinal data analysis, and survival analysis. Internship, technical writing, and management skills are required components of the program. Graduates will ideally find positions in professional settings such as health care agencies, governmental agencies, and the pharmaceutical industry, among others.

Requirements for Biostatistics Track

I. Core Courses: 15 credits

AMS	535	Epidemiology (3 cr)
AMS	677	Regression Models in Biostatistics (3 cr)
or		
STA	587	Categorical Data Analysis (3 cr)
STA	574	Statistical Programming (3 cr)
STA	580	Applied Statistical/Biostatistical Methods (3 cr)
STA	583	Sample Survey Design and Analysis (3 cr)

II. Extra Disciplinary Credits: 5 credits

Ethics

STA	501	Ethical Issues in Biostatistics (2 cr)
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Management. Select one of the following courses;

MBA	670	Management Science (3 cr)
HPM	636	Health Information Management (3 cr)
OPR	561	Deterministic Models in Operations Research (3 cr)

III. Practical Experience: 3 credits

STA	575	Graduate Internship and Writing (3 cr)
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IV. Electives: Choose 9 credits of the following

STA/OPR	562	Stochastic Modeling (3 cr)
STA/OPR	563	Simulation Modeling and Analysis (3 cr)
STA	582	Introduction to Longitudinal Data Analysis (3 cr)
STA	584	Advanced Design and Analysis of Experiments (3 cr)
STA	585	Linear Models and Forecasting (3 cr)
STA	589	Survival Analysis (3 cr)
STA	591	Topics in Biostatistics (3 cr)

2. Track Two: Applied Statistics

Required Courses:

STA	574	Statistical Programming (3 cr)
STA	580	Applied Statistical/Biostatistical Methods (3 cr)

Choose from these additional courses:

STA/OPR	562	Stochastic Modeling (3 cr)
STA/OPR	563	Simulation Modeling and Analysis (3 cr)
STA/OPR	575	Graduate Internship and Writing (var cr)
STA	581	Statistical Quality Control (3 cr)
STA	582	Introduction to Longitudinal Data Analysis (3 cr)
STA	583	Sample Survey Design and Analysis (3 cr)
STA	584	Advanced Design and Analysis of Experiments (3 cr)
STA	585	Linear Models and Forecasting (3 cr)
STA	587	Categorical Data Analysis (3 cr)
STA	589	Survival Analysis (3 cr)
STA	591	Topics in Biostatistics (3 cr)

3. Track Three: Operations Research/Applied Mathematics

Required Courses:

OPR	561	Deterministic Models in Operations Research (3 cr)
OPR/STA	562	Stochastic Modeling (3 cr)
OPR/STA	563	Simulation Modeling and Analysis (3 cr)
STA	580	Applied Statistical/Biostatistical Methods (3 cr)

Choose from these additional courses:

OPR/STA	564	Queueing Networks (3 cr)
OPR/MAT	571	Graph Theory (3 cr)
OPR/STA	575	Graduate Internship and Writing (var cr)
STA	581	Statistical Quality Control (3 cr)
STA	582	Introduction to Longitudinal Data Analysis (3 cr)
STA	583	Sample Survey Design and Analysis (3 cr)
STA	584	Advanced Design and Analysis of Experiments (3 cr)
STA	585	Linear Models and Forecasting (3 cr)
STA	587	Categorical Data Analysis (3 cr)
STA	589	Survival Analysis (3 cr)
STA	591	Topics in Biostatistics (3 cr)

Requirements for Tracks Two and Three

The requirements for the M.S. degree in statistics consist of a minimum of 30 credit hours. At least 18 credit hours must be graduate courses offered by the graduate program, excluding graduate internship credits, independent study credits, or thesis/project credits. A student meeting the above requirements has the flexibility of taking additional courses subject to the following policies: at most six of the required credits may be earned by taking pre-approved relevant upper level undergraduate courses. Moreover, the student may earn up to three credits by way of internship with local industry. The program will provide guidance in locating internship opportunities.

Requirements for All Tracks

In addition to the specific track requirements all degree students will be subject to the following requirements.

1. For students within the 4+1 format, at most two pre-approved relevant graduate courses may be used for both the undergraduate and graduate degrees. At least 18 credit hours should be taken by students after full matriculation.
2. All courses applied toward the graduate degree must be completed within six years of enrollment in the graduate program with a cumulative GPA of 3.0 or better. Otherwise, additional coursework must be taken to fulfill program requirements.
3. Our program policies allow a student to earn up to three graduate independent-study credits under the supervision of a faculty member associated with our graduate program. With the approval of the graduate committee, a student may transfer a maximum of six credit hours for graduate work completed at other institutions or in other graduate programs at USM, including those listed in concentrations.
4. A student must register for at least one course every semester 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. Students who anticipate being unable to take classes may apply in writing for a fixed-term leave of absence.
5. A student whose grade point average (GPA) falls below 3.0 will be placed on academic probation. In this case a student will be allowed 12 semester hours to raise their GPA to, or above, the 3.0 minimum by taking only graduate-level courses. Students unsuccessful in raising their GPA during a probationary period may be dismissed from the program.

Master's Thesis Project Procedure

Students can earn up to 6 credits by completing a master's thesis/project. If a student chooses to do a master's thesis/project, he/she must select one of the following:

Option I: Master's Thesis. The student must write a master's thesis (STA/OPR/MAT 590).

Option II: Master's Project. The student must complete a master's project (STA/OPR/MAT 590).

Once an option has been selected, the student with his/her advisor must submit a proposal to the Graduate Committee for approval. The thesis/project must be approved by the Graduate Committee in advance.

Once the thesis/project topic has been approved by the Graduate Committee, the student must select a Thesis/Project Committee in consultation with his/her advisor. The Thesis/Project Committee will consist of at least three members, including the advisor. At most, one member of the Thesis/Project Committee may be from outside the Department of Mathematics and Statistics. The Graduate Committee will approve the Thesis/Project Committee.

Although the thesis/project work will be done under the direct supervision of the advisor, the student is expected to keep all committee members apprised of its progress. Once the thesis/project is completed, the student will produce a document describing his/her work. This document must adhere to the format specified by the Graduate Committee. Each Thesis/Project Committee member must be supplied with a copy of this document for review and approval at least two weeks before the intended date of defense.

The defense of the thesis/project should occur no less than 60 days after the approval of the Thesis/Project Committee and will consist of an oral presentation of its content to the University community. The Master's Thesis/Project requirement will be considered fulfilled when the thesis/project has been defended and the final document has been approved by all members of the Thesis/Project Committee.

The entire procedure for the fulfillment of the Master's Project requirement is the same as in the Master's Thesis, except that the project may be in the form of an expository paper in an area of mathematics/statistics/operations research, or it may be a solution of a practical problem in one of these areas, possibly related to the student's employment.

Financial Aid

A limited number of teaching assistantships and tuition waivers is available to students receiving regular graduate admission. Requests for an assistantship and/or a tuition waiver should accompany the application.

Graduate Certificate in Statistics

The Department also offers a graduate certificate in statistics for those candidates who are interested in attaining a working knowledge of statistical methodologies. Interested candidates should apply to the Graduate Admissions Office and submit current vitae, 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 153, MAT 281, MAT 282 or their equivalents. To earn the graduate certificate, a candidate must earn a minimum of 15 credits in statistics, at least 12 of which are at the graduate level. A cumulative GPA of 3.0 or better is required in these courses, and they must be completed within six years of enrollment (which is defined as the date when the application for admission to the graduate certificate is accepted by the Graduate Committee). Courses taken for the certificate may also be used toward the master's degree in statistics, as long as they are completed within six years of enrollment in the graduate program (Master of Science in Statistics).

Note: Academic matters not addressed by the *Program Description* should be referred to the Graduate Committee in writing (official letter) for prompt resolution.

MAT 501 Ethical Issues in Biostatistics

This course examines a variety of ethical controversies in biotechnology, medicine, and the environment. It also examines the major ethical principles in conducting biomedical research including ethical aspects related to the production and use of biomedical statistical analyses. Cr 2.

OPR/MAT 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.

OPR/STA 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.

OPR/STA/MAT 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.

OPR/STA 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/OPR 571 Graph Theory

This course considers various properties of graphs and digraphs and includes applications to optimization questions and networks. Prerequisite: MAT 290 or permission of instructor. Cr 3.

STA 574 Statistical Programming

This course focuses on statistical programming using software SAS and/or STATA. Topics include, but are not limited to, data management, database programming, statistical graphics, generating statistical reports, Basic statistical procedures (routine), modi-

fying and creating MACROS (Routines) for non-standard statistical methods, etc. Prerequisite: MAT 212 or MAT 282 or permission of instructor. Cr 3.

STA/OPR/MAT 575 Graduate Internship and Writing

The course is intended to give students work experience with statistical data analysis through paid or unpaid internship opportunities. The student is expected to spend a minimum of 10 weeks working with area businesses on statistical problems approved by the graduate committee. The student will submit to the graduate committee a formal written report on the internship experience. The report format should adhere to all the elements of a formal project/ thesis. At least one oral presentation to the public is expected before the student receives a pass/fail grade. Students within the Biostatistics track are required to take 3 credits; two for the internship experience and one for the writing component. Cr var.

STA 580 Applied Statistical/Biostatistical Methods

Basics in distribution theory (focus on CLT and Sampling distributions); standard one-, two-sample problems (both parametric and nonparametric); one-, two-way ANOVA; estimation and testing theory (focus on normal theory and the principles of likelihood), various chi-square tests (Wald, Likelihood ratio, and Score tests); and analysis of contingency tables. 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 Introduction to Longitudinal Data Analysis

This is an introductory course on how to use statistical techniques to analyze longitudinal (repeated measures) data and interpret the results from such analysis. The course will focus primarily on application of the various statistical models covered, with direct application illustrated using standard statistical software. Topics include random or mixed-effects models (also called HLM or multilevel models); covariance pattern models; generalized estimating equations (GEE) models; and missing data in longitudinal studies. Cr 3.

STA 583 Sample Survey Design and Analysis

In this course, students will develop an understanding of alternative probability sample designs and the statistical and practical factors that impact design choices. Develop the ability to select an estimator for a population parameter and an estimator of its

variance, given a sample design and auxiliary information (covariates). Introduce statistical principles and methods used to study disease and its prevention or treatment in human populations in clinical trials, including phase I to IV clinical trials. Ways of treatment allocation that will ensure valid inference on treatment comparison will be discussed. Other topics include sample size calculation and early stopping of a clinical trial and noncompliance. Prerequisite: MAT 282. Cr 3.

STA 584 Advanced Design and Analysis of Experiments

Topics covered include: one-way and two-way layouts, factorial experiments, fractional replications in factorial experiments, BIB and PBIB designs, and repeated measure design. Prerequisite: MAT 282. Cr 3.

STA 585 Linear Models and Forecasting

This is an introductory regression and forecasting modeling course. Topics include basic concepts of linear models and forecasting, simple and multiple linear regression, model building and diagnostics, time series regression and smoothing, and forecasting time series with ARIMA (Autoregressive Integrated Moving Average) and Box-Jenkins models. Prerequisite: MAT 282. Cr 3.

STA 587 Categorical Data Analysis

Topics to be examined include: two-way tables, generalized linear models, logistic and conditional

logistic models, loglinear models, fitting strategies, model selection, and residual analysis. 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.

STA/OPR/MAT 590 Master's Project/Thesis

The project must be approved by the graduate program committee in advance. Offered only as a pass/fail course. Prerequisites: full graduate standing and faculty approval. Cr 6.

STA 591 Topics in Biostatistics

Course will be offered on demand. Based on students' interests, the course may cover one or more of the following topics: clinical trials, computer intensive statistical methods, statistical methods in bioinformatics, environmental statistics, or a combination of these topics. Prerequisites: full graduate standing and faculty approval. Cr 3.

STA/OPR/MAT 599 Independent Study

An opportunity for graduate students to pursue areas not currently offered in the graduate curriculum. Cr 3.

Graduate Certificate in the Acting Techniques of Michael Chekhov

The graduate certificate, offered by the Department of Theatre, in the acting techniques of Michael Chekhov, is designed to appeal to theatre and drama instructors, professional actors/directors, experienced community actors/directors, and advanced students. The courses provide an intensive overview of the acting techniques attributed to Michael Chekhov and the application of those techniques to performing, directing, auditioning, and teaching. Areas of focus will include image and body, preparing the part, characterization, and improvisation. The graduate certificate program introduces methods of teaching these techniques and provides opportunities for graduate students to teach back to the peer group and faculty, receiving feedback and guidance on their presentations. Candidates for the certificate must attend two summer institutes at USM, and complete a significant one-credit independent project approved by the instructors.

School of Business

Dean: James Shaffer

Associate Dean: James Suleiman; *Associate Dean for Innovation and Entrepreneurship:* Valarie C. Lamont; *Assistant Dean for Student Affairs:* Alice B. Cash; *Coordinator of Career Services and Internships:* Melissa Burns

Professors: Andrews, Artz, Gramlich, Houlihan, Manny, Violette, Voyer; *Associate Professors:* Bennett, Chinn, Grover, Jensen, Munger, Pryor, Shields, Smoluk, Suleiman, VanderLinden, Williams; *Assistant Professors:* Chene, Heiser, Kerr, Kohli

Mission

The School of Business at the University of Southern Maine prepares and inspires current and future leaders, and stimulates economic growth by providing quality learning opportunities, valuable research and professional service, all in partnership with the business community.

Program Description

The School of Business 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 School of Business graduate programs are designed for part-time, working professionals; the programs also accommodate those students wishing to pursue full-time study.

The master of business administration program is designed for students who wish to advance their careers and contribute to their companies. Partnering with the business community, the program emphasizes the skills needed to inform and guide organizational change. Students in the program develop cross-functional business solutions to “real world” problems, and cultivate a broad critical perspective, interpersonal skills, and the analytical tools of management. The program also emphasizes an appreciation of the international and ethical contexts of professional practice. Students are encouraged to apply to the program regardless of their undergraduate academic specialization.

Accreditation

The School of Business is accredited by the AACSB International—the Association to Advance Collegiate Schools of Business. AACSB International 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 M.B.A. program. Included in the assessment of a candidate’s potential to perform satisfactorily in the M.B.A. 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, demonstrated potential for successful completion of the program, qualities likely to enhance the educational environment at USM, demonstrated leadership, the Graduate Management Admission Test (GMAT) score, three letters of recommendation, and a candidate’s record of successful business or professional experience. Although the admissions committee has no affirmative duty to seek this information, it will consider other information about the applicant including (1) professional knowledge of faculty members, administrators, and staff at USM, (2) information within the files at USM, and (3) publicly available information about the applicant. To be admitted either fully, conditionally, or as special or transient student, students must have no evidence of past conduct incompatible with the educational environment at USM. This is defined as conduct which, if it occurred at USM, would have a detrimental effect on (1) the ability of fellow students to learn, (2) the ability of instructors to teach effectively, or (3) the ability of administrators and staff to engage in their normal professional activities. Examples of such conduct include, without limitation: commission of a crime, other than a minor traffic offense; commission of an intentional act resulting in physical or psychological injury or threat thereof; intentional misrepresentation; and violation by the applicant of a code of conduct at any educational institution, employer, military organization, or professional association. An applicant who has engaged in such conduct *may*, at the discretion of the admissions committee, be

admitted based upon its judgment (e.g., because of the passage of time) that there is little likelihood that the conduct will recur in the future.

In addition to receiving strong recommendations, fully admitted students must have a formula score of 1,100 or higher and absence of evidence of past conduct that is incompatible with the educational environment at USM. (The formula is $(\text{GPA} \times 200) + \text{GMAT}$. The GPA will be computed twice—overall GPA and GPA of the last 60 credit hours. 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, (b) evidence of creativity and leadership, or (c) accomplishment in business and who show absence of evidence of past conduct that is incompatible with the educational environment at USM, *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, (b) evidence of creativity and leadership, or (c) accomplishment in business and who show absence of evidence of past conduct that is incompatible with the educational environment at USM, *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 and who show absence of evidence of past conduct that is incompatible with the educational environment at USM *may* be granted conditional admission.

Only a limited number of applicants will be admitted with conditional admission status in any one academic year. Applications received *by* the recommended admissions deadlines which fall into the conditional acceptance category will be put on a waiting list and will be considered shortly after the admission deadline. Applications received *after* the recommended admissions deadlines which fall into the conditional category will be put on a waiting list and considered during the next admission cycle. Applicants admitted conditionally will be required to complete a specified set of courses (either foundation, regular or both). 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. Under exceptional circumstances, a conditionally admitted student who fails to meet one or more condition(s) and is dismissed from the M.B.A. program may be invited by the director to reapply for regular admission.

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 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, who have a “B” average in their home programs, and who show no evidence of past conduct that is incompatible with the educational environment at USM will be allowed by the director to enroll in courses, subject to permission of the instructor. All students in this group must sign a non-degree release.

Non-matriculated Students

All students wishing to enroll in M.B.A. 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. (Note that the LL.B. from outside the United States is not an acceptable terminal degree, a condition which may also exist for other non-U.S. degrees.) Holders of terminal degrees normally will be allowed to enroll in M.B.A. 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 director, alone or in consultation with the Admissions Committee.

Others seeking to enroll in M.B.A. 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, or (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.

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 director, have been satisfied. All students in this group must sign a non-degree release. This privilege does not extend to graduate students *conditionally* admitted to other USM graduate programs.

Application Material

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

1. A completed application. In the required essay applicants should, in addition to stating their reasons for wanting an M.B.A., 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. Note that the LL.B. from outside the United States is not an acceptable terminal degree, a condition which may also exist for other non-U.S. degrees.)
3. Three letters of recommendation.
4. Test of English as a Foreign Language (TOEFL) score of at least 550 on the paper-based TOEFL, 213 on the computer-based TOEFL, or 79 on the Internet-based TOEFL (iBT) for students whose native language is not English.
5. A résumé that includes post-baccalaureate, full-time work experience including military experience.

Application materials may be obtained online (www.usm.maine.edu/grad) or from the USM Office of Graduate Admissions. All application materials should be submitted to the USM Office of Graduate Admissions.

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). International applicants and applicants seeking financial assistance should complete applications by March 1. Applicants wishing to

be considered for merit scholarships in graduate programs beginning in September are encouraged to submit completed applications by early January.

Program Policies

In addition to the general policies described in the Academic Policies chapter, specific policies of the M.B.A. 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 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 M.B.A. program may apply to have graduate credits transferred from other regionally accredited institutions of higher education. Transfer credit is not granted until a student has earned nine graduate credit hours from the University of Southern Maine. A grade of B (3.00) or higher 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 nine semester hours of transfer credit may be accepted and applied toward the M.B.A. 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 M.B.A. core and elective requirements, graduate coursework must be completed within six years of the date a student enrolls in his or her first 600-level course. Graduate courses completed more than six years prior will be reviewed and may or may not be allowed. Courses considered outdated must be repeated or replaced for use toward the M.B.A.

Non-Degree Release

Students enrolling in courses on a non-matriculated basis must sign a release stating that they will not pursue an M.B.A. from USM on the basis of accumulated non-matriculated courses, unless they gain admission through the formal admissions process described earlier.

Grade Policy/Minimum Grade Point Average

All graduate courses numbered MBA 610 or higher must be completed with a minimum grade of C (2.0) in order to carry graduate degree credit. If a student receives a grade below C (2.0) in a required graduate course, the student must repeat the course and has only one opportunity to raise the grade for that course to C (2.0) or higher. A student receiving two grades below C (2.0) will be dismissed from the program.

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 director. Any student may appeal any dismissal decision in writing to the M.B.A. Admissions Committee.

A student who has completed the program of study must have a cumulative grade point average of 3.00 to receive the M.B.A. 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 regularly admitted student who is dismissed from the M.B.A. program may not be readmitted. Under exceptional circumstances, a conditionally admitted student who fails to meet one or more conditions and is dismissed from the M.B.A. program may seek permission to reapply for regular admission.

Special Policies

In order to receive graduate credit toward the M.B.A. degree, a student must be registered in a graduate course as a graduate student. Please refer to the transfer credit policy for possible use of prior graduate credit.

Dual Degree Options

H.P.M. and M.B.A. The joint degrees program in business administration and health policy and management offers the master's of business administration (M.B.A.) through the USM School of Business, and the master's degree in health policy and management (M.S.) through the Muskie School of Public Service. The program allows students to earn both the M.B.A. and M.S. simultaneously by designating a certain number of crossover courses that satisfy the graduation requirements of each degree. Full-time students may thus complete both degrees in three years instead of the four years that would ordinarily be required. Separate admission is required.

J.D. and M.B.A. The joint degrees program in law and business administration offers the juris doctor degree (J.D.) through the University of Maine School of Law, and the master's degree (M.B.A.) through the USM School of Business. The program allows students to earn both the J.D. and the M.B.A. simultaneously by designating a certain number of crossover courses that satisfy the graduation requirements of each degree. Students may thus complete both degrees in four years instead of the five years that would ordinarily be required. Separate admission is required.

M.S. in Nursing and M.B.A. The dual master's degree in nursing and business administration at USM is designed for students in the health professions who wish to combine advanced nursing skills with the analytical tools of business. See the College of Nursing and Health Professions section of this catalog for more information on this option.

3-2 Program

The master of business administration (M.B.A.) program allows interested and qualified students to complete a bachelor's degree and an M.B.A. in five to six 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 M.B.A. requirements in the fourth year, and mostly M.B.A. requirements in the fifth and sixth 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 or after the end of their first semester of undergraduate studies. Students entering directly need an SAT combined score of 1,200 or higher. Students currently enrolled in a baccalaureate degree program may enter the 3-2 program by meeting the regular M.B.A. 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 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 M.B.A.-level courses

In either admission path, a 3-2 student may not enroll in M.B.A.-level courses until they have accumulated 90 credit hours of undergraduate coursework.

Internship Program

Students are encouraged to participate in an internship 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 internship positions, or they may learn of positions through the program manager and by contacting the School of Business internship coordinator. In a typical three-credit internship, a student works a minimum of 140 hours on-site and will be advised by a faculty member during the internship 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 695 for prerequisites and restrictions. For further information, contact the program manager or the School of Business Internship Office at 780-4020.

Center for Entrepreneurship

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

Center for Real Estate Education

Director: Valarie C. Lamont

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. Real estate courses can be used for academic credit. Persons interested in additional information may contact the Center for Real Estate Education, University of Southern Maine, 68 High St., Portland, ME 04101, (207) 228-8400, cree.usm.maine.edu.

Maine Center for Business and Economic Research

Director: Bruce H. Andrews

Associate Director: Charles S. Colgan

Senior Research Associates: Aiello, Andrews, Artz, Barringer, Bennett, El-Taha, Colgan, Grover, Hillard, Jensen, Sanders, Smoluk, Suleiman, Voyer

The Maine Center for Business and Economic Research (MCBER) was originally formed in 1974 as an EDA University Center, and now serves as a conduit for bringing the expertise and skills of faculty from the School of Business, the Muskie School, and other academic units at USM, to the challenges and opportunities facing the public and private sectors in Maine. As a joint center managed by the Business School and the Muskie School, MCBER is dedicated to helping the state prosper.

Supported by both public and private sources, the Center offers applied research and technical assistance services to Economic Development Districts, profit and nonprofit organizations, and individuals. These services include: survey-based research, economic impact analysis, forecasting, strategic planning, program evaluation, statistical/quantitative analysis, simulation modeling, feasibility studies, risk management, market research, financial/economic modeling, and other forms of customized business/economic analysis. For additional information, contact the Maine Center for Business and Economic Research, University of Southern Maine, P.O. Box 9300, Portland, ME 04104-9300, (207) 780-4187, www.usm.maine.edu/cber.

Maine Small Business Development Centers

State Director: Mark Delisle

Associate State Director: Carolyn Arcand

Maine Small Business Development Centers (Maine SBDC) and its tech-focus group, Maine Small Business and Technology Development Centers (Maine

SBTDC) provide comprehensive business management assistance, training, resource, and information services to Maine's micro, small, and technology-based business communities. Professional certified counselors, who meet rigorous education and business experience standards, provide business assistance at no cost to Maine's existing and prospective business owners.

Maine SBDC/SBTDC is a partnership program of the U.S. Small Business Administration (SBA) in association with the SBA/SBDC, Maine Department of Economic and Community Development (Maine DECD), the University of Southern Maine, and leading economic and/or community development hosting organizations, with support from other contractors, allies, and stakeholders. Accredited by the Association of Small Business Development Centers (ASBDC) and administered by USM's School of Business for over 30 years, Maine SBDC/SBTDC operates a network of 12 service centers and numerous outreach offices located conveniently throughout the state.

Maine SBDC/SBTDC's mission is to engage itself and others in development activities that contribute to the improvement of the economic climate for and the success of micro, small, and technology-based businesses in the state of Maine. Its focus is to assist in the creation, growth, and maintenance of viable small businesses and the jobs these businesses provide. Maine SBDC/SBTDC serves those seeking assistance who are willing and able to build, sustain, and/or expand their business. More information about the Maine SBDC/SBTDC can be found at www.mainesbdc.org or by calling (207) 780-4420. Maine SBDC state administrative offices are at 68 High Street, Portland. Mailing address: P.O. Box 9300, Portland, ME 04104-9300.

Master of Business Administration

The master of business administration program at the University of Southern Maine is composed of 30 credit hours of core courses and 9 credit hours of elective or concentration courses. In addition, up to 15 credit hours of foundation courses may be required depending on the student's previous academic background.

Orientation

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 M.B.A. students and faculty. Information on the exercise will be provided. There is a fee to participate in this exercise.

MBA Grade Policy

All graduate courses numbered MBA 610 or higher must be completed with a minimum grade of C (2.0) in order to carry graduate degree credit. If a student receives a grade below C (2.0) in a required graduate course, the student must repeat the course and has only one opportunity to raise the grade for that course to C (2.0) or higher. A student receiving two grades below C (2.0) will be dismissed from the program.

Foundation Courses *Credits*
0-15

M.B.A. courses numbered below MBA 610 are not applicable toward the 39 credits needed for graduation. Admitted students whose educational background is lacking the foundation courses are required to satisfactorily complete each of these courses or their equivalents as stipulated in their letter of admission.

Grades earned in M.B.A.-level foundation courses are included in the student's grade point average. Any foundation courses in which a student earns less than a C grade (2.0) must be repeated.

Faculty strongly recommend that students, who do not have a solid recollection of foundation course content, retake or, at a minimum, review content material independently prior to enrolling in core courses. Students may consult the School of Business Web site or faculty for information on course content.

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. After admission students needing foundation courses are expected to enroll in the 500-level MBA courses to meet the requirement. In extenuating circumstances a student may petition the director for permission to enroll in undergraduate equivalent courses to meet M.B.A.-level foundation course requirements. Any undergraduate courses taken will not be included in the computation of the student's graduate grade point average.

BUS 340 Managing Organizational Behavior 3
MBA 501 Economic Analysis:
 An intensive survey of micro and macroeconomic theory 3
MBA 502 Financial Accounting 3
MBA 504 Probability and Statistics for Business Decision Making 3
MBA 505 Financial Management 3

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.

Core Courses *Credits*
30
Alpha Course 3
 MBA 611 Introduction to Organizational Change
Accounting: 3
 ACC 630 Management Accounting Systems

Ethical and Legal Issues	3
MBA 615 Ethical and Legal Issues in Business	
Finance (choose one)	3
MBA 625 International Finance	
MBA 626 Strategic Valuation	
MBA 627 Investment Management	
Information Systems	3
MBA 674 Topics in Information Systems Management	
International	3
MBA 612 Topics in International Business	
Marketing	3
MBA 660 Managerial Marketing	
Management Science	
MBA 670 Management Science	
Operations Analysis (choose one)	3
MBA 672 Supply Chain Management	
MBA 675 Production/Operations Management	
Capstone	3
MBA 698 Practicum	

Electives (Choose three) 9

Courses used to fulfill core requirements above may not be used to fulfill elective choices. Students may elect a concentration in one of two areas: finance or taxation. Please refer to the concentration areas below for specific course requirements. Student preferring not to concentrate may select elective courses from the following list.

ACC 632 Financial Statement Analysis	
ACC 633 Tax Policy and Administration	
ACC 634 Advanced Business Taxation	
ACC 635 Advanced Individual Taxation	
MBA 625 International Finance	
MBA 626 Strategic Valuation	
MBA 627 Investment Management	
MBA 642 Leadership	
MBA 643 Creative Problem Solving	
MBA 644 Strategic Management of Technology and Innovation	
MBA 646 Negotiation and Conflict Management	
MBA 647 Organizational Strategy	
MBA 649 Special Topics in Management: Introduction to System Dynamics	
MBA 657 Triple Bottom-Line Marketing	
MBA 665 Consumer Behavior	
MBA 669 Multivariate Methods for Marketing	
MBA 672 Supply Chain Management	
MBA 691 Independent Study	
MBA 695 Internship	

Taxation Concentration

The taxation concentration provides the necessary introductory background for students who want to specialize as professionals in the field of taxation. Students complete two required courses covering advanced topics in business and individual taxation and select one elective course, such as tax policy, tax internship, or another specialized tax topic. The taxation concentration builds technical, research, and other analytical skills necessary for success in the profession. One undergraduate course, ACC 413 Concepts and Strategies of Taxation, is a required prerequisite to all taxation concentration courses.

Required:

ACC 634 Advanced Business Taxation	
ACC 635 Advanced Individual Taxation	

Select one course from the following:

ACC 633 Tax Policy and Administration	
ACC 691 Independent Study in Taxation	

- ACC 695 Internship in Taxation
- ACC 699 Special Topics in Taxation

Finance Concentration

The finance concentration offers advanced financial training to professionals who want to specialize in the field of finance. Students choose concentration courses from the areas of financial modeling, investments, international finance, valuation or current issues. The finance concentration focuses on the application of financial tools to real world problems, technical competence in the various functions of finance, and professional responsibility and ethics.

All MBA students are required to take at least one 600-level MBA finance course. Students are able to earn a concentration in finance by taking three additional 600-level MBA finance courses.

- MBA 625 International Finance
- MBA 626 Strategic Valuation
- MBA 627 Investment Management
- MBA 699 Special Topics in Finance
- * MBA 691 Independent Study in Finance
- * MBA 695 Internship in Finance

*Students may select either MBA 691 or 695, but not both.

ACC 413 Concepts and Strategies of Taxation

This course provides a conceptual understanding of the federal tax system, and its impact on individuals, corporations, and partnerships. The primary emphasis is on fundamental income tax concepts and principles, with an overview of other taxes. Detailed technical coverage and return preparation are minimized. The economic, political, social, and judicial reasoning underlying tax provisions are explored. Tax issues and changes under current consideration at the national, state, local and international levels are discussed. Basic research skills and methodology are introduced. Prerequisites: ACC 110 and junior standing. Cr 3.

ACC 630 Management Accounting Systems

This course examines how management accounting systems can be used to establish and maintain competitive advantages 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 501, MBA 502. Cr 3.

ACC 632 Financial Statement Analysis

This case-oriented course (i) provides a framework for business analysis and valuation using financial statement data; and (ii) gives practical advice when using the framework to value a firm. The course assumes a good working knowledge of accounting, finance, economics, and business strategy. The course focuses on integrating key concepts from each of these areas and applying them to real world problems. The course places heavy emphasis on illustrating the latest techniques and information sources used by Wall Street professionals. At times the course draws on detailed understanding of financial statement data but more importantly the course assumes an understanding of the nuances of the accounting inputs used. Prerequisites: MBA 501, MBA 502, and MBA 505. Cr 3.

ACC 633 Tax Policy and Administration

This course examines tax policy, including such topics as how taxes affect the economy, guidelines for evaluating tax systems, and proposals to replace or reform tax systems. Tax administration process and professional tax practice will also be discussed. Course emphasis will be on federal taxes, with some exposure to state taxes. Prerequisite: ACC 413/613 or equivalent. Cr 3.

ACC 634 Advanced Business Taxation

This course begins with concepts of Federal tax research methodology including communication of research results. The second section of the course

considers corporate tax topics including income taxation of corporations, pass-through entities (S corporations and partnerships), multi-state taxation and tax-exempt organizations. Students will write tax research memoranda and client letters as well as prepare relevant tax returns. Prerequisite: ACC 413/613 or equivalent. Cr 3.

ACC 635 Advanced Individual Taxation

This course begins with a review of Federal tax research methodology including the communication of research results. Then, the course considers topics in advanced individual taxation such as AMT issues, like-kind exchanges, and installment sales. The final section of the course considers family tax planning issues including federal estate and gift taxation and the income taxation of trusts and estates. Students will write tax research memoranda and client letters as well as prepare relevant tax returns. Prerequisite: ACC 413/613 or equivalent. Cr 3.

ACC 691 Independent Study in Taxation

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

ACC 695 Internship in Taxation

This internship education course is described in the preceding text. Prerequisites: completion of foundation courses, ACC 413, 3.0 GPA or higher, and permission of instructor and curriculum chair. Enrollment is normally limited to degree candidates concentrating in taxation. A maximum of three credits of ACC 695 may be used toward the degree. Cr 1-3.

ACC 699 Special Topics in Taxation

Prerequisites vary. Cr 3.

BUS 340 Managing Organizational Behavior

A 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 and decision making, individual differences and diversity, motivation, group dynamics, communication, stress, power and politics, organizational design, and change. The environmental context, workforce diversity, the global economy, and managerial ethics are core integrating themes. Prerequisite: junior standing. Cr 3.

MBA 501 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 502 Financial Accounting

This course offers an opportunity to gain a firm understanding of basic financial accounting concepts and issues including debits and credits, journal

entries, and knowledge of the balance sheet, income statement, and statement of cash flows. This course will include insights into the fundamental strengths and limitations of the financial reporting process. This course covers the nature of the financial reporting process and the basic accounting principles, conventions, and concepts underlying the current reporting environment of GAAP basis financial statements. No prior knowledge of accounting is assumed. Cr 3.

MBA 504 Probability and Statistics for Business Decision Making

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

MBA 505 Financial Management

The primary objective of this course is to provide a balanced introduction to the theory and practice of financial management. Emphasis is placed on the management of capital to enhance shareholder wealth. Topics include time value of money, risk and return, stock and bond valuation, capital budgeting, and cost of capital. Prerequisites: MBA 501, MBA 502, MBA 504. Cr 3.

MBA 611 Introduction to Organizational Change

This course focuses on understanding the nature of organizational change. Process consulting forms the basis for much of the course. Prerequisite: BUS 340. Cr 3.

MBA 612 Topics in International Business

This courses is taught by professors with different specialties and consists of two parts: (1) core topics which are included every time the course is taught, and (2) coverage of other topics in international business using either: (a) a multidisciplinary approach, (b) a legal approach, or (c) a marketing approach. Prerequisites: legal approach—none; multidisciplinary approach—MBA 501; marketing approach—MBA 660. 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 625 International Finance

This course is intended to give students a solid introduction to the very important field of international finance. It offers a rigorous examination of and the financial management of the multinational corporation and of international financial markets. Intensive coverage of foreign exchange markets and methods of managing exchange rate risk are emphasized. Topics include currency derivative markets and risk

management, arbitrage and international parity conditions, market efficiency, short- and long-term asset management, and capital budgeting. Prerequisite: MBA 505 or equivalent. Cr 3.

MBA 626 Strategic Valuation

This is the M.B.A. corporate finance course, focusing on strategic and quantitative analyses of complex, real asset investments. It prepares students for making investment decisions and evaluating investment decisions made by others. Topics include incremental cash flows, traditional capital budgeting, capital structure, required rates of return, real options, and valuation of business entities for purposes of acquisition or divestiture. Prerequisite: MBA 505. 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 505. 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 Creative Problem Solving

This course provides an applications-oriented understanding of the creative problem-solving process. Students will learn how to be more creative at the individual, group, and organizational levels. This course focuses on divergent and convergent creativity techniques together with various models of creativity. Prerequisite: BUS 340. Cr 3.

MBA 644 Strategic Management of Technology and Innovation

Focuses on the strategic management of technology-based innovation in the firm. Specific topics include assessing the innovative capabilities of the firm, managing the corporate R&D function, managing the interfaces between functional groups in the development process, managing the new business development function in the firm, understanding and managing technical entrepreneurs, building technology-based distinctive competencies and competitive advantages, technological leadership versus followership in competitive strategy, institutionalizing innovation, and attracting and keeping corporate entrepreneurs. Prerequisite: BUS 340. Cr 3.

MBA 646 Negotiation and Conflict Management

This course focuses on negotiation and conflict management theory and practice. Students are expected to develop negotiation and conflict management skills by participating in experiential exercises both inside and outside of class as well as to develop a personal negotiation and conflict management style designed to successfully meet the challenges of common conflict and negotiation situations. Cr 3.

MBA 647 Organizational Strategy

Using strategic tools such as competitive analysis and the value chain, this course provides an in-depth examination of the resource-based view of the firm. Emphasizes entrepreneurial strategy approaches in high-velocity business environments. Prerequisites: MBA 615 (or concurrent), MBA 505 and 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 657 Triple Bottom-Line Marketing

How can marketers manage for the triple bottom line of financial, environmental, and social performance? This asynchronous, online course begins with an exploration of sustainable business (i.e., the pursuit of profits without causing pollution or social inequity). The course ends by examining green consumer behavior and the interrelationship between environmental issues and marketing strategy. Prerequisites: introductory marketing class (MBA 507, BUS 260, or MBA 660). Students will benefit if they have prior knowledge of economics (MBA 501), cost accounting (ACC 210), and production (BUS 375 or MBA 675). 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 502. 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: basic marketing course or instructor permission. Cr 3.

MBA 669 Multivariate Methods for Marketing

This course focuses on the application of multivariate statistical methods in the development of marketing strategy and the investigation of marketing problems. Building of descriptive and predictive models using multi-dimensional techniques such as factor analysis, regression analysis, cluster analysis, analysis of variance, conjoint analysis, and perceptual mapping. Use of statistical packages. Prerequisite: MBA 504. Cr 3.

MBA 670 Management Science

This course examines the role, perspective, and commonly used tools of quantitative analysis in business decision making. Emphasis is placed on developing students' abilities to recognize the need for quantification; to formulate business problems quantitatively; to select and test computer-based decision-support system models; to collect meaningful data; and to interpret the implications of analysis results. Prerequisite: MBA 504. 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. Using practical applications, the focus is on the proactive management of movement and coordination of goods and services, and information, from raw material to end user through the value chain. Other topics include understanding the nature of demand for goods and services within business markets and the process of building relationships with suppliers. 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 508 or MBA 670. Cr 3.

MBA 674 Topics in Information Systems Management

A topics course exploring major issues in the management of information technology. Students completing this course should have acquired an understanding of the strategic, tactical, and operational importance of information systems within an organization, and an understanding of how to leverage information technology in the management of an organization. Topics include, but are not limited to: strategic use of information technology, emerging technologies, systems development and project management, managing information systems resources, and knowledge management. 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 508 or MBA 670. 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 M.B.A. degree candidates. Prerequisites: permission of the instructor and curriculum chair. Cr 1-3.

MBA 695 Internship

This internship education course is described in the preceding text. Prerequisites: completion of foundation courses, 3.0 GPA or higher, and permission of the instructor and curriculum chair. Enrollment is

normally limited to M.B.A. 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.

MBA 698 Practicum

This course is organized around projects provided by organizations in the southern Maine business community. Working with a faculty coach, teams of three to five MBA students work in organizations as consultants. The student teams analyze their assigned projects and recommend courses of action. Business leaders help with the identification of problems and evaluate the team's analysis and recommendations. In addition, students attend discussion sessions designed to allow all the teams to discuss with and seek advice from other teams. This course is usually taken in a student's final semester. Prerequisites: MBA 611, MBA 674, and any MBA marketing course. Cr 3.

MBA 699 Special Topics

Prerequisites vary. Cr 3.

College of Education and Human Development

Dean: Betty Lou Whitford; *Assistant Dean for Finance and Administration:* Robin Day; *Director of Student Affairs:* Kimberly Warren; *Director of Center for Education Policy, Applied Research and Evaluation:* David L. Silvernail; *Director of Professional Development Center:* George C. Lyons

Dean's Office, 8 Bailey Hall, Gorham, ME 04038
USM Graduate Admissions, 39 Exeter Street, Portland, ME 04104-9300
Center for Educational Policy, Applied Research, and Evaluation, 99 School Street, Gorham, ME 04038
Professional Development Center, 8 Bailey Hall, Gorham, ME 04038
Southern Maine Partnership, 222C Bailey Hall, Gorham, ME 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, mathematics, 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), the Council for Accreditation of Counseling and Related Education Programs (CACREP), the Council on Rehabilitation Education (CORE), and the National Association of School Psychologists (NASP).

Graduate Programs

The College of Education and Human Development offers degrees and certificate programs in the following areas (programs are arranged alphabetically by master's programs, doctoral programs, post-master's certificate of advanced study, and certificates of graduate study):

Abilities and Disabilities Studies

Master of Science in Abilities and Disabilities Studies with concentrations in:
Gifted and Talented
Self-Design in Special Education
Teaching ALL Students

Adult Education

Master of Science in Adult and Higher Education
Post-Master's Certificate of Advanced Study in Adult Learning

Counseling

Master of Science in Counseling with concentrations in:
Clinical Mental Health
Substance Abuse Counseling Expertise Area
Rehabilitation
School
Post-Master's Certificate of Advanced Study in Counseling
Mental Health Rehabilitation Technician/Community Certificate

Educational Leadership

Master of Science in Education in Educational Leadership
Post-Master's Certificate of Advanced Study in Educational Leadership
Certificate of Graduate Study in Assistant Principal
Certificate of Graduate Study in Athletic Administration
Certificate of Graduate Study in Middle Level Education

Literacy Education and English as a Second Language

Master of Science in Education in Applied Literacy (*for ETEP, TEAMS only*)
Master of Science in Education in Literacy Education
Master of Science in Education in Literacy Education with a concentration
in English as a Second Language
Post-Master's Certificate of Advanced Study in Literacy Education
Post-Master's Certificate of Advanced Study in English as a Second Language
Certificate of Graduate Study in Early Language and Literacy
Certificate of Graduate Study in Literacy

Professional Educator

Master of Science in Education: Professional Educator

School Psychology and Educational Psychology

Master of Science in Educational Psychology with a concentration in
Applied Behavior Analysis
Master of Science in School Psychology
Doctor of Psychology in School Psychology
Certificate in Applied Behavior Analysis (Post-master's)

Teacher Education

Master of Science in Education in Teaching and Learning (*ETEP, TEAMS*)
Extended Teacher Education Program (ETEP)

College-Wide Certificate Program

Certificate of Graduate Study in Culturally Responsive Practices in 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: E. Michael Brady

Adult Education—*Professor:* Atkinson, Brady; *Lecturer:* Day

Counseling—*Professor:* Murphy, VanZandt; *Associate Professors:* Katsekas,
Stevens; *Assistant Professor:* Baruch-Runyon, Schnieders; *Clinical Lecturer:* Jones;
Field Placement: Tully

School Psychology—*Professors:* Mace, Steege; *Associate Professor:* Brown-Chidsey;
Assistant Research Professor: Kelley

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 focus areas in adult development, training and development, educational gerontology, community/international education, teaching adult learners, 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, and clinical mental health counseling. Post-Master's Certificate of Advanced Study programs in adult learning and counseling are also available. The school psychology program offers a certificate of applied behavior analysis, a master of science in educational psychology, and a doctorate of psychology in school psychology.

Department of Professional Education

Chair: James Curry

Abilities and Disabilities Studies—*Associate Professors:* Alexandrin, Curry
Educational Leadership—*Professors:* Capelluti, Miller, Silvermail; *Associate Professors:* Beaudry, Goldsberry

Literacy Education—*Associate Professor:* Amoroso; *Adjunct Assistant Professor:* Bouchard

The Department of Professional Education provides initial educational and professional development opportunities to new and current educators. The Department offers programs in four areas of study: educational leadership, literacy education, professional educator, and special education. The Educational Leadership program offers a master's degree, three certificates of graduate study, and a post-master's certificate of advanced study. The master's program is divided into three areas: administration, for certification as a school principal; administration, for certification as a director of special education; and teacher leadership. The Literacy Education program offers a master's degree with the option of a concentration in English as a second language, a certificate of graduate study in literacy, and post-master's certificates of advanced study in early language and literacy and literacy education and in English as a second language. The Professional Educator program offers a master's degree. The Abilities and Disabilities Studies program offers a master's degree that includes options in Teaching ALL Students, self-design in special education, and education of gifted and talented learners.

Department of Teacher Education

Director: Ken Jones

Chair: Catherine Fallona

Professors: Kimball, Whitford; *Associate Professors:* Davis, Fallona, Jones, Kuech, Ross, Shank, Whitney; *Assistant Professors:* Canniff, Hitchens; *Lecturer:* Red

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 options for an intensive one-year program; a unified K-8 general and special education option, a unified secondary and special education option, and a K-8 general education and ELL option and a special education only option; completion of certification requirements; and optional completion of a master's degree in either teaching and learning or applied literacy.

The College of Education and Human Development houses the following centers:

Centers/Programs

Action Learning Center

Assistant Dean for Finance and Administration: Robin Day; *Director:* Laura O'Neill

The Action Learning Center (ALC) provides an experiential education opportunity targeting middle and high school students, college students, teachers, administrators, business and industry management and personnel, and nonprofit agency groups of all ages. Programs are conducted both in a University indoor setting as well as at our outdoor learning course located in coastal Freeport, adjacent to the USM Stone House conference facility. Programs are facilitated by highly skilled and trained professionals with expertise in adventure-based education. The focus of the ALC is to offer outdoor activities designed to expand the physical, intellectual, social, and emotional resources of participants. Activities emphasize problem-solving and decision-making skills, self-confidence building, interpersonal skills, team building strategies, and leadership development training. Graduate courses are offered by the CEHD Professional Development Center. For more information visit the Action Learning Center Web site at www.usm.maine.edu/alc or call (207) 780-5659. The program office is located at 8 Bailey Hall on USM's Gorham campus. The mailing address is 37 College Avenue, Gorham, ME 04038.

Assessment Center

Coordinator: Rachel Brown-Chidsey

The Assessment Center is a resource for CEHD faculty, students, and affiliated educators. Staffed by a graduate assistant, under the supervision of faculty from the counselor education, school psychology, and special education programs, the Assessment Center lends assessment materials to students, faculty, and affiliated educators who possess the prerequisite training and expertise to administer and interpret them. The Assessment Center has a collection of over 475 achievement, behavior, cognitive, and personality tests. For additional information and hours of operation, contact the Assessment Center at 407 Bailey Hall, Gorham, ME 04038; (207) 780-5671 or (207) 780-5220; assessment.center@maine.edu.

Center for Education Policy, Applied Research, and Evaluation

Director: David L. Silvernail

The Center for Education Policy, Applied Research, and Evaluation (CEPARE), provides assistance to school districts, agencies, organizations, and University faculty by conducting research, evaluation, and policy studies. In addition, CEPARE co-directs the Maine Education Policy Research Institute (MEPRI), an institute jointly funded by the Maine State Legislature and the University of Maine System. This institute was established to conduct studies on Maine education policy and the Maine public education system for the Maine Legislature.

More information can be found on the Center's Web site at www.cepare.usm.maine.edu or by contacting CEPARE at the University of Southern Maine, 99 School Street, Gorham, ME 04038; (207) 780-5044.

Multicultural Education Programs

Director: Linda Evans; *Assistant Director:* Satomi Shimada

The Multicultural Education Programs is administered through the University of Southern Maine College of Education and Human Development in partnership with school districts to provide training and outreach to educators who work with limited English proficient students. Its mission is to increase the number of qualified school personnel serving culturally and linguistically diverse students in Maine schools. Participants for this program include immigrants and refugees who have settled in Maine. This program also helps to ensure that pre-service and in-service teachers are able to fulfill the requirements necessary for the Maine State ESL Endorsement.

Within the Multicultural Education Programs is the Newcomer ETEP program that is designed to recruit language-minority candidates with experience and aptitude for teaching and to facilitate their entry and advancement in the profession through provision of appropriate supports, professional development, and certification through the Extended Teacher Education Program (ETEP).

The Multicultural Education Programs also administers the Pathways to Higher Education for Educational Technicians. The program provides financial support and comprehensive individualized education planning for non-certified bilingual educational technicians and language facilitators. The program helps bilingual education technicians and language facilitators complete an associate's degree or 60 college credits, a requirement for all paraprofessionals under No Child Left Behind. For more information about the programs visit www.usm.maine.edu/cehd/Multicultural-education-programs or call (207) 780-5564, or visit 62 School Street, Gorham, ME 04038.

Professional Development Center

Director: George Lyons

The Professional Development Center (PDC) is the inservice agent of the College of Education and Human Development (CEHD). Its mission is to provide sustained, high-quality professional development that enables K-12 educators and human resource professionals to continue learning throughout their careers.

The PDC works collaboratively with CEHD departments, programs, and other centers to complement their outreach missions; the Maine Department of Education to provide resources for teacher re-certification and endorsement; K-12 schools to design and deliver professional development tailored to school district's specific needs; human resource organizations to offer professional development opportunities for counselors, school psychologists and adult educators; nonprofit organizations and professional associations.

The PDC develops, implements, and administers credit and noncredit courses, workshops, and conferences to supplement and expand professional development opportunities.

To learn more about services provided by the Professional Development Center, visit the PDC Web site at www.usm.maine.edu/pdc or call (207) 780-5326. The PDC offices are located on the USM Gorham campus in 8 Bailey Hall. The mailing address is: 37 College Ave, Gorham, ME 04038.

Admission and Academic Policies and Requirements

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 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;

Applicants who do not have a 2.5 overall GPA 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.

- Submit standardized testing scores for graduate admission, based on individual program requirements.
- Submit official TOEFL scores of 550 or higher on the paper-based test, 79 or higher on the Internet-based test, or 213 or higher on the computer-based test if the applicant is an international student whose first language is not English. International students who have received their undergraduate degree from an English-speaking institution may apply for a waiver of this requirement.

Special admission requirements, including testing requirements and scores are listed under the Special Admission Requirements for each program. Please consult the specific CEHD section program pages for special admission requirements and details.

Candidates should submit all application materials to the USM Office of Graduate Admissions, 39 Exeter Street, Portland, ME 04104-9300 by the application deadline.

Application materials must include:

- a) Two completed copies of the Application for Admission to Graduate Study, including an essay on a topic specified by the program, and an application fee of \$50.00 (nonrefundable);
- b) Two copies of 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. Recommendations must be received either directly from the recommender or forwarded by the applicant in sealed envelopes with the recommender's signature over the seal;
- d) Official scores on the MAT or the GRE, taken within five years of application sent directly from the testing service, if applicable. Please see Special Admission Requirements for each program;
- e) Additional or other special admission requirements specified by the program.

In extenuating circumstances, applications completed after the deadline may be reviewed for admission on a space-available basis.

Admission to Doctoral Program

Please see Psy.D. section for specific admission instructions and requirements.

Admission to Post-Master's 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 postmarked by the application deadline. All application materials should be submitted to the Office of Graduate Admissions, 39 Exeter Street, Portland, ME 04104-9300. Applications materials must include:

- a) Two completed copies of the Application for Admission to Graduate Study, including an essay (see below), and a \$50.00 nonrefundable application fee;

- b) Two copies of official transcripts from all previous college/university 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. Recommendations must be received either directly from the recommender or forwarded by the applicant in sealed envelopes with the recommender's signature over the seal;
- 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.
- e) Additional or other special admission requirements specified by the program.

Admission to Certificate of Graduate Study

Criteria for admission include successful completion of a bachelor's degree and relevant professional experience. To earn a certificate, students must complete 75 percent of the required coursework at USM, and earn a grade of B (3.0) or better in each course. Candidates must submit all application materials directly to the Office of Graduate Admissions, 39 Exeter Street, Portland, ME 04104-9300. Candidates for admission must submit:

- a) Application for Certificate Program, including a \$15.00 nonrefundable application fee;
- b) Official transcripts or copies of official transcripts from all colleges and universities from which you received a degree;
- c) Current resume;
- d) Personal statement;
- e) Additional or other special admission requirements specified by program.

Credits earned through enrollment in a certificate program are transferrable to the respective graduate programs under the transfer credit policies outlined below. However, acceptance to a certificate program does not constitute acceptance to a master's or post-master's certificate of advanced study program. Applications for degree status must be made under separate cover under the guidelines above.

Application Deadlines

Master's Degree Programs

Abilities and Disabilities Studies	Rolling with priority deadlines for intended semester of matriculation By Oct 1 for spring matriculation By May 1 for fall matriculation
Adult and Higher Education	Rolling with priority deadlines for intended semester of matriculation By Oct 1 for spring matriculation By March 15 for summer matriculation By May 1 for fall matriculation
Applied Literacy	Rolling
Counseling	February 1
Educational Leadership	Rolling with priority deadlines for intended semester of matriculation By Oct 1 for spring matriculation By March 15 for summer matriculation By May 1 for fall matriculation
Educational Psychology	Rolling with priority deadlines for intended semester of matriculation By Oct 1 for spring matriculation By March 15 for summer matriculation By May 1 for fall matriculation

Literacy Education	Rolling with priority deadlines for intended semester of matriculation By Oct 1 for spring matriculation By March 15 for summer matriculation By May 1 for fall matriculation
Professional Educator	Rolling with priority deadlines for intended semester of matriculation By Oct 1 for spring matriculation By March 15 for summer matriculation By May 1 for fall matriculation
Teaching and Learning (ETEP)	January 9 and March 8
Doctoral Programs School Psychology	December 1
Post-Master's Certificates of Advanced Study Adult Learning	Rolling with priority deadlines for intended semester of matriculation By Oct 1 for spring matriculation By March 15 for summer matriculation By May 1 for fall matriculation
Counseling	Rolling
Educational Leadership	Rolling with priority deadlines for intended semester of matriculation By Oct 1 for spring matriculation By March 15 for summer matriculation By May 1 for fall matriculation
English as a Second Language	Rolling with priority deadlines for intended semester of matriculation By Oct 1 for spring matriculation By March 15 for summer matriculation By May 1 for fall matriculation
Literacy Education	Rolling with priority deadlines for intended semester of matriculation By Oct 1 for spring matriculation By March 15 for summer matriculation By May 1 for fall matriculation
Certificates of Graduate Study	Rolling
Certificate in Applied Behavior Analysis	Rolling with priority deadlines for intended semester of matriculation By Oct 1 for spring matriculation By March 15 for summer matriculation By May 1 for fall matriculation

Please note: For those programs using priority deadlines, students must have submitted the completed admission application by the specified deadline to be considered for matriculation in the noted semester.

Admission and Academic 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 Please refer to the Special Admission Requirements section within each program to see the policy on transfer credits for that program. Graduate students in graduate-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.

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 and dean of Graduate Studies.

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 his or her faculty advisor to work out program changes. No more than six hours of academic credit may be waived or substituted. Waived courses must be substituted with elective credits. Please see course waiver policy under Special Admission Requirements for individual programs.

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 reserve the right to accept and 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.

Technology Standards

Recommended Entry Standards for Students in CEHD

In order to engage successfully in program and department communication and in course learning activities, students should be able to:

- operate a computer system in order to use software successfully
- use e-mail communication applications, e.g., attachments, nicknames, signature; sending, replying, forwarding; cutting and pasting from documents; utilizing a listserv; organizing messages
- access and use appropriate library databases
- use word-processing productivity tools
- access and use the World Wide Web
- use remote access to University (if applicable)

Graduate Assistantships

Students admitted into programs in CEHD who need further training in any of the above areas should use the following resources for computer support:
USM computer workshops (call 780-4029 for more information)
USM computer labs (Portland, Gorham, and Lewiston-Auburn College campuses)
USM HELP!Desk: 780-4029

Graduate Scholarships

A limited number of graduate assistantships are available for graduate students. Assistants must carry a minimum of six graduate credit hours per semester. Duties may involve teaching, research, advising, office administration, and supervision of students/interns. Applications for assistantships are available from the CEHD Dean's Office, 8 Bailey Hall. The recommended application deadline is March 1.

Assessment Center Lab Fees

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 or applicants intending to take six or more graduate credits per semester during the following year. Applications for graduate scholarships are available each January from the CEHD Dean's Office, 8 Bailey Hall, and are due March 1.

The Assessment Center lab fees will be charged to all students who enroll in the specified classes for which Assessment Center materials are required. All students, regardless of campus or location, are expected to pay the fees because the tests are mailed to students who take the courses from a distance. If a course instructor decides to require use of the Assessment Center as part of a course, and that course does not have a lab fee collected at the time of registration, the Assessment Center reserves the right to charge each student in the class a one-time lab fee of no more than \$50 to cover the costs associated with their use of Center materials for that class.

Professional Licensure and Certification Notice

Students who are pursuing degrees leading to application for professional licensure or certification, and/or who will be participating in clinical placements, internships, or practica through their USM program should be aware that their host facility may require a criminal background check, finger printing, or drug screening. In such situations, each student is responsible for obtaining and paying for the background check or other screening process and for delivering required documentation to the facility. Although the University will make reasonable efforts to place admitted students in field experiences and internships, it will be up to the host facility to determine whether a student will be allowed to work at that facility. Students should further be aware that a criminal record may jeopardize licensure by the state certification body. Students may consult the certification body corresponding to their intended occupation for more details. Successful completion of a program of study at USM does not guarantee licensure, certification, or employment in the relevant occupation.

Master of Science in Abilities and Disabilities Studies

The master of science in abilities and disabilities studies is designed for regular, specialty, and special education teachers who are already certified and want to complete further coursework in the field of exceptional children. Concentration programs require 36-39 credits of coursework, and students must submit a professional portfolio, which is completed at the end of the program. There are three concentrations: one in Teaching ALL Students, another in Gifted and Talented Education, and a third in Self-Design in Special Education. There is also a course sequence in special education administration offered for those individuals matriculated into the educational leadership program.

Abilities and Disabilities Studies Program Core Values

- Educators interact with others based on a belief in the infinite possibilities of and for human growth and development; all youth have the potential to learn and express knowledge through their unique styles of acquiring and demonstrating knowledge.
- Educators are responsible for supporting and guiding each student on his/her journey from potentials to performances through personally meaningful, respectful, and accessible pathways.
- Educators create learning opportunities that honor and enhance the gifts and talents of each individual and make possible the contributions of each student to self and to society.
- Educators create learning environments where every child feels welcome and accepted for their unique attributes, including her/his cultural background, strengths, and weaknesses.
- Educators always use person-first language and thinking; everyone is valued and viewed as a whole person, not strictly by a label or one characteristic.
- Educators use multiple assessments and evaluations when measuring students' successes and abilities and in understanding their needs.
- Educators are collaborative, respectful, and supportive with all educators they come in direct and indirect contact with, including parents, maintenance workers, and administrative assistants.
- Educators base all of their behaviors on the belief that each individual has intrinsic and global value to the evolution of human kind.

Special Admissions Requirements

In addition to the general requirements of the College, candidates to the master's program must submit proof of teacher certification, provisional or professional level, which can be in any area or from any state. And, in place of the standard essay, in two to three pages:

1. Describe why you are enrolling in this program.
 - a. What goals do you have for yourself by earning a master's degree in this concentration?
 - b. What is at least one aspect of your teaching that you feel you will strengthen through earning this master's?

And

2. Describe your past experiences with youth, either in teaching or another capacity.
 - a. What did you learn about youth through this experience?
 - b. What did you learn about yourself through this experience?

Testing Requirements As of March 2009 standardized testing for graduate admission to the Abilities and Disabilities Studies program has been eliminated. Students are no longer required to submit GRE or MAT scores. Applicants must submit proof of teacher certification, which can be in any area or from any state.

Submit official TOEFL scores of 550 or higher on the paper-based test, 79 or higher on the Internet-based test, or 213 or higher on the computer-based test if the applicant is an international student whose first language is not English. International students who have received their undergraduate degree from an English-speaking institution may apply for a waiver of this requirement.

Transfer Credit Previously completed graduate courses may be approved for transfer into a graduate program within the Abilities and Disabilities Studies pro-

gram if credits for the courses were earned no more than five years prior to matriculation, with grades of B or better. A syllabus for each course submitted for transfer credit must be provided upon application.

For previous work completed through the University of Maine System (UMS), up to twelve (12) credits may be accepted if the courses meet the requirements above and they are equivalent to core courses or elective courses in the relevant USM program of study. Up to six (6) graduate credits completed at institutions outside of the University of Maine System may be accepted if the courses meet the requirements above and are equivalent to core courses or elective courses in the relevant USM program of study.

Transfer of more than twelve (12) University of Maine System credits or six (6) non-University of Maine System credits may be approved by the program coordinator and faculty. These credits may include certificate of graduate study program courses and professional development in-service graduate courses.

Program Requirements

I. Gifted and Talented Education Concentration (36 credits)

Core (12 credits)

EDU	600	Research Methods and Techniques
SED	653	Assessment in Special Education
SED	601	Introduction to Student Programming and Master's Goal Setting (1 credit)
SED	698	Capstone Seminar and Portfolio – last course only (2 credits)
SED	699	Directed Study

Specialization (12 credits)

SED	618	Programming for Learners with Special Needs
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	666	Models in Education of the Gifted

Electives (12 credits)

SED	550	Teaching Gifted Students in the Regular Classroom
SED	663	Management in Education of the Gifted
SED	664	Gifted Students in Special Populations
SED	665	Institute for the Program Planners in Education of the Gifted/Talented
SED	667	Social/Emotional Needs of the Gifted
SED	670	Secondary Programs in the Gifted and Talented

Other electives as approved by program or advisor

II. Self Design in Special Education (36 credits)

Core Courses (12 credits)

EDU	600	Research Methods and Techniques
SED	601	Introduction to Student Programming and Master's Goal-setting (1 credit)
SED	697	Universal Design Implemented
SED	698	Capstone Seminar and Portfolio (must be taken last) (2 credits)
SED	699	Directed Study

III. Teaching ALL Students Concentration (39 credits)

Core Course (7 credits)

EDU	600	Research Methods and Techniques
SED	601	Introduction to Student Programming and Master's Goal Setting (1 credit)
EDU	562	Linguistic and Cultural Diversity in the Classroom

Special Education (12 credits)

SED	614	Methods of Teaching Mathematics for Students with Special Needs
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SED	615	Positive Behavioral Interventions and Supports
SED	618	Programming for Learners with Special Needs
SED	679	Consultation and Special Education

Gifted and Talented (6 credits)

SED	550	Teaching Gifted Students in the Regular Classroom
SED	662	Productive Thinking and the Gifted Learner

English Language Learners (9 credits)

EDU	559	Aspects of Reading for Multilingual Learners
EDU	561	Aspects of the English Language
EDU	563	ESL Language Testing and Assessment

Capstone (5 credits)

SED	697	Universal Design Implemented
SED	698	Capstone Seminar and Portfolio—last course only (2 credits)

Electives (24 credits)

The elective courses allow students to tailor their master's programs to their interests and the areas they feel they need further study in to become better teachers for students with exceptionalities. These courses will be discussed with the student's advisor and written in an agreement between the student and his/her advisor. Any course changes from this agreement will need to be approved, in writing, by the student's advisor.

At least 15 of these credits need to be directly related to working with students with disabilities. All courses need to be graduate level. They can be taken from any graduate department at USM with prior approval by advisor.

Program Requirements

Portfolio Students in all concentrations will create, in SED 601, the goals and objectives they plan to accomplish through their plan of study and their teaching philosophy statement. Goals and objectives can be an expansion of the admissions essay they use for matriculation into the program.

The professional portfolio will consist of the student's reflection of their goals and objectives and teaching philosophies created in SED 601 and on their evidence of meeting five (5) of the Council for Exceptional Children's Teaching Standards.

The purpose of the portfolio is to provide an opportunity for students to demonstrate and reflect upon what they have gained in the program. It is expected that the goals and objectives will integrate the principles of one's concentration, the application of knowledge to practice, an understanding of research methodology, and the ability to communicate effectively.

Students are responsible for compiling the elements of their portfolio throughout their program of study. Completion of portfolios will occur during SED 698, after all their other courses are completed. The portfolio will demonstrate how students have met the goals and objectives they planned at the beginning of their program, and the new and unexpected knowledge that they gained in their program. Students will then present live, or via video, their portfolios. Presentations occur two times a year, at the end of the fall semester and spring semester.

If a student fails all or part of the portfolio, the student will meet with program advisors to discuss the results. Note that students are permitted to resubmit their portfolios only once.

Master of Science in Adult and Higher Education

The master of science in adult and higher education is the only graduate program of its kind in northern New England. 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.

Online Courses

The adult education program offers online courses. Students wishing to complete the program from a distance can do so by selecting online courses during the fall and spring semesters and taking one-week intensive campus-based electives during the summer.

Special Admission Requirements

In place of the standard essay required on the graduate application, candidates should provide a 3-5 page narrative, 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.

Testing Requirement As of March 2009 standardized testing for graduate admission to the adult education program has been eliminated. Students are no longer required to submit GRE or MAT scores.

Submit official TOEFL scores of 550 or higher on the paper-based test, 79 or higher on the Internet-based test, or 213 or higher on the computer-based test if the applicant is an international student whose first language is not English. International students who have received their undergraduate degree from an English-speaking institution may apply for a waiver of this requirement.

Transfer Credit A maximum of 12 credit hours of graduate-level study may be approved as transfer credit provided these credits were not used as part of another degree or certificate program, were earned no more than five years prior to matriculation, are in subject areas related to adult education, and that students received grades of B or better in the classes. In rare situations and when compelling evidence is provided, the program faculty reserves the right to expand the number and age of credits transferred into the M.S. in adult and higher education program beyond the 12 credit, five-year rule.

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

The master of science in adult education requires 36 credits of coursework. Students must also submit a professional portfolio to complete the degree.

Basic Core (15 credits)

EDU 600	Research Methods and Techniques
HRD 600	History and Philosophy of Adult Education
HRD 604	Self-Directed Education: Orientation (1 credit)
HRD 605	Self-Directed Education: Review and Focus (1 credit)
HRD 606	Self-Directed Education: Comprehensive Exam (1 credit)
HRD 631	The Adult Learner

Middle Core (9 credits required from the following)

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 635	Training and Development
HRD 653	Consulting: Fundamentals and Practice
HRD 667	Action Research and Evaluation Methodologies

Field-Based Practice Courses (3 credits)

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

Senior Course (3 credits)

HRD 649	Seminar in Adult Education and Human Resource Development
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Electives (9 credits)

Students may cluster their electives into a concentration in consultation with their faculty advisor.

EDU 559	Aspects of Reading for Multilingual Learners
EDU 561	Aspects of the English Language
EDU 562	Linguistic and Cultural Diversity in the Classroom
EDU 671	Organizational Behavior
EDU 678	School Law (<i>state director certification</i>)
EDU 679	Evaluation and Supervision of School Personnel (<i>state director certification</i>)
EDU 683	School Finance (<i>state director certification</i>)
HCE 604	Career Development
HRD 545	Gender and Learning
HRD 555	Introduction to Student Affairs in Higher Education
HRD 556	Summer Institute in Student Affairs
HRD 557	Gerontology for Educators
HRD 558	Aging and Life Review
HRD 559	Aging, Death, and Bereavement
HRD 637	Community Education
HRD 639	The Heart of Teaching
HRD 643	Multicultural Adult Development
HRD 646	Global Perspectives of Adult Education and Practices
HRD 647	Work and Learning Institute
HRD 693	Life Stories, Personal Mythmaking, and Spiritual Development
HRD 699	Independent Study in Human Resource Development

Post-Master's Certificate of Advanced Study in Adult Learning

The post-master's certificate of advanced study 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.

Special Admissions Requirements

Candidates should have a master's degree in adult education or a related field from a regionally accredited college or university and at least 2 years of experience in professional practice. Professional practice may include, but is not limited to, work in student affairs in higher education, training, teaching in a variety of contexts, program administration, or community education. In addition to the general requirements of the college, candidates should provide a narrative that includes:

- a. an integrated essay of approximately 1,000 words that includes a brief autobiography, referencing study in 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. tentative list of proposed coursework

Note: Candidates whose master's degree and/or work experiences are not strongly related to adult education will be advised to apply to the master's in adult and higher education program.

Transfer Credit Candidates may transfer up to 15 credit hours of graduate-level study earned at other universities into the CAS in adult learning if these credits were not used as part of another degree or graduate certificate, relate to the subject of adult education/learning, were earned no more than five years prior to admission, and that students received grades of B or better in the classes. In rare situations and when compelling evidence is provided, the program faculty reserves the right to expand the number and age of credits transferred into the CAS in adult learning program beyond the 15 credit, 5-year rule.

Program Requirements

Required Courses (6 credits)

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 (21 credits)

HRD 685 CAS Completion Project in Adult Learning (3 credits)

A field-based capstone project will be completed as one of the following: a field-based study; a public policy initiative; a publishable empirical research and/or 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 post-master's certificate of advanced study. The master of science in counseling degree provides its graduates with the counseling knowledge and skills used in school, clinical 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, clinical mental health counseling, and rehabilitation counseling. The Mental Health Rehabilitation Technician/Community (MHRT/C) Certificate Program may be taken independently of the master's degree. The certificate of advanced study in counseling is a post-master's program for current counselors who are interested in pursuing advanced coursework.

The mission of the counselor education program is to prepare counselors for ethical practice. The program prepares its graduates to act as facilitators of change in the lives of individuals at all developmental levels. By modeling high standards of professionalism and offering a foundation of knowledge, skills, self-awareness, and practice, the program aspires to prepare counselors of the highest quality to work in schools, mental health agencies, businesses, hospitals, rehabilitation organizations, private practice, and other settings.

Program Description

The master's program in counseling provides students with counseling knowledge and skills used in school, agency, private practice, and rehabilitation settings. Students study human development and behavior, individual counseling theory and skills, group theory and dynamics, research methodology, psychological measurement and evaluation, as well as courses in the individual specialty areas of school counseling, clinical mental health counseling, and rehabilitation counseling. Program training includes traditional university-based courses, distance education, and clinical instruction. The program provides an integrated and conceptually sound framework of knowledge, skills, and self awareness as a foundation for ethical practice in the fields of counseling and rehabilitation. In addition, the program provides leadership for the counseling profession at the state, regional, and national levels.

Students in the counseling program will be able to:

- a) demonstrate knowledge of core curriculum.
- b) demonstrate an integration and application of their knowledge and skills in the specialty areas in counseling (school, clinical mental health, and rehabilitation).
- c) demonstrate knowledge and skills in addressing issues of diversity
- d) apply individual and group counseling skills and techniques
- e) reflect on their personal and professional strengths, weaknesses, abilities, and challenges to identify professional development needs.
- f) analyze and apply relevant technologies for the growth and practice of counseling and rehabilitation.
- g) apply ethical decision-making in counseling situations.
- h) articulate how their professional identity is grounded in their personal identification with the standards and ethical practices of the counseling profession.

The master of science in counseling degree is divided into three specialty areas: school counseling, clinical mental health counseling, and rehabilitation counseling. Depending on the specialty area, the counselor education program requires 54-63 credit hours of coursework, which includes core courses, required specialty courses, and electives. In addition to coursework, each student must successfully pass the Counselor Preparation Comprehensive Examination (CPCE).

The counselor education program holds accreditation from the Council for the Accreditation of Counseling and Related Education Programs (CACREP) for the clinical mental health and school counseling specialties, and from the Council on Rehabilitation Education (CORE) for the rehabilitation specialty.

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 a brief autobiography that relates the applicant's experiences that have led to an interest in counseling and application to the counselor education program. Candidates are also

asked to address the following statement: "As counseling professionals, we are constantly seeking areas in ourselves that bear examination and change. As future practitioners, you will be witness to a wide variety of client experiences." Please discuss areas in yourself that may block your ability to empathically listen to client experiences that are different than your own. The entire narrative, including the autobiography and the statement, should be limited to three typewritten, 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. As part of the interview, applicants will be required to provide a brief, spontaneous writing sample.

Testing Requirement Applicants to the counseling program must take the MAT or GRE. One of the tests must be taken within five years of application. For those taking the Miller Analogies Test (MAT) you must have earned a score of 40 points or above, or a score of 390 or above if the test was taken after September 30, 2004. For the GRE (Graduate Record Exam) you must have earned a score of 900 or above combined verbal and quantitative scores (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), 79 or higher on the Internet-based test, or 213 on the computer-based test for students whose native language is not English.

Applicants who did not score 40, or 390 if the test was taken after September 30, 2004, 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.

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 program chair in exceptional circumstances, including certificates of graduate study program courses. Please also see College transfer credit policies in the CEHD Admission and Academic Policies section.

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

Professional Licensure and Certification Notice Students with a criminal record who are pursuing degrees leading to application for professional licensure or certification should contact the appropriate licensure or certification body prior to matriculation to ensure eligibility.

II. Clinical Mental Health Counseling Concentration

The clinical mental health counseling specialty requires a total of 63 credit hours of coursework. The specialty 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. During 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 it will also prepare them to be licensed as a clinical professional counselor (LCPC) in Maine. The clinical mental health counseling specialty holds accreditation from the Council for the Accreditation of Counseling and Related Education Programs (CACREP).

Program Requirements

Core Courses (36 credits)

EDU	600	Research Methods and Techniques
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
HCE	690	Individual Counseling Practicum Seminar
HCE	691	Individual Counseling Practicum Laboratory
HRD	664	Culture, Tradition, and Diversity
HRD	668	Human Development

Required Specialty Courses (21 credits)

HCE	640	Professional Issues for Mental Health Counselors
HCE	642	Perspectives in Chemical Dependency
HCE	644	Crisis Intervention
HCE	645	Diagnosis and Treatment Planning
HCE	686	Internship in Counselor Education (9 credits - 900 hours)

Electives (6 credits)

***Substance Abuse
Counseling Expertise
Area***

For those students interested in working in the area of substance abuse, the counselor education program offers coursework which will enable students to obtain a Substance Abuse Counseling expertise area within their master's degree. This expertise is available as part of the clinical mental health counseling specialty. Students who complete this expertise area 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 expertise area:

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

III. Rehabilitation Counseling Concentration

The rehabilitation counseling specialty requires a total of 54 credit hours of coursework. The specialty 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:

- a) the value, worth, dignity, and capabilities of all people;
- b) the right of all people to full societal participation with individuals in settings of their choice;
- c) the treatment of persons with disabilities as equal partners in the rehabilitation process;
- d) the emphasis on societal, community, and professional change as much as individual change;
- e) the importance of hope, individual capacity, community inclusion, support, and education; and
- f) 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:

- a) the use of class and community experiences to acquaint students with rehabilitation philosophies, methods, and organizations;
- b) 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:

- a) participation on local professional and consumer boards and committees;
- b) presentation at local and regional conferences;
- c) 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 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.

Students are eligible to receive the MHRT/community certificate from the state of Maine upon completion of the degree program.

Program Requirements

Core Courses (27 credits)

EDU	600	Research Methods and Techniques
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
HCE	690	Individual Counseling Practicum Seminar
HCE	691	Individual Counseling Practicum Laboratory
HRD	668	Human Development

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	Multicultural Counseling: Family and Disability Issues
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)

Electives (3 credits)

III. School Counseling Concentration

The school counseling specialty requires a total of 60 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. Graduates of this specialty are eligible to sit for the National Counselor Examination. The school counseling specialty holds accreditation from the Council for the Accreditation of Counseling and Related Education Programs (CACREP).

Program Requirements

Core Courses (36 credits)

EDU	600	Research Methods and Techniques
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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
HCE	690	Individual Counseling Practicum Seminar
HCE	691	Individual Counseling Practicum Laboratory
HRD	664	Culture, Tradition, and Diversity
HRD	668	Human Development

Required Specialty Courses (21 credits)

HCE	607	School Guidance Programs and Services
HCE	609	The Practice of School Counseling
HCE	622	Counseling Children and Adolescents
HCE	642	Perspectives in Chemical Dependency
HCE	644	Crisis Intervention
HCE	686	Internship in Counselor Education (6 credits - 600 hours)

Electives (3 credits)

Note: To receive certification as a school counselor in the state of Maine, students must take an exceptionalities course. This may be an undergraduate or graduate course. If you choose to take a graduate course, we recommend SED 540 Nature and Needs of Learners Who Are Exceptional.

Post-Master's Certificate of Advanced Study in Counseling

The post-master's 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, rehabilitation counseling, and couple and family therapy.

Special Admission Requirements

Candidates should have a master's degree in counseling or allied field and, preferably, two years of experience in professional 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 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.

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 of 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.

Program Requirements

Focus Area (30 credits)

Students can pursue one or more of the focus areas detailed below, or design a professionally relevant focus area of their own with the assistance of a faculty advisor.

Portfolio

Students develop a professional portfolio describing progress toward professional goals while in the CAS program. Portfolios are used in final seminars as the basis for discussion, summary, and sharing among completing students.

Focus Areas

Clinical Supervision

HCE	681	Clinical Supervision
HCE	687	Internship in Clinical Supervision
HCE	694	Practicum in Individual Supervision

Electives: 21 credits selected in consultation with an advisor

Holistic Counseling

HCE	507	Spirituality and Religion in Counseling
HCE	619	Myth, Madness, and Mental Illness
HCE	641	Mind-Body Techniques
HRD	558	Aging and Life Review
HRD	693	Life Stories: Personal Mythmaking and Spiritual Development

Electives: 15 credits selected in consultation with the advisor.

Play Therapy

HCE	623	Theories and Applications of Play Therapy: Summer Institute
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Electives: 27 credits selected in consultation with an advisor. At least two courses (6 credits) must be selected from the following list to qualify for national certification:

HCE	622	Counseling Children and Adolescents
HCE	624	Child-Centered Play Therapy
HCE	625	Adlerian Play Therapy
HCE	687	Internship in Clinical Supervision (play therapy placement)
HCE	694	Practicum in Individual Supervision (play therapy placement)
HCE	695	Practicum in Play Therapy

Self-Designed

With the assistance of their faculty advisor, students may design a program of study that fulfills their individual learning goals. This option may also be used to obtain state certification in rehabilitation or school counseling, or state licensure as a substance abuse counselor.

Mental Health Rehabilitation Technician (MHRT)/ Community Certificate

The MHRT/community 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. Applications and materials need to be submitted to the Office of Graduate Admissions, 39 Exeter Street, PO Box 9300, Portland, ME 04104-9300. For more information about the program and application materials, see the CEHD Web site at www.usm.maine.edu/cehd/counselor-education/mhrt.htm. The five-course program described below leads to the MHRT/community certificate and can also lead to the new state employment specialist certificate.

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

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 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 (Professional Teacher in a Democratic Society). 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 engages experienced teachers in thoughtful examination of the demands and rewards of teaching in a democratic society. Although the program may lead to certification as curriculum coordinator or other administrative roles, it is equally appropriate for the classroom teacher who simply wants to make a difference in her or his setting. In addition to the common elements listed above, graduates of the teacher leadership area (the Professional Teacher in a Democratic Society) will be able to:

- a) evaluate the societal values, trends, and issues that impact education;
- b) evaluate potential roles, responsibilities, and standards for professional teachers in a democratic society;
- c) develop culturally responsive strategies that foster inclusion and access for all students;
- d) assess both student outcomes and features of learning communities, using both qualitative and quantitative data;
- e) demonstrate expertise in an area of concentration relevant to their own settings; and
- f) 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; and, in the administrative strand, evidence of three or more years of

teaching experience; 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.

Testing Requirement As of March 2009 standardized testing for graduate admission to the educational leadership program has been eliminated. Students are no longer required to submit GRE or MAT scores.

Submit official TOEFL scores of 550 or higher on the paper-based test, 79 or higher on the Internet-based test, or 213 or higher on the computer-based test if the applicant is an international student whose first language is not English. International students who have received their undergraduate degree from an English-speaking institution may apply for a waiver of this requirement.

Transfer Credit Previously completed graduate courses may be approved for transfer into a graduate program within the educational leadership program if credits for the courses were earned no more than five years prior to matriculation, with grades of B or better. A syllabus for each course submitted for transfer credit must be provided upon application.

For previous work completed through the University of Maine System (UMS), up to twelve (12) credits may be accepted if the courses meet the requirements above and they are equivalent to core courses or elective courses in the relevant USM program of study. Up to six (6) graduate credits completed at institutions outside of the University of Maine System may be accepted if the courses meet the requirements above and are equivalent to core courses or elective courses in the relevant USM program of study.

Transfer of more than twelve (12) University of Maine System credits or six (6) non-University of Maine System credits may be approved by the program coordinator and faculty. These credits may include certificate of graduate study program courses and professional development in-service graduate courses. Requests for the transfer of credits taken more than five (5) years prior to matriculation may also be evaluated and approved by the program coordinator and faculty.

Program Requirements for Certification as a School Principal (36 credits)

EDU	600	Research Methods and Techniques
EDU	605	Teaching, Learning, 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
EDU	670	Introduction to Administration
EDU	671	Organizational Behavior
EDU	677	Seminar in School Management
EDU	678	School Law
EDU	679	Evaluation and Supervision of School Personnel
EDU	685	Internship in Administration (three semesters, nine credits)

Curriculum Coordinator (36 credits)

For those who wish to pursue certification as a curriculum coordinator students must take all of the school principal courses listed above, minus the administration internship, and instead take the internship course in curriculum management.

EDU	688	Internship in Curriculum Management (three semesters, nine credits)
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Program Requirements for Certification as a Director of Special Education (36 credits)

EDU	600	Research Methods and Techniques
EDU	603	Analysis of Teaching
EDU	671	Organizational Behavior
EDU	677	Seminar in School Management
EDU	678	School Law
EDU	679	Evaluation and Supervision of School Personnel

EDU	686	Internship in Special Education Administration (three semesters, nine credits)
SED	618	Programming for Learners with Special Needs
SED	682	Special Education Law
SED	684	Administration in Special Education

Program Requirements for Professional Teacher in a Democratic Society
(39 credits)

Course Requirements

EDU	600	Research Methods and Techniques
EDU	601	Naturalistic Inquiry and Qualitative Research
EDU	603	Analysis of Teaching
EDU	605	Teaching, Learning, and Assessment
EDU	608	Curricular Contexts for Teaching in a Democratic Society
EDU	610	The Professional Teacher in a Democratic Society
EDU	680	Professional Learning in Schools

Capstone (6 credits)

EDU	612	Practicum/Seminar
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Concentration (12 credits)

Self-Designed Concentration

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

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.

Post-Master's Certificate of Advanced Study in Educational Leadership

The post-master's 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 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

Self-designed Concentration (24-27 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/Seminar, EDU 685/686/687/688 Internship in Administration/Special Education Administration/Superintendency/Curriculum Management; or EDU 665 CAS Directed Study.

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:

Special Admission Requirements

Applicants to the assistant principal certificate are expected to have two years of teaching experience with the expectation of completing a third year of teaching during USM graduate study. The Maine Department of Education requires three years of teaching experience for administrative certification.

This 12-credit certificate 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 résumés 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.

Athletic Administrator Certificate

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 course 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.

Special Admission Requirements

Applicants to the athletic administrator certificate are expected to have two years of teaching experience with the expectation of completing a third year of teaching during USM graduate study. The Maine Department of Education requires three years of teaching experience for administrative certification.

This 18-credit certificate consists of six courses:

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

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 résumés and job applications. Upon submission of the USM transcript, the state office of certification will issue a state of Maine assistant principal certificate to candidates with appropriate professional prerequisites established by the state of Maine. Although 12 of the 18 credit hours earned in this program (indicated by single asterisks above) can be transferred into a master's program, students who wish to matriculate into the master's program must apply separately for admission.

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

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

Master of Science in Education in Literacy Education

The master of science in education in literacy education, an advanced certification for teachers, 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 teachers, and other experienced educators whose primary responsibility is helping students to become competent users of language. The literacy education program offers the following: a Master of Science in Education in Literacy Education (36 credit hours of coursework and successful completion of a synthesizing project); a Master of Science in Education in Literacy Education with a concentration in English as a Second Language (36 credit hours of coursework and successful completion of a synthesizing project); a Master of Science in Education in Applied Literacy (an option only for ETEP/CLASS/TEAMS); a Post-Master's Certificate of Advanced Study in Literacy Education (30 credit hours of coursework including a capstone experience); a Post-Master's Certificate of Advanced Study in English as a Second Language (30 credit hours of coursework including a capstone experience); and a Certificate of Graduate Study in Literacy. For advising purposes, it is recommended that students take no more than two courses before applying to the program. Individuals seeking Maine certification as a literacy specialist through this program must also pass the Praxis II exam required by the state.

Special Admission Requirements

Testing Requirements Applicants to the literacy education program must take the MAT or GRE. One of the tests must be taken within five years of application. For those taking the Miller Analogies Test (MAT) you must have earned a score of 40 points or above, or a score of 390 or above if the test was taken after September 30, 2004. For the GRE (Graduate Record Exam) you must have earned a score of 900 or above combined verbal and quantitative scores (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), 79 or higher on the Internet-based test, or 213 on the computer-based test for students whose native language is not English.

Applicants who did not score 40, or 390 if the test was taken after September 30, 2004, 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.

Transfer Credit Previously completed graduate courses may be approved for transfer into a graduate program within the literacy education program if credits for the courses were earned no more than five years prior to matriculation, with grades of B or better. A syllabus for each course submitted for transfer credit must be provided upon application.

For previous work completed through the University of Maine System (UMS), up to twelve (12) credits may be accepted if the courses meet the requirements above and are equivalent to core courses or elective courses in the relevant USM program of study. Up to six (6) graduate credits completed at institutions outside of the University of Maine System may be accepted if the courses meet the requirements above and are equivalent to core courses or elective courses in the relevant USM program of study.

Transfer of more than twelve (12) University of Maine System credits or six (6) non-University of Maine System credits may be approved by the program coordinator and faculty. These credits may include certificate of graduate study program courses and professional development in-service graduate courses. Requests for the transfer of credits taken more than five (5) years prior to matriculation may also be evaluated and approved by the program coordinator and faculty.

Program Requirements

First Tier Courses (15 credit hours)

EDU	511	Children's Literature or
EDU	513	Adolescent Literature
EDU	559	Aspects of Reading for Multilingual Learners or
EDU	562	Linguistic and Cultural Diversity in the Classroom
EDU	600	Research Methods and Techniques
EDU	620	Reading Development and Instruction
EDU	626	The Writing Process

Second Tier Courses (12 credit hours)

EDU	514	Improving Teaching in Content Areas through Literacy
EDU	521	Electronic Literacy and Education or
EDU	622	Designing and Managing Literacy Instruction, PS-3
EDU	607	Teacher Research in Literacy
EDU	621	Literacy Problems: Assessment and Instruction

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.

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 (36 credits)

EDU	514	Improving Teaching in Content Areas through Literacy
EDU	559	Aspects of Reading for Multilingual Learners
EDU	561	Aspects of the English Language*
EDU	562	Linguistic and Cultural Diversity in the Classroom*
EDU	563	ESL Testing and Assessment*
EDU	600	Research Methods and Techniques
EDU	607	Teacher Research in Literacy
EDU	620	Reading Development and Instruction*
EDU	626	The Writing Process*
EDU	635	Seminar in Second Language Literacy
EDU	639	Practicum in Literacy Education (6 credits)

State endorsement in ESL requires prior professional teacher certification as well as coursework in ESL instruction. The master's degree in literacy education with an ESL concentration does not qualify graduates for Maine literacy specialist certification.

*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.

Applied Literacy, ETEP option

Please see Master's Degree Options located within the Extended Teacher Education Program section of this catalog.

Post-Master's Certificate of Advanced Study in Literacy Education

The post-master's 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. Please consult your advisor.

Program Requirements (30 credits)

Electives (30 credits)

With advisor consultation, students may select graduate courses in education or other disciplines that relate to their focus in literacy and contribute to their overall plan of study.

Advanced Seminar in Literacy/Capstone Project

For specific requirements please see the literacy education Web site at www.usm.maine.edu/cehd/Literacy-Education/prog_materials.htm.

Post-Master's Certificate of Advanced Study in English as a Second Language

The post-master's 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 559	Aspects of Reading for Multilingual Learners
EDU 561	Aspects of the English Language
EDU 562	Linguistic and Cultural Diversity in the Classroom
EDU 563	ESL Testing and Assessment
EDU 600	Research Methods and Techniques or
EDU 607	Teacher Research in Literacy
EDU 635	Seminar in Second Language Literacy

Electives (6 credits)

Advanced Seminar in Literacy/Capstone Project (3 credits)

For specific requirements please see the literacy education Web site at www.usm.maine.edu/cehd/Literacy-Education/prog_materials.htm.

Certificate of Graduate Study in Early Language and Literacy

The certificate of graduate study in early language and literacy is a four-course sequence that provides students with a thorough understanding of the development of early language and concepts that are foundational to understanding and using printed language. Those who complete the certificate program can design early care and preschool curricula to effectively implement strategies to foster this development in all children, ages 0-5, and can coach others in these strategies and practices. The program was developed in collaboration with the USM Muskie School's Cutler Institute for Child and Family Policy.

This 12-credit program consists of four graduate-level courses.

The courses include:

EDU 516	Early Care and Education Policy
EDU 517	Early Language and Literacy Learning
EDU 518	Using Literature to Support Learning in Young Children
EDU 519	Early Language and Literacy Curriculum and Instructional Design

*Certificate of Graduate
Study in Literacy*

Admission to the certificate program is based on successful completion of a bachelor's degree and an interest in early language and literacy. For application instructions please refer to the College's section on admission to certificate of graduate study programs.

The certificate of graduate study in literacy 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 who wish to obtain a basic background in literacy. 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.

The courses include:

- 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
- EDU 620 Reading Development and Instruction
- EDU 626 The Writing Process

Admission to the literacy certificate program is based on successful completion of a bachelor's degree and an interest in literacy-related issues. For application instructions please refer to the CEHD section on admission to certificate of graduate study programs.

Master of Science in Education: Professional Educator

The professional educator program is a master of science in education degree that is designed for teachers who want to focus on classroom teaching and to pursue a master's degree that best fits their particular interests and needs. The program is a cross-department program that allows students to choose from multiple and diverse academic offerings that focus on teaching, learning, and assessment.

The professional educator program requires 36 credit hours of coursework. Students take courses from a foundation core and an academic core that focuses on curriculum, teaching, and assessment. Students then complete a concentration of their choice. A capstone completes the program.

Special Admission Requirements

In addition to the regular requirements of the College, applicants to the professional educator program must submit proof of teacher certification. The certification can be in any area or from any state.

Testing Requirement As of March 2009 standardized testing for graduate admission to the professional educator program has been eliminated. Students are no longer required to submit GRE or MAT scores. Applicants must submit proof of teacher certification, which can be in any area or from any state.

Submit official TOEFL scores of 550 or higher on the paper-based test, 79 or higher on the Internet-based test, or 213 or higher on the computer-based test if the applicant is an international student whose first language is not English. International students who have received their undergraduate degree from an English-speaking institution may apply for a waiver of this requirement.

Transfer Credit Previously completed graduate courses may be approved for transfer into a graduate program within the professional educator program if credits for the courses were earned no more than five years prior to matriculation, with grades of B or better. A syllabus for each course submitted for transfer credit must be provided upon application.

For previous work completed through the University of Maine System (UMS), up to twelve (12) credits may be accepted if the courses meet the requirements above and are equivalent to core courses or elective courses in the relevant USM program of study. Up to six (6) graduate credits completed at institutions outside of the University of Maine System may be accepted if the courses meet the requirements above and are equivalent to core courses or elective courses in the relevant USM program of study.

Transfer of more than twelve (12) University of Maine System credits or six (6) non-University of Maine System credits may be approved by the program coordinator and faculty. These credits may include certificate of graduate study program courses and professional development in-service graduate courses. Requests for the transfer of credits taken more than five (5) years prior to matriculation may also be evaluated and approved by the program coordinator and faculty.

Program Requirements for Professional Educator (36 credits)

I. Foundations Core (6 credits)

EDU 600 Research Methods

Select one from the following:

EDU 610 The Professional Teacher in a Democratic Society

EDU 562 Linguistic and Cultural Diversity in the Classroom

II. Academic Core in Curriculum, Teaching, Assessment (9 credits)

Choose one course from each domain

A. Curriculum

EDU 604 Curriculum Development

EDU 608 Curricular Contexts for Teaching in a Democratic Society

EDU 615 Middle Level Curriculum Organization

SED 618 Programming for Learners with Special Needs

B. Teaching

EDU 511 Children's Literature

EDU 513 Adolescent Literature

EDU 514 Improving Teaching in the Content Area through Literacy

EDU	603	Analysis of Teaching
EDU	617	Teaching in the Middle Level School
EDU	620	Reading Development and Instruction
EDU	626	The Writing Process
SED	550	Teaching Gifted Students in the General Classroom
SED	614	Methods of Teaching Mathematics for Students with Special Needs
C. Assessment		
EDU	605	Teaching, Learning, and Assessment
EDU	621	Literacy Problems: Assessment and Instruction
EDU	563	ESL Testing and Assessment
SED	654	Assessment in Special Education

III. Concentration (15 credits)

Students may choose from one of the approved concentrations below or participate in a concentration that is self designed or cohort designed.

- Culturally Responsive Practices
- Curriculum Coordinator
- Early Language Literacy
- English as Second Language
- Literacy
- Middle Level Education
- Teacher Leadership
- Cohort Design
- Self Design

IV. Capstone (3 - 6 credits)

Students work with a faculty member to define their capstone experience. This may include: portfolio, thesis, internship, action research project or other appropriate format.

Master of Science in Educational Psychology with a concentration in Applied Behavior Analysis

The master of science in educational psychology with a concentration in applied behavior analysis prepares master's-level clinicians with the education and training to sit for the examination to become Board Certified Behavior Analysts (BCBA). The program's goals are (a) to provide a consistent and coherent program of study in educational psychology founded on specific conceptual frameworks (outlined below), (b) to teach and demonstrate best practices in behavior analysis in all program courses and activities, and (c) to prepare students for the practice of behavior analysis in Maine and elsewhere. The MSEPABA objectives pull together the mission and goals by providing courses and practical strategies for implementing best practices in school psychology by using empirically validated assessment, intervention, and consultation methods.

The M.S. in educational psychology program prepares students to meet competencies set forth by the Behavior Analyst Certification Board (BACB). Upon completion of the program, graduates have earned the academic requirements in the preparation for the practice of behavior analysis. The program is designed to meet the academic requirements necessary for the following credentials: Board Certified Behavior Analyst.

Based on the models and professional standards found in the program philosophy, students in the M.S. program receive training in the following areas prior to and during the practicum/internship phases of the program: assessment: functional behavior assessment (e.g., indirect, direct, and analogue), clinical interviews; interventions, consultation, positive behavioral supports; social foundations training, applied research and evaluating the effectiveness of interventions, and single case experimental design.

In addition to the academic requirements, BACB requires a 1,500-hour supervised work experience; this work experience must occur in a behavior analytic environment under the supervision of a Board Certified Behavior Analyst. The supervised work is designed to provide students or graduates with experience utilizing the knowledge and skills gained during and concurrent with coursework. The supervised work is conducted under the direct supervision of a BCBA and may or may not involve direct supervision by University faculty. The supervised work experience is arranged independent of the University or educational psychology program, by the student and may occur concurrent with or upon completion of the coursework.

Consistent with BACB Guidelines for Responsible Conduct For Behavior Analysts (August 2004), graduates of the program are encouraged to maintain a rigorous course of professional development throughout their careers and are bound to limit their practice to competencies and populations in which they are trained.

Graduates who are interested in further development in behavior analysis or as an educational or school psychology practitioner are encouraged to pursue doctoral training. Doctoral training typically prepares practitioners in advanced skills in school psychology practice (e.g., neuro-psychological assessment, behavioral assessment, counseling, applied behavior analysis, applied research, supervision) with specific populations (e.g., emotional disability, developmental disabilities, autism, learning disability).

Special Admission Requirements

Testing Requirements Applicants to the education psychology program must take the MAT or GRE. one of the tests must be taken within five years of application. For those taking the Miller Analogies Test (MAT) you must have earned a score of 40 points or above, or a score of 390 or above if the test was taken after September 30, 2004. For the GRE (Graduate Record Exam) you must have earned a score of 900 or above combined verbal and quantitative scores on (this requirement is waived for applicants already holding a graduate degree, except for admission to the Psy.D. program); and have earned a score of at least 550 on the paper-based Test of English as a Foreign Language (TOEFL), 79 or higher on the Internet-based test, or 213 on the computer-based test for students whose native language is not English.

Applicants who did not score 40, or 390 if the test was taken after September 30, 2004, 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.

Transfer Credit Students admitted to the school psychology program can request permission to transfer up to 6 graduate credits toward the Psy.D. in school psychology, M.S. in educational psychology, or Certificate in Applied Behavior Analysis (CABA). In order for credits to be eligible for transfer, they must meet the following criteria:

1. The credits must have been earned as part of a graduate course (e.g., 500 level or higher) offered at a U.S. institution of higher learning accredited at the time the credits were earned by a regional and/or national accrediting body and recognized as accredited by the U.S. Department of Education.
2. The credits must have been earned for a course which is equivalent in content covered and skills developed to one required in the student's USM program of study.
3. The earned grade for the course must be a B or higher (GPA equivalent of 3.0).
4. The credits must have been earned within 3 years from the date when transfer credit is requested.
5. The credits must not have been applied to any previously earned degree.
6. For students seeking certification for BCBA, any applicable course(s) must be transferred from a program that is approved by the Behavior Analyst Certification Board.

Transferred credits will be noted on the student's USM transcript and counted toward the student's degree or certificate program of study. To request transfer of credit(s), a student must submit the course syllabus/i and official transcript(s) showing the course grade(s) for the course(s) already taken to the school psychology program coordinator. The coordinator will consult with program faculty to determine if the credit transfer is approved. Once approved, the program will notify the USM Registrar to enter the official transfer onto the student's record.

Course Waivers Students who have extensive prior graduate-level training in areas covered in the school psychology program courses can request to waive up to 5 courses or 15 credits of the required program of study. Waived courses are NOT transferred to the student's transcript. Students must replace waived courses with electives. Students are required to take enough electives to cover the number of credits or courses waived. In order for a course to be waived, the student must demonstrate the following:

1. The credits must have been earned as part of a graduate course (e.g., 500 level or higher) offered at a U.S. institution of higher learning accredited at the time the credits were earned by a regional and/or national accrediting body and recognized as accredited by the U.S. Department of Education.
2. The credits must have been earned for a course which is equivalent in content covered and skills developed to one required in the student's USM program of study.
3. The earned grade for the course must be a B or higher (GPA equivalent of 3.0).
4. The student can demonstrate ongoing competency in the knowledge and skills covered in the course for which a waiver is requested. For example, a student who has a prior master's degree in counseling and who has practiced and maintained state licensure as a counselor could be eligible for a waiver of a required counseling course.

Requests for course waivers follow the same procedure as requests for credit transfer. To request a course waiver, a student must submit the course syllabus and official transcript(s) showing the course grade(s) for the course(s) already taken to the school psychology program coordinator. The coordinator will consult with program faculty to determine if a course waiver is approved. Once approved, the program coordinator will notify the student in writing and a copy of the waiver agreement will be placed in the student's file.

Note: Course waivers are not available for those courses that are required for certification in behavior analysis.

Program Requirements (33 credits)	
Psychological Foundations (9 credits)	
SPY 671	Physical Bases of Behavior
SPY 673	Social Foundations of Behavior
SPY 676	Behavioral Principles of Learning
Assessment (9 credits)	
SPY 675	Indirect Behavioral Assessment
SPY 627	Advanced RTI for Reading
SPY 678	Functional Behavioral Assessment
Interventions (9 credits)	
SPY 629	ABA for Individuals with Developmental Disabilities
SPY 603	Consultation in School Psychology
SPY 684	Advanced Applied Behavior Analysis
Research (6 credits)	
EDU 600	Research Methods and Techniques (Must be taken within first year)
SPY 659	Clinical Research Methods

Certificate in Applied Behavior Analysis

The Certificate in Applied Behavior Analysis (CABA) includes an 18-credit program of study related to the research foundations, methods, ethics, and applications of applied behavior analysis. The certificate provides the coursework that leads to the Board Certified Behavior Analyst (BCBA) credential. The certificate does not automatically lead to obtaining the BCBA. BCBA requires 1,500 hours of supervised work experience in a behavior analytic environment under the supervision of a Board Certified Behavior Analyst (BCBA). The supervised work may be completed concurrent with the coursework, and must be supervised and documented. Visit the Behavior Analyst Certification Board Web site for detailed information concerning the BCBA credentialing, supervised work, and examination requirements. Upon completion of coursework and supervised work, students must also pass a national exam. Those who complete the required coursework, the supervised work, and pass the national exam will earn the BCBA. The supervised work is neither arranged nor administrated through the educational psychology program.

Special Admission Requirements

Since the Certificate of Applied Behavior Analysis is a post-master's certificate program, applicants not currently matriculated in the M.S. or Psy.D. in school psychology programs must show evidence of a master's degree.

Transfer Credit Students admitted to the school psychology program can request permission to transfer up to 6 graduate credits toward the Psy.D. in school psychology, M.S. in educational psychology, or Certificate in Applied Behavior Analysis (CABA). In order for credits to be eligible for transfer, they must meet the following criteria:

1. The credits must have been earned as part of a graduate course (e.g., 500 level or higher) offered at a U.S. institution of higher learning accredited at the time the credits were earned by a regional and/or national accrediting body and recognized as accredited by the U.S. Department of Education.
2. The credits must have been earned for a course which is equivalent in content covered and skills developed to one required in the student's USM program of study.
3. The earned grade for the course must be a B or higher (GPA equivalent of 3.0).
4. The credits must have been earned within 3 years from the date when transfer credit is requested.
5. The credits must not have been applied to any previously earned degree.
6. For students seeking certification for BCBA, any applicable course(s) must be transferred from a program that is approved by the Behavior Analyst Certification Board.

Transferred credits will be noted on the student's USM transcript and counted toward the student's degree or certificate program of study. To request transfer of credit(s), a student must submit the course syllabus/i and official transcript(s) showing the grade(s) for the course(s) to the school psychology program coordinator. The coordinator will consult with program faculty to determine if the credit transfer is approved. Once approved, the program will notify the USM Registrar to enter the official transfer onto the student's record.

Students in the certificate program take the following courses:

SPY	603	Consultation in School Psychology
SPY	659	Clinical Research Methods
SPY	676	Behavioral Principles of Learning
SPY	678	Functional Behavioral Assessment
SPY	684	Advanced Applied Behavior Analysis

In addition, certificate students must take one elective chosen from approved courses offered in the College of Education and Human Development.

Master of Science in School Psychology

Admission to the master of science in school psychology has been suspended. USM will maintain the actual M.S. in school psychology, as well as its accreditation, until the last of the students admitted as of May 2007 graduate, transfer to the Psy.D., or meet the statute of limitations (6 years).

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 based on a data-based problem-solving model. 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 72 credit hours of coursework.

Individuals graduating from this program are eligible for certification as a Nationally Certified School Psychologist, and for certification by the Maine Department of Education as a School Psychological Service Provider. Some graduates may be eligible to sit for the examination leading to licensure as a psychological examiner by the Maine Board of Examiners of Psychologists. 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 typed narrative, 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.

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 program chair in exceptional circumstances, including certificates of graduate study program courses. Please also see College transfer credit policies in the CEHD Admission and Academic Policies section. 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.

Professional Licensure and Certification Notice Students who are pursuing degrees leading to application for professional licensure or certification, and/or who will be participating in clinical placements, internships, or practica through their USM program should be aware that their host facility may require a criminal background check, finger printing, or drug screening. In such situations, each student is responsible for obtaining and paying for the background check or other screening process and for delivering required documentation to the facility. Although the University will make reasonable efforts to place admitted students in field experiences and internships, it will be up to the host facility to determine whether a student will be allowed to work at that facility. Students should further be aware that a criminal record may jeopardize licensure by the state certification body. Students may consult the certifi-

cation body corresponding to their intended occupation for more details. Successful completion of a program of study at USM does not guarantee licensure, certification, or employment in the relevant occupation.

Program Requirements (72 credits)

Psychological Foundations (15 credits)

HRD	668	Human Development
SPY	671	Physical Bases of Behavior
SPY	674	Child and Adolescent Psychopathology
SPY	676	Behavioral Principles of Learning

Educational Foundations (9 credits)

HCE	622	Counseling Children and Adolescents
SED	540	Nature and Needs of Learners Who Are Exceptional
SED	682	Special Education Law

Assessment (15 credits)

HCE	605	Psychological Measurement and Evaluation
SED	653/	
SPY	672	Assessment of Academic Achievement
SPY	675	Indirect Behavioral Assessment
SPY	677	Cognitive Assessment
SPY	678	Functional Behavioral Assessment

Interventions (9 credits)

HCE	626	Group Process and Procedures
SPY	603	Consultation in School Psychology
SPY	673	Social Foundations of Behavior
SPY	684	Advanced Applied Behavior Analysis

Research (6 credits)

EDU	600	Research Methods and Techniques
SPY	659	Clinical Research Methods

Professional School Psychology (18 credits)

SPY	609	Professional Ethics in Psychology
SPY	688	Internship in School Psychology (9 Credits, 1,500 hours)
SPY	693	School Psychology Practicum I
SPY	694	School Psychology Practicum II

Doctor of Psychology (Psy.D.) in School Psychology

The doctor of psychology (Psy.D.) in school psychology provides school psychology practitioners with advanced training in the areas of psychological assessment, interventions, and applied research. The focus of the Psy.D. includes advanced training in school psychology that goes beyond what a student typically acquires during master's-level training. Psy.D. students are expected to demonstrate their research and scholarship through the completion of an applied research project. The Psy.D. course of study includes a minimum of 60 credit hours. During the final portion of the program, students complete a minimum of 1,500 clock hour, pre-doctoral internship. Following completion of the Psy.D. program, graduates will be eligible for state certification as a School Psychological Service Provider, and national certification as a Nationally Certified School Psychologist. Following completion of a 1,500 clock-hour, post-doctoral training experience, graduates will also be eligible for licensure as a psychologist.

Admission

In addition to meeting the minimum admission requirements of the College of Education and Human Development, to be eligible for admission to the Psy.D. program, an applicant must meet the following requirements:

1. Hold a baccalaureate degree from an accredited institution;
2. Have earned a cumulative grade point average of 2.75 or higher (on a 4.0 scale) in a baccalaureate degree program; or have earned a cumulative grade point average of 3.25 or higher (on a 4.0 scale) in a master's/graduate degree program;
3. Have earned a score of 1,000 points or above on the combined verbal and quantitative scores on the Graduate Record Examination (GRE), or, for those with certification as a Nationally Certified School Psychologist (NCSP), submit a copy of a current and valid Nationally Certified School Psychologist (NCSP) Certificate and have earned a score of 900 points or above on the combined verbal and quantitative scores on the Graduate Record Examination (GRE). Standardized test scores required of all applicants;
4. Submit two personal essays (see application form);
5. Provide documentation of professional experiences form (see application form).

All admission applications materials must be postmarked by the deadline of December 1. Late applications will not be considered.

The Psy.D. admissions process requires a date-specific formal interview. Candidates to be interviewed will be selected on the basis of the above information.

The Psy.D program includes two different sets of course requirements. Those students who were admitted to the Psy.D. program already holding the Nationally Certified School Psychologist (NCSP) credential are required to complete at least 60 credit hours. Those students admitted to the Psy.D. with a bachelor's degree are required to complete at least 117 credit hours. Those students admitted to the Psy.D. who hold a prior graduate degree in a field other than school psychology and who do not hold the NCSP will be required to complete the full 117 credit hour Psy.D. program except for any courses allowed to be transferred (see policy) and any courses waived by program faculty. After admission to the Psy.D., all students with a prior graduate degree may request a transcript review to determine if any courses can be transferred or waived. Transfer credits will be applied to the Psy.D. program. Waived courses must be substituted with courses of the same number of graduate credits from the CEHD graduate catalog.

Transfer Credit Students admitted to the school psychology program can request permission to transfer up to 6 graduate credits toward the Psy.D. in school psychology, M.S. in educational psychology, or Certificate in Applied Behavior Analysis (CABA). In order for credits to be eligible for transfer, they must meet the following criteria:

1. The credits must have been earned as part of a graduate course (e.g., 500 level or higher) offered at a U.S. institution of higher learning accredited at the time the credits were earned by a regional and/or national accrediting body and recognized as accredited by the U.S. Department of Education.
2. The credits must have been earned for a course which is equivalent in content covered and skills developed to one required in the student's USM program of study.

3. The earned grade for the course must be a B or higher (GPA equivalent of 3.0).
4. The credits must have been earned within 3 years from the date when transfer credit is requested.
5. The credits must not have been applied to any previously earned degree.
6. For students seeking certification for BCBA, any applicable course(s) must be transferred from a program that is approved by the Behavior Analyst Certification Board.

Transferred credits will be noted on the student's USM transcript and counted toward the student's degree or certificate program of study. To request transfer of credit(s), a student must submit the course syllabus/i and official transcript(s) showing the course grade(s) to the school psychology program coordinator. The coordinator will consult with program faculty to determine if the credit transfer is approved. Once approved, the program will notify the USM Registrar to enter the official transfer onto the student's record.

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

Course Waivers Students who have extensive prior graduate-level training in areas covered in the school psychology program courses can request to waive up to 5 courses or 15 credits of the required program of study. Waived courses are NOT transferred to the student's transcript. Students must replace waived courses with electives. Students are required to take enough electives to cover the number of credits or courses waived. In order for a course to be waived, the student must demonstrate the following:

1. The credits must have been earned as part of a graduate course (e.g., 500 level or higher) offered at a U.S. institution of higher learning accredited at the time the credits were earned by a regional and/or national accrediting body and recognized as accredited by the U.S. Department of Education.
2. The credits must have been earned for a course which is equivalent in content covered and skills developed to one required in the student's USM program of study.
3. The earned grade for the course must be a B or higher (GPA equivalent of 3.0).
4. The student can demonstrate ongoing competency in the knowledge and skills covered in the course for which a waiver is requested. For example, a student who has a prior master's degree in counseling and who has practiced and maintained state licensure as a counselor could be eligible for a waiver of a required counseling course.

Requests for course waivers follow the same procedure as requests for credit transfer. To request a course waiver, a student must submit the course syllabus and official transcript(s) showing the course grade(s) to the school psychology program coordinator. The coordinator will consult with program faculty to determine if a course waiver is approved. Once approved, the program coordinator will notify the student in writing and a copy of the waiver agreement will be placed in the student's file.

Note: Course waivers are not available for those courses that are required for certification in behavior analysis.

Students who enter the Psy.D. at the post-baccalaureate level can earn a master's degree along the way to the doctoral degree. Students may also apply to the Psy.D. at the post-master's level. Students seeking only a master's degree should apply for admission to the educational psychology master's degree program.

If a Psy.D. student is unable or chooses not to complete all program requirements, the student may be eligible for the M.S. in school psychology degree. Psy.D. students seeking to earn the M.S. instead of the Psy.D. in school psychology may apply to transfer into the M.S. program by completing the following steps:

1. Complete an application for the M.S. program that includes the same GRE scores, transcript(s), and letters of recommendation submitted for the Psy.D.;
2. Submit a letter with the M.S. application requesting admission to the M.S. that summarizes the reasons why the student wishes to obtain the M.S. instead of the Psy.D. as the terminal degree;
3. Pay a \$25.00 re-application fee with the M.S. application.
4. Provide the above information to the Office of Graduate Admissions no later than December 1 of the year preceding the requested transfer.

Program Requirements for those with the National Certified School Psychologist (NCSP) credential (60-72 credits):

Psychological Foundations (3 credits)

SPY 709 History and Systems of Psychology
Other competencies met through completion of NASP approved M.S. program or equivalent

Educational Foundations (6 credits)

HRD 630 Facilitating Adult Learning
One course chosen from 600-level or higher in the College of Education and Human Development
Other competencies met through completion of NASP approved M.S. program or equivalent

Assessment

All competencies met through completion of NASP approved M.S. program or equivalent

Interventions (12 credits)

HCE 620 Fundamentals of Counseling Theories
HCE 644 Crisis Intervention
SPY 727 Advanced Academic Intervention Methods
SPY 728 Advanced Interventions for Individuals with Behavioral Disabilities
SPY 729 Advanced Intervention Methods for Individuals with Developmental Disabilities

Research (15 credits)

EDU 697 Statistics I
EDU 698 Statistics II
SPY 751 Advanced Research Seminar
SPY 759 Psy.D. Dissertation (6 credits)

Professional School Psychology (15 credits)

EDU 671 Organizational Behavior
HCE 681 Clinical Supervision
SPY 788 Pre-Doctoral Internship in School Psychology (9 credits)

Electives (3-15 credits)

Students completing the counseling concentration need to complete the following courses:

HCE 621 Fundamentals of Counseling Skills
HCE 622 Counseling Children and Adolescents
HCE 627 Group Counseling
HCE 690 Individual Counseling Practicum Seminar
HCE 691 Practicum in Individual Counseling Laboratory

Students not completing the counseling concentration need to complete a minimum of 3 hours of coursework selected from 600-level or higher courses in the College of Education and Human Development.

Program Requirements for those without the Nationally Certified School Psychologist (NCSP) credential (117-129 credits)

Psychological Foundations (18 credits)

HRD 668 Human Development
SPY 671 Physical Bases of Behavior
SPY 673 Social Foundations of Behavior
SPY 674 Child and Adolescent Psychopathology
SPY 676 Behavioral Principles of Learning
SPY 709 History and Systems of Psychology

Educational Foundations (12 credits)

- HRD 630 Facilitating Adult Learning
- SED 540 Nature and Needs of Learners Who Are Exceptional
- SED 682 Special Education Law

One course chosen from 600 level or higher in the College of Education and Human Development

Assessment (15 credits)

- HCE 605 Psychological Measurement and Evaluation
- SED 653/
SPY 672 Assessment of Academic Achievement
- SPY 675 Indirect Behavioral Assessment
- SPY 677 Cognitive Assessment
- SPY 678 Functional Behavioral Assessment

Interventions (24 credits)

- HCE 620 Fundamentals of Counseling Theories
- HCE 626 Group Process and Procedures
- HCE 644 Crisis Intervention
- SPY 603 Consultation in School Psychology
- SPY 684 Advanced Applied Behavior Analysis
- SPY 727 Advanced Academic Intervention Methods
- SPY 728 Advanced Interventions for Individuals with Behavioral Disabilities
- SPY 729 Advanced Intervention Methods for Individuals with Developmental Disabilities

Research (21 credits)

- EDU 600 Research Methods and Techniques
- EDU 697 Statistics I
- EDU 698 Statistics II
- SPY 659 Clinical Research Methods
- SPY 751 Advanced Research Seminar
- SPY 759 Psy.D. Dissertation (6 credits)

Professional School Psychology (24 credits)

- EDU 671 Organizational Behavior
- HCE 681 Clinical Supervision
- SPY 609 Professional Ethics in Psychology
- SPY 693 School Psychology Practicum I
- SPY 694 School Psychology Practicum II
- SPY 788 Pre-Doctoral Internship in School Psychology (9 credits)

Electives (3-15 credits)

Students completing the counseling concentration need to complete the following courses:

- HCE 621 Fundamentals of Counseling Skills
- HCE 622 Counseling Children and Adolescents
- HCE 627 Group Counseling (6 credits)
- HCE 690 Individual Counseling Practicum Seminar
- HCE 691 Practicum in Individual Counseling Laboratory

Students not completing the counseling concentration need to complete a minimum of 3 hours of coursework selected from 600-level or higher courses in the College of Education and Human Development.

Master of Science in Education in Teaching and Learning (MTL)

The task of preparing teachers to meet the needs of learners in the 21st century is complex and demanding. The College offers teacher preparation programs 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. See the Teacher Education Department Web site for more information at www.usm.maine.edu/cehd/ted.

The faculty is committed to instilling a commitment to equitable and engaging learning and to the development of teachers who:

- Continually examine beliefs and practices and act upon findings to improve teaching and learning
- Provide a variety of accessible learning experiences that attend fairly to learners' strengths, needs, and interests
- Establish and communicate clear, challenging, and attainable standards for all learners
- Support and refine teaching and learning through sharing diverse perspectives and understandings
- Integrate teaching knowledge and disciplinary knowledge to foster and support professional expertise
- Use multiple sources of information, including performance-based assessments, to make valid inferences about student learning and informed instructional decisions
- Provide feedback and adjust teaching based on growing understandings about learners and learning
- Create, study, critique, and apply research related to teaching, learning, and schooling.

Special Admission Requirements

Testing Requirements ETEP requires the Praxis I test. For information about the application process and special admission requirements of the Extended Teacher Education Program, contact the USM Office of Graduate Admissions, 39 Exeter Street, Portland, ME 04104-9300, (207) 780-5306, and ask for a copy of the ETEP Application Handbook; or find it on the Web at www.usm.maine.edu/cehd/TED.

Extended Teacher Education Program

The post-baccalaureate program, designed for those seeking teacher certification, consists of two distinct phases: the internship, and the master's degree in teaching and learning or applied literacy. The program offers four different options to meet the various needs of graduate students.

Nine-Month Option (K-8 or 7-12) This is an intensive full-time experience that integrates both theory and practice in a school-based program. Beginning in mid-August and continuing through May, interns complete two semesters with a mentor teacher in a public school classroom. This internship prepares students to teach in one of the following areas:

- Elementary and middle level (K-8)
- English (7-12)
- Foreign Language (K-12)
- Life Science (7-12)
- Mathematics (7-12)
- Physical Science (7-12)
- Social Studies (7-12)

Following the internship, eligible candidates may complete an additional 13 credits to complete a Master of Science in Education in Teaching and Learning.

Course Requirements

All courses are 3 credit hours unless otherwise noted. The exact sequence of courses will vary, depending on site, concentration, and program option.

Elementary (K-8) (33 credits)

EDU	505	Mathematics Methods
EDU	527	Understanding and Teaching Diverse Learners
EDU	566	Introduction to the Writing Process
EDU	565	Teaching Reading

EDU	541	Seminar in Teaching , Learning, and Assessment I
EDU	542	Seminar in Teaching, Learning, and Assessment II
EDU	544	Applied Pedagogy
EDU	551	Teaching Social Studies K-8
EDU	552	Teaching Science K-8
EDU	644	Internship in Elementary Education
SED	540	Nature and Needs of the Exceptional Learner

Secondary (7-12) and Foreign Language (K-12) (33 credits)

EDU	514	Improving Teaching in the Content Areas Through Literacy
EDU	527	Understanding and Teaching Diverse Learners
EDU	541	Seminar in Teaching, Learning, and Assessment I
EDU	542	Seminar in Teaching, Learning, and Assessment II
EDU	544	Applied Pedagogy
EDU	613	Internship in Secondary Education (6 credits)
EDU	651	Instructional Strategies
EDU	652	Curriculum Design
SED	540	Nature and Needs of the Exceptional Learner
<i>Content Area Methods Courses: One of the following (3 credits)</i>		
EDU	501	Secondary Science Methods
EDU	502	Secondary English Methods
EDU	503	Foreign Language Methods
EDU	504	Secondary Social Studies Methods
EDU	554	Secondary Math Methods

Special Education Certification Option (K-8 or 7-12) This ETEP pathway will lead individuals to initial teacher certification in special education at either the K-8 or 7-12 level. Graduates of this program will be prepared to teach students with mild-moderate disabilities in a range of educational settings. This pathway is designed for full or part-time study and built upon the ETEP commitments of integrated course and field work, cohort support, mentored internship, school/university partnership, and performance assessment. Individuals completing the 39-credit program will be recommended to the state for special education certification (K-8 or 7-12) and earn their Master of Science in Education in Teaching and Learning.

Course Requirements

All courses are 3 credit hours unless otherwise noted. The exact sequence of courses will vary, depending on site, concentration, and program options.

Elementary (K-8) 39 credits

EDU	505	Teaching Math K-8
EDU	541	Seminar in Teaching, Learning, and Assessment I
EDU	565	Teaching Reading
EDU	600	Research Methods and Techniques
SED	518	Instructional Strategies for Learners with Special Needs
SED	527	Understanding and Teaching Diverse Learners
SED	543	Research and Equity in Educating Diverse Learners
SED	615	Positive Behavioral Interventions and Supports
SED	653	Special Education Assessment
SED	682	Special Education Law
SED	688	Special Education Internship (6 credits)
SED	699	Directed Study

Secondary (7-12) 39 credits

SED	518	Instructional Strategies for Learners with Special Needs
SED	540	Nature and Needs of the Exceptional Learner
SED	615	Positive Behavioral Interventions and Supports
SED	653	Assessment in Academic Achievement
SED	682	Special Education Law
SED	688	Special Education Internship
SED	692	Transition from School to Adult Life

SED	699	Directed Study
SED	527	Understanding and Teaching Students with Diverse Abilities in the General Education Curriculum
EDU	514	Improving Teaching in the Content Areas through Literacy
SED	541	Seminar in Teaching and Learning for Special Educators I
SED	542	Seminar in Teaching and Learning for Special Educators II
EDU	600	Research Methods

Two-Year K-8 Unified ETEP Option (dual certification in K-8 general education and K-8 special education) In response to the state's need for special education teachers, ETEP offers a unique program in this area. Students who choose this option complete the program in two academic years (four semesters) and two summers. This 54-credit-hour program is designed so that interns may work part-time. It is especially designed for persons employed in schools as educational technicians who want to remain in their position while completing an internship in general education and special education. Courses are offered online. Upon completion of all requirements, students are recommended for certification in both K-8 general education and K-8 special education and receive a master of science in education in teaching and learning.

Course Requirements (54 credits)

EDU	505	Teaching Math K-8
EDU	541	Seminar in Teaching, Learning, and Assessment
EDU	551	Teaching Social Studies K-8
EDU	552	Teaching Science K-8
EDU	562	Cultural and Linguistic Diversity
EDU	565	Teaching Reading
EDU	566	Introduction to the Writing Process
EDU	600	Research Methods and Techniques
EDU	644	Internship in Elementary Education
SED	518	Instructional Strategies for Learners with Special Needs
SED	527	Understanding and Teaching Diverse Learners
SED	543	Research and Equity in Educating Diverse Learners
SED	615	Positive Behavioral Interventions and Supports
SED	653	Special Education Assessment
SED	682	Special Education Law
SED	688	Special Education Internship (6 credits)
SED	699	Directed Study

Two-Year 7-12 Unified Secondary ETEP (Dual Certification in 7-12 Special Education and a Chosen Content Area) The Unified 7-12 ETEP option, like its Unified K-8 ETEP counterpart, prepares candidates to teach in inclusive school environments. The program is designed to accommodate eligible candidates who are employed as educational technicians or conditionally certified teachers. While the program provides this flexibility for school staff, employment in a school is not a prerequisite for the program. Persons not employed in a school are encouraged to apply. Upon completion of 45 credit hours, candidates will be eligible for certification in both secondary special education and a selected 7-12 content area (English/language arts, social studies, physical science, life science, mathematics or K- 12 foreign language). After the completion of an additional 9 credit hours, candidates will earn a master of science in education in teaching and learning. The program spans two summers and two academic years.

General Education Course Requirements (24 credits)

EDU	514	Improving Teaching in the Content Areas Through Literacy
EDU	527	Understanding and Teaching Diverse Learners
EDU	541	Seminar in Teaching, Learning, and Assessment I
EDU	542	Seminar in Teaching, Learning, and Assessment II
EDU	613	Internship in Secondary Education (3 credits)
EDU	652	Curriculum Design
EDU	600	Research Methods and Techniques

Content Area Methods Courses: One of the following (3 credits)

EDU	501	Secondary Science Methods
EDU	502	Secondary English Methods
EDU	503	Foreign Language Methods
EDU	504	Secondary Social Studies Methods
EDU	554	Secondary Math Methods

Special Education Course Requirements (30 credits)

SED	518	Instructional Strategies for Learners with Special Needs
SED	540	Nature and Needs of Exceptional Learner
SED	541	Seminar in Teaching and Learning for Special Educators I
SED	542	Seminar in Teaching and Learning for Special Educators II
SED	615	Positive Behavioral Interventions and Supports
SED	653	Special Education Assessment
SED	682	Special Education Law
SED	688	Special Education Internship (3 credits)
SED	692	Transition Planning from School to Adult Life
SED	699	Directed Study

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

Undergraduate Pathways to the MTL

Three undergraduate teacher certification programs also lead to the master's in teaching and learning:

Teachers for Elementary and Middle Schools (TEAMS)

www.usm.maine.edu/cehd/TED

Collaborative Learning and School Success (CLASS) (Lewiston-Auburn campus)

www.usm.maine.edu/lac/class

German, Latin, and Spanish Education

Secondary Mathematics Education Program

www.usm.maine.edu/%7Emath/UTeachMath.html

Please see listed Web sites or the undergraduate catalog for more information.

After completing the internship, ETEP, TEAMS, CLASS, Secondary Education, and German, Latin, and Spanish Education students have the option of completing the master of science in education degree. Students must successfully complete all program requirements and requirements for state certification, including Praxis II, before being admitted to either the Teaching and Learning or the Applied Literacy master's option.

Teaching and Learning Program Upon successful completion of the certification year students will be invited to continue to work toward completion of requirements for the master of science in education in teaching and learning degree. This innovative program extends teacher education beyond initial certification as beginning teachers to 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 Saturday a month during the academic year. Students have a full five years beyond the certification year to complete the master's degree.

Other Master's Degree Options

Applied Literacy Program This concentration provides an opportunity for ETEP, TEAMS, or CLASS students to complete their master's degree in a focused area (literacy). The concentration in applied literacy builds upon the curriculum and experiences of ETEP, gives novice teachers increased skill as literacy teachers, and leads to further opportunities for specialist certification, ESL endorsement, and/or a Certificate of Advanced Study in Literacy.

After completing ETEP, TEAMS, or CLASS with initial teacher certification, a student can complete the 18 (elementary) to 21 (middle/secondary) credits required for the master's degree in approximately one and a half years. Certification as a literacy specialist requires 12 additional credits beyond the degree, and endorsement in English as a Second Language (ESL) requires 9 additional credits beyond the degree.

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 and literacy education (including ESL). 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 programs in teaching and learning or applied literacy.

Certificate of Graduate Study in Culturally Responsive Practices in Education and Human Development

The 12-credit Certificate of Graduate Study in Culturally Responsive Practices is offered to accommodate individuals who wish to obtain a basic background in culturally responsive practices in education and human development, especially: teachers, educational technicians, counselors, and leaders in education.

Special Admission Process and Requirements

Applications to the certificate program will be reviewed periodically by an admissions committee during the academic year. This committee will include members from Multicultural Education Programs, including the diversity scholars, HRD coordinator, and members of the departments within the College of Education and Human Development. Incomplete applications will not be accepted.

Application materials and scholarship information may be obtained by contacting:

Linda Evans, director
Multicultural Education Programs
University of Southern Maine
62 School Street, Gorham, ME 04038
(207) 780-5564

www.usm.maine.edu/cehd/Culturally_Responsive_Practices/index.htm

Applications and materials need to be submitted to the Office of Graduate Admissions, 39 Exeter Street, Portland, ME 04104-9300.

Program Requirements

Students are required to select at least one College of Education and Human Development (CEHD) course from the list below to ground their understandings in pedagogical practices.

EDU 559	Aspects of Reading for Multilingual Learners
EDU 562	Linguistics and Cultural Diversity in the Classroom
EDU 610	Professional Teacher in a Democratic Society
HCE 507	Spirituality and Religion in Counseling
HCE 612	Disability and Family in a Multicultural Society
HRD 545	Gender and Education
HRD 543	Multicultural Adult Development
HRD 646	Global Perspectives of Adult Education and Practices
HRD 664	Culture, Tradition, and Diversity
HRD 699	Independent Study (open to matriculated students only)
SED 540	Nature and Needs of the Exceptional Learner

Other courses as approved by program advisor

Students may choose from the following USM courses, offered outside of the College of Education and Human Development.

American and New England Studies

ANE 638	Reading the Cultural Landscape
ANE 641	Environment and Culture

Leadership Studies

MLS 650	Cultural Contexts
MLS 661	Ethical and Spiritual Dimensions of Leadership
MSL 670	Leadership Study Abroad (6 credits)

Muskie School

CPD 602	Sustainable Communities
PPM 624	Gender, Race, Politics, and Public Policy

Occupational Therapy

OTH 507	Social Issues and Ethics
OTH 503	Communications for Health Professionals

Social Work

SWO 501	Multicultural Social Work
SWO 502	Critical Thinking about Human Behavior I

EDU 501 Secondary Science Methods

The course has an interactive laboratory/discussion field-based approach, modeling and focusing on the teaching and learning aspects of science in the high school and middle school. The emphasis is on content, process, and methodology and will help interns develop knowledge of how to teach (pedagogy) and, more specifically, knowledge of how to teach science (pedagogical content knowledge). Students will learn strategies for planning and providing core academic and behavioral experiences to all learners. Prerequisites: Open to matriculated interns in the ETEP program or by Teacher Education Department permission. Cr 3.

EDU 502 Secondary English Methods

This course focuses on ways to organize and teach English classes at the middle school and high school levels based upon current research in literacy and national and state standards in English Language Arts. Various strategies involved in designing and managing a student-centered literacy program will be presented. Different theories for teaching English will serve as a backdrop for creating classroom activities that connect the literature to the students' lives. The writing process and the reading-writing connection will be emphasized to assess and enhance both literacy and learning. Prerequisites: Open to matriculated interns in the ETEP program or by Teacher Education Department permission. Cr 3.

EDU 503 Foreign Languages Methods

This course provides an introduction to the theory and practice of teaching and learning foreign languages at the middle and high school based upon current research and national and state standards with a central focus on communicative language teaching. Students examine theories of second language acquisition, techniques for teaching interpersonal, interpretive, and presentational modes of communication, as well as literature and culture. The course explores task-based instruction, the use of culturally authentic materials, the integration of technology as well as means of performance-based assessment and grading. Prerequisite: Open to matriculated students in ETEP, the Modern and Classical Languages and Literature Education TED Pathway or by Teacher Education Department permission. Cr 3.

EDU 504 Secondary Social Studies Methods

This course focuses on ways to organize and teach social studies classes at the middle school and high school levels. Various theories for teaching social studies, national and state standards, and current research work serve as the backdrop for creating classroom activities that connect the topics to the students' lives. The instructor will demonstrate various strategies involved in designing and managing a student-centered curriculum. Prerequisite: Open to matriculated ETEP students or by permission of the Teacher Education Department. Cr 3.

EDU 505 Teaching Mathematics K-8

This course, intended for those preparing to be K-8

teachers, provides experiences to develop, critique, and apply knowledge, skills, and research findings in mathematics, pedagogy, and mathematical learning theory in elementary and middle school classrooms. Major areas of focus include learning and assessment of all children, instruction to support all students' mathematical understanding, reasoning, communication, and collaboration; standards (national, state, and local); content integration; resources; issues; and the discipline's philosophical framework. Prerequisite: ETEP, CLASS, or TEAMS program admission. 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. Attention will be given to the dynamics of adolescence, individualizing reading, standards of selection, and creative methods of introducing books. Cr 3.

EDU 514 Improving Teaching in Content Areas through Literacy

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

EDU 516 Early Care and Education Policy

This course will focus on the social, political, economic, and legislative forces that have shaped early language and literacy policies and programs. We will explore the relevant societal and political contexts that impact children as they develop language and literacy in their early years. The course will examine the current issues and policies that impact very young children, their families, and early care educators. The instructors and guest speakers have extensive knowledge of child and family policy, including the historical development of policies and how policies affect children, families, and early care educators both positively and negatively. Cr 3.

EDU 517 Early Language and Literacy Learning

This course focuses on language acquisition and early reading/writing development in infants, toddlers, and preschoolers (ages 0-5). Students will examine cur-

rent theories and research on these aspects of development, as well as current thinking on best practices for fostering linguistic development in diverse populations of very young children. Requirements include regular field experiences in which students will be asked to observe or apply the knowledge gained from classwork and readings. The course examines the benefits and drawbacks of several early language/literacy assessments. In the area of early literacy foundations, students will examine two categories of child learnings: those related broadly to comprehension, and those related to print. Cr 3.

EDU 518 Using Literature to Support Learning in Young Children

Repeated, constant exposure to books in the earliest years is the cornerstone of later literacy development. This course will provide an indepth examination of appropriate literature for sharing with babies, toddlers, and preschoolers, as well as research and experience-based techniques for reading aloud to children of different ages, backgrounds, and interests. Students will explore ways of integrating literature into infant/toddler care-giving and preschool curricula. EDU 517 recommended. Cr 3.

EDU 519 Curriculum and Instructional Design: Early Language and Literacy

This course leads students to examine the purposes and appropriateness of both daily and longer term planning of teacher-facilitated language and literacy experiences for very young children. Questions to be addressed include: What underlying philosophies guide curriculum development for young children? How can language and literacy content be made developmentally appropriate for toddlers and preschoolers? Students will study and critique short and long-term plans for incorporating literacy in the curriculum, and will generate a detailed curriculum design incorporating Maine's Early Learning Guidelines and following guidelines used in class. Although appropriate content for toddlers will be included, the primary focus of this course is preschool and kindergarten curricula and instruction. Prerequisites: EDU 516, 517, 518. 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 527 Understanding and Teaching Diverse Learners

This course introduces students to the diversity of

learners in schools in the 21st century. Students will understand the principles and practices of universal design in education, differentiation, and culturally responsive pedagogy in curriculum and lesson planning and implementation. Prerequisites: Open to matriculated students in TEAMS and ETEP, the Secondary Mathematics Education TED Pathway, the Modern and Classical Languages and Literature (MCLL) Education TED Pathway, or by Teacher Education Department (TED) permission. Cr 1-3.

EDU 541 Seminar in Teaching, Learning, and Assessment I

The primary purpose of this course is to build a learning community where members of the cohort are supported in their internship through the assessment system. This course is based on helping the participants develop their personal philosophy of teaching and perfect their craft through ongoing discourse, reflection, and inquiry. Specific topics include instruction, lesson and unit planning, classroom management, assessment, diversity, technology, and professionalism. Corequisite: EDU 544, EDU 644 or EDU 613. Prerequisites: Open to matriculated students in TEAMS and ETEP, the Secondary Mathematics Education TED Pathway, the Modern and Classical Languages and Literature Education TED Pathway, or by Teacher Education Department permission. Cr 1-3.

EDU 542 Seminar in Teaching, Learning and Assessment II

The primary purpose of Seminar II is to sustain a learning community where members of the cohort are supported in their internship through the assessment system. This course is based on helping the participants develop their personal philosophy of teaching and professional portfolio. Participants perfect their craft through ongoing discourse, reflection and inquiry. Specific topics include instruction, lesson and unit planning, classroom management, assessment, diversity, technology and professionalism. Corequisite: EDU 613 or EDU 644. Prerequisites: Open to matriculated students in TEAMS and ETEP, the Secondary Mathematics Education TED Pathway, the Modern and Classical Languages and Literature (MCLL) Education TED Pathway, or by Teacher Education Department (TED) permission. Cr 3.

EDU 544 Applied Pedagogy

This course is a part-time, supervised internship experience in applying knowledge and skills under study in their coursework to the practice of teaching. An intern completes a semester-long classroom placement in which she/he is assigned to a mentor teacher in an elementary, middle, or secondary classroom in a school. The intern completes a minimum of one week of lead teaching. Prerequisites: Open to matriculated interns in ETEP and TEAMS or by permission of the Teacher Education Department. Cr 3.

EDU 551 Teaching Social Studies K-8

This course is designed to provide students with a

general understanding of the guiding principles and the strands of social studies. Students will gain a working knowledge of the best practices in social studies instruction and the goals of social studies education. Students will create lesson plans and incorporate appropriate instructional methods and materials as part of the course requirements. Prerequisites: Open to matriculated interns in the ETEP and TEAMS programs or by permission of the Teacher Education Department. Cr 3.

EDU 552 Teaching Science K-8

This course has an interactive laboratory/discussion field-based approach, modeling and focusing on the teaching and learning aspects of science in the elementary and middle school. The emphasis is on content, process, and methodology. The course will be framed by the Department of Teacher Education's Core Practices, Maine's Learning Results, the National Science Education Standards, and by the students' goals about the teaching and learning of science. Students will learn strategies for planning and providing core academic and behavioral experiences to all learners and differentiated academic and behavioral experiences for learners with special needs. Prerequisites: Open to matriculated students in the ETEP or TEAMS programs, or by Teacher Education Department permission. Cr 3.

EDU 554 Secondary Mathematics Methods

This course, intended for those preparing to teach mathematics at the 7-12 level in the state of Maine, provides experiences to develop and apply mathematical content knowledge and pedagogical skills in middle and secondary school classrooms. Major areas of focus include: how students learn mathematics, conceptual development of mathematical understandings, problem-solving instructional strategies, appropriate and effective uses of tools and technology, assessment of student learning, and providing equitable access to learning for all students. Prerequisites: Open to matriculated students in ETEP, the Secondary Mathematics Education TED Pathway, or by Teacher Education Department (TED) permission. Cr 3.

EDU 558 Content Based Curriculum for English Language Learners

This course focuses on the factors necessary for the development and implementation of relevant content learning for second language students of all age and proficiency levels in the public school setting. The course explores the theoretical background and models of strategies for insuring competent delivery of appropriate language and content in a multilingual context. A co-construction approach incorporating the backgrounds and experiences of course participants is the principle methodological approach. The framework of the course is a pedagogical focus that incorporates scaffolding, differentiated instruction, independent learning strategies, critical thinking, and assessment. Cr 3.

EDU 559 Aspects of Reading for Multilingual Learners

This course examines the role of literacy for learners of linguistic and cultural diversity. The influence of first language on reading in another language, contrasting differences between first and second language reading, the role of vocabulary, and aspects of comprehension are among the topics of study. The differences between learning how to read in a second language for the first time and reading English with first language literacy are highlighted. 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 second language and cross-cultural communication and their role in the classroom. Second language acquisition principles and challenges, aspects of culture, and multicultural education are among the topics to be studied. Specific emphasis is on how language and cultural diversity impact teaching and learning. Cr 3.

EDU 563 ESL Testing and Assessment

This course examines the variety of assessments, 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 565 Teaching Reading

This course traces the development of literacy and examines conditions that foster its growth. Topics relate to major stages of literacy development and include: preschool influences on literacy, initial reading, the development of fluency, vocabulary development, comprehension, study skills, and refinement of reading. Informal diagnostic techniques are demonstrated and practiced. The invariant nature of literacy acquisition among students of all ages is stressed. Prerequisite: ETEP, CLASS, or TEAMS program admission. Cr 3.

EDU 566 Introduction to the Writing Process

This course is designed to introduce preservice teachers to the development of writing proficiencies through a process approach. 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.

Many strategies are modeled to meet the needs of diverse learners and an exploration of technology and standards is included. Students gain experience with the writing process through participation in an ongoing, in-class writing workshop. Prerequisite: ETEP, CLASS, or TEAMS program admission. Cr 3.

EDU 599 Independent Study in Teacher Education

This course provides students the opportunity to pursue a project independently, planning and exploring an area of interest within the field of teacher education. Most independent study projects are library based; all are intellectually sound and reflect a high caliber of performance. Specific content and methods of evaluation are determined in conjunction with the instructor. An approved proposal is a necessary prerequisite to registration. Prerequisite: Matriculation into MTL program. 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 critiques and research reviews 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 Teaching, Learning, and Assessment

This course develops students' knowledge of testing and assessment and provides opportunities for students to apply that knowledge to instruction and curriculum issues. Students will review the critical

roles of teachers and administrators in testing and assessment. Participants will examine concepts such as curriculum alignment, opportunity to learn, equity, and fairness, and relate these concepts to classroom assessments and other common district and statewide standardized assessments. Participants will address issues such as validity, reliability, and standard setting in the context of diverse perspectives about the construction, production, and interpretation of knowledge. Cr 3.

EDU 607 Teacher Research in Literacy

This course enables students to become generators of new knowledge through their own classroom-based research and inquiry. Students learn the history and current policies of responsible conduct of research with human subjects. They analyze the methodology of published classroom research studies and learn and practice techniques of data collection and analysis. During the semester each student selects a problem, designs a pilot study using qualitative methodology, collects and analyzes sample data, and summarizes findings. Working in collaborative groups, students reflect upon and critique their work as it proceeds. Prerequisites: EDU 620, EDU 626. Open to matriculated students only. Cr 3.

EDU 608 Curricular Contexts for Teaching in a Democratic Society

This is a required course for the professional teacher in a democratic society strand of the educational leadership program. This course will explore the historical roots of and the contemporary influences on curricula in P-12 schools. The course offers opportunities to examine political, ideological, socio-economic, and cultural dimensions to curricular design, enactment, and effectiveness—all in light of democratic aims for education. Moreover, students examine carefully the teacher's role and responsibility in making curricular choices that serve the best interests of their students. Cr 3.

EDU 610 The Professional Teacher in a Democratic Society

This is an introductory experience for the professional teacher in a democratic society strand of the educational leadership program. This course will focus each learner's deliberate consideration on issues regarding teaching in light of educational aims in a democratic society. Guided reading, intensive class discussions, focused writing, and critical dialogue with public school stakeholders provide a structure upon which each student is expected to craft a personal platform to guide her or his professional efforts and further development. Students consider teaching choices and practices through moral, social, philosophical, political, and cultural lenses. Students also consider historic and contemporary pressures on curriculum and on teaching, including the standards movement, the press for accountability, culturally responsive teaching in a pluralistic society, governance structures, and financial support (or lack thereof) for schooling. 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 613 Professional Internship in Secondary Education

This course is a full-time, supervised internship experience in applying knowledge and skills to the practice of teaching. An intern completes a semester-long classroom internship in which she/he is assigned to a mentor teacher and classroom. The intern completes a minimum of two weeks of lead teaching. Prerequisites: Open to matriculated interns in ETEP, the Secondary Mathematics Education TED Pathway, the Modern Classical Language and Literature Education TED Pathway. Cr 3-9.

EDU 615 Middle Level Curriculum

This course provides an opportunity to examine realities and possibilities of middle school curriculum design and content and to explore various longstanding controversies about the relationship between curriculum and the world, curriculum and learners, curriculum and the academic disciplines, and curriculum and educational aims. Moreover, it delves into conceptions of knowledge, knowing, and learning and into who has access to all three. The course investigates both middle school curriculum theory and curriculum practices, invites students to critique current and past approaches, and then develop a curricular approach of their own. It looks closely at the impact of curricular practices on the welfare of students and society. An important goal of the course is to provide opportunities for students to develop their own standards and naming the institutional contexts necessary for supporting those standards. Students should leave the course with a clear idea about what curricular approaches they think serve the welfare of middle school students and the larger society. 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 620 Reading Development and Instruction

Becoming a skilled reader is a developmental process. Although literacy acquisition is continuous, distinct stages of reading growth may be discerned as students become accomplished readers. The course provides a theoretical framework for sound instructional practices based on a cognitive, developmental

perspective. Major emphasis is on using literature-based instruction. Current issues in the teaching of reading will be examined and the application of literacy practices to ESL, adult basic education, and special needs populations will be addressed. Suggested readings represent current research and practice. In addition to the texts, students are expected to read professional books and journal articles, synthesize information from readings, and generate implications for literacy instruction. Case studies and simulation exercises will be used to provide practical applications of the course content. This course is intended for classroom teachers and administrators. 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 struggling readers of all ages. Current trends from research and practice are explored. Case studies and in-class practica help teachers implement effective procedures in the classroom. 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 620. Cr 3.

EDU 624 Schools and the Classroom

This course relates cultural, historical, philosophical, sociological, and curricular foundations of education. Students study how schools work as organizational cultures and how classrooms function as learning environments through an analysis of personal teaching contexts. Prerequisites: Completion of one of the following teacher certification programs: TEAMS, ETEP, CLASS, the Secondary Mathematics Education TED Pathway, or the Modern Classical Language and Literature Education TED Pathway. Cr 3.

EDU 626 The Writing Process

This course focuses on the study of writing development in children and how teachers can facilitate writing through a process approach. Many writing strategies for the classroom and the individual writer will be modeled and put into practice. In addition, students will investigate specific areas of interest to improve their own writing and writing instruction. Through participation of writing lessons and workshops, students will develop their own pieces of writing, examine the needs of diverse learners, design instruction for varying developmental stages of writers, explore the use of technology, and understand the implications of national, state, and local standards. Prerequisite: must be an in-service teacher or administrator. Cr 3.

EDU 627 Classroom Assessment and Research Development I

This course focuses on the formative use of classroom assessment, including developing a repertoire of valid and reliable assessment methods, communicating clear expectations, giving meaningful feedback, and involving students in assessment. Students share experiences and practices with each other, discuss and reflect upon relevant readings, apply learning in classroom settings, and conduct action research projects to address authentic problems and investigate the effects of their own research-based instructional interventions. The course is not recommended for first-year teachers. Prerequisites: Completion of one of the following teacher certification programs: TEAMS, ETEP, CLASS, the Secondary Mathematics Education TED Pathway, or the Modern Classical Language and Literature Education TED Pathway, and current employment in a school setting as a teacher or educational technician, or by special permission of the instructor. Cr 3.

EDU 628 Classroom Assessment and Research Development II

This course focuses on the formative use of classroom assessment, including developing a repertoire of valid and reliable assessment methods, communicating clear expectations, giving meaningful feedback, and involving students in assessment. Students share experiences and practices with each other, discuss and reflect upon relevant readings, apply learning in classroom settings, and conduct action research projects to address authentic problems and investigate the effects of their own research-based instructional interventions. The course is not recommended for first year teachers. Prerequisites: EDU 627, and current employment in a school setting as a teacher or educational technician, or by special permission of the instructor. Cr 3.

EDU 629 Classroom Assessment and Research Development III

This course focuses on the formative use of classroom assessment, including developing a repertoire of valid and reliable assessment methods, communicating clear expectations, giving meaningful feedback, and involving students in assessment. Students share experiences and practices with each other, discuss and reflect upon relevant readings, apply learning in classroom settings, and conduct action research projects to address authentic problems and investigate the effects of their own research-based instructional interventions. The course is not recommended for first year teachers. Prerequisites: EDU 627 and EDU 628, and current employment in a school setting as a teacher or educational technician, or by special permission of the instructor. 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 a cultural-historical lens to literacy and reviews of current research trends in literacy theory and practice. Students will review and analyze contemporary research. Prerequisites: all literacy program courses or permission of the instructor. Cr 3.

EDU 635 Seminar in Second Language Literacy

This course integrates the knowledge base acquired in core ESL 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 discuss 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 tier-two courses and instructor permission. Cr 6.

EDU 640 Professional Internship in English as a Second Language

This internship is a full-time, supervised clinical experience in applying knowledge and skills to the practice of teaching. An intern completes a classroom placement in which she/he works cooperatively with a mentor teacher and a University supervisor in addressing the USM teaching standards. The culminating event is a lead teaching experience during which the intern had primary responsibility for guiding the instructional program for students who have been part of the internship. Prerequisite: Open to matriculated candidates in certification programs. Cr 3.

EDU 644 Professional Internship in Elementary Education

This course is a full-time, supervised internship experience in applying knowledge and skills to the practice of teaching. An intern completes a semes-

ter-long classroom internship in which she/he is assigned to a mentor teacher and classroom. The intern completes a minimum of two weeks of lead teaching. Prerequisites: Open to matriculated interns in ETEP and TEAMS. Cr 3-6.

EDU 651 Instructional Strategies for Secondary Teaching

This course explores the historical, philosophical, and political foundations of contemporary secondary schools, pedagogy, and curriculum as a means to understand how instructional and curricular choices are made. It also assists students in developing a repertoire of instructional strategies through modeling, practice, and reflection. Students hone their skill in choosing and using student-centered, thinking-oriented instructional strategies, addressing students' diverse learning needs through varied learning activities. Prerequisites: Open to matriculated ETEP interns and by Teacher Education Department permission. Cr 3.

EDU 652 Curriculum Design

This course is designed to develop an understanding of the levels of policy decisions about curriculum selection and implementation and how teachers develop curriculum for units, grade levels, and subject areas. Major areas of focus include the governance of curriculum, backward planning design process, curriculum mapping, and the development of a conceptual framework which demonstrates the interconnections of curriculum, instruction, and assessment. Prerequisites: EDU 550 or 651 and matriculation in ETEP, the Secondary Mathematics Education TED Pathway, the Modern and Classical Languages and Literature (MCLL) Education TED Pathway, or by Teacher Education Department permission. Cr 3.

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 Educational Leadership

This course is designed to be the first course taken in the educational leadership program leading to certification as a principal, special education director, and curriculum coordinator. The course has two major foci: the characteristics of good leadership and the skills of effective educational leadership.

Since many students who enroll in this course are exploring a career transition into administration, a goal of the course is to give participants a clear understanding of the decisions faced by educational leaders, the skills and knowledge necessary to perform effectively, and to give participants an opportunity to explore strategies for balancing the demands of the job, personal commitments, and responsibilities. Cr 3.

EDU 671 Organizational Behavior

This course will explore the interactions between individuals and the systems in which they live and work. Organizational behavior is the utilization of theory and methods of academic disciplines for understanding and influencing behavior in people in organizations. Individual and group level analysis are included in covering such topics as diversity, perception, communication, motivation, power, group development and performance, innovation, quality, individual effectiveness and development, leadership, and intergroup behavior. Cr 3.

EDU 672 Political and Community Leadership

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, through the use of case studies, simulations, readings, presentations, and discussions will focus on students: (1) learning the nuts and bolts needed for daily management, (2) examining current issues facing the principalship, (3) learning strategies for managing and understanding oneself within the principal's role, (4) studying specific financial skills required of the principal and, (5) articulating positions on current educational practices, and developing an educational leadership philosophy. Prerequisite: instructor 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 Teaching

This is an introductory course focused on evaluating and supervising teaching performance. As the teaching students may supervise ranges from preschool through adult education in a variety of subject areas, this course offers a framework of supervisory concepts and asks students to apply these concepts to the settings and clientele they would likely encounter. The major product of this course is a Platform for articulating one's beliefs and espoused

practices for evaluating and supervising teaching in a setting specified by the student. Cr 3.

EDU 680 Professional Learning in Schools

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. Cr 3.

EDU 685 Internship in Administration

This three-semester 9-credit course (3 credit hours each semester) combines the 240-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 activities students complete a journal, develop a leadership platform (portfolio), conduct an investigation on an aspect of financial management and a study of community demographics and formulate a leadership project based on an issue of importance to the school. 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 9.

EDU 686 Internship in Special Education Administration

This three-semester 9-credit course (3 credit hours each semester) serves as the Capstone experience in the educational administration program for aspiring special education directors. The internship is designed to immerse the student in the everyday tasks of the special education director, providing an opportunity for the student to actually apply the skills and knowledge gained throughout the educational leadership program. The early focus of the course is on the internship in a district setting designed jointly by the student, the internship supervisor, and a district special education director. Out of the internship activities students complete a journal, develop a leadership platform (portfolio), conduct an investiga-

tion on an aspect of financial management related to special education and a study of community demographics/child find and formulate a leadership project based on an issue of importance in special education at the school or district level. Each student is required to produce a written report on the leadership project and to present it at the conclusion of the course. Prerequisite: Instructor permission. Taken at the conclusion of a student's program. Cr 9.

EDU 687 Internship in the Superintendency

This two-semester, 6-credit course (3 credits each semester) is designed to immerse the student in the everyday tasks of the superintendent of schools providing an opportunity for the student to actually apply the skills and knowledge gained throughout the educational leadership program. This course, made up of field experiences in the school superintendency, is designed to meet certification requirements and to prepare individuals for the position. The internship is designed to encourage application of formal coursework to the leadership and management issues that face superintendents in the workplace. Out of the internship experience, students will develop a project, in which they will be expected to take a leadership role in designing, implementing, and assessing a project that addresses an important district-wide educational issue. Prerequisite: Instructor permission. Program capstone. Cr 6.

EDU 688 Internship in Curriculum Administration

This three-semester, 9-credit course (3 credits each semester) serves as the capstone experience in the educational leadership program for aspiring curriculum coordinators. The internship is designed to immerse the student in the every day tasks of the curriculum coordinator, providing an opportunity for the student to actually apply the skills and knowledge gained throughout the program. The early focus of the course is on the internship in a district/central office setting designed jointly by the student, the internship supervisor, and a curriculum coordinator. Out of the internship activities, students complete a journal, develop a leadership platform (portfolio), conduct an investigation on an aspect of financial management related to special education and a study of community demographics and formulate a leadership project based on an issue of curriculum/instructional importance to the district/school. Each student is required to produce a written report on the leadership project and to present it at the conclusion of the course. Prerequisite: Instructor permission. Program capstone. Cr 9.

EDU 697 Statistics I

This course provides training in the knowledge and skills necessary to select and use a range of statistical methods for educational and psychological research. Students will learn and use basic parametric and non-parametric statistical procedures, including Chi Square, t-tests, and Analysis of Variance. Prerequisites: EDU 600 or equivalent and permission of instructor. Cr 3.

EDU 698 Statistics II

This course provides training in advanced applications of statistical methods for educational and psychological research. Students will learn and use complex statistical procedures, such as Multiple Analysis of Variance, multiple regression, and structural equation modeling. Prerequisites: EDU 697 and permission of instructor. 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. Prerequisite: Permission of supervising instructor and the department chair. 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 507 Spirituality and Religion in Counseling

This course will address, in an ecumenical and inclusive format, the growing renaissance in the psychotherapeutic community and in the larger American society of the integration of spirituality and religious values. Various aspects of spirituality and religion will be explored as they relate to the counseling process. The course will seek to increase the awareness of counselors to potential areas of client concern, including spiritual journeys, early religious training, search for meaning, personal relationship with the divine, and death and bereavement. Participants will explore various religious and spiritual practices, including, but not limited to, Islam, Buddhism, Native American beliefs, Hinduism, Christianity, and Judaism. 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 will be on understanding theories, information systems, materials, activities, and techniques for fostering career awareness exploration, decision making, and preparation. The interrelationships among work, family, and other life roles, including multicultural and gender issues, will also be addressed. Cr 3.

HCE 605 Psychological Measurement and Evaluation

This course focuses on group tests and related measurement techniques. The course content includes a review of the history of testing, current issues, fundamental statistics for understanding, evaluating, and using tests, including selected aptitude, intelli-

gence, achievement, interest, and personality tests. A variety of standardized and non-standardized evaluation measures will be reviewed. 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. Prerequisites: HCE 609, matriculation in the counselor education program or by permission of the instructor. Cr 3.

HCE 609 The Practice of School Counseling

This course will provide students with an introduction to the practices of consultation and large group guidance for counselors working within a developmental model of school counseling. Assignments will incorporate field experiences that promote reflective learning and skill building. Prerequisite: open to matriculated students or by 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 will be 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 will be psychological explanations of disability, their applications, and their implications for rehabilitation practice. A primary focus throughout the course will be on highlighting the perspectives that people with disabilities hold toward their life situations as well as the medical and rehabilitation settings and professionals they encounter. Cr 3.

HCE 612 Multicultural Counseling: Family and Disability Issues

This course provides an in-depth analysis of the effects of developmental, mental, and physical disability on individuals and their families within the context of a pluralistic society. It will explore the experience of living with a disability and family dynamics in the context of the broader community and society. Students will study multicultural issues relative to disability, counseling, and rehabilitation. The course also examines the reactions, adjustments, and accommodations to disability as perceived by individuals with disabilities, their families, and rehabilitation counseling 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, inpatient movement, legal rights and protections, medications, alternative treatments, trauma, and ethical issues in service delivery. Students also will 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 that 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 that influence the interactions within the counseling relationship. The primary focus is to help the student develop greater self-knowledge and skills in interpersonal communication within the counseling relationship. Prerequisite: open to matriculated graduate students. 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 620 and HRD 688 (HRD 688 may be taken concurrently with permission of the 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 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 625 Adlerian Play Therapy

This course will examine Adlerian theory as it applies to clinical work with children and adolescents. Topics will include an overview of Adlerian theory and of play therapy, consultation with parents and teachers, encouragement, setting limits, under-

standing the goals of discouraged children, phases of therapy, and ethical and legal implications. Classes will include brief lectures, skill building exercises, discussion, and reflection. Prerequisite: graduate-level status. 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, the behavior of the leader and participants is analyzed to promote a deeper understanding of group roles and functions. Prerequisites: HCE 690 or by permission of the instructor. 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 that 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. Mental health counselor roles, functions, professional associations, credentialing, and ethical standards will also be examined. A special emphasis of the course is on examining mental health counseling from an historical, ethical, legal, 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 distorting 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 are examined. Several different crisis situations will be discussed in relationship to agencies or persons responsible for interventions. Prerequisite: HCE 621 or by permission of the instructor. Cr 3.

HCE 645 Diagnosis and Treatment Planning

This course focuses on the diagnostic systems and their use in counseling. The development of treatment plans and the use of related services are reviewed. The roles of assessment, intake interviews, and reports are examined. Prerequisite: HCE 621 or by permission of the instructor. Cr 3.

HCE 650 Basic Concepts in Couple and Family Counseling

This course will provide a historical context for the field of family therapy, as well as an exploration of the major theories that inform the current application of family therapy. Cr 3.

HCE 655 Human Sexuality for Counselors

This course provides information about human sexuality to heighten individual's awareness of his/her own sexuality and 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 examines the relationships between sexuality, self-esteem, sex roles, and life styles. Emphasis is placed on developing an awareness of personal values associated with human sexuality. Prerequisite: HCE 621 or permission of 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, matriculated Psy.D. students, or by permission of the instructor. Cr 3.

HCE 686 Internship in Counselor Education

This course provides an opportunity for students to integrate formal coursework with on-the-job experience in selected institutions. Prerequisite: HCE 690. Cr 1-12.

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 Seminar

Through lecture, discussion, and group supervision students learn to apply professional knowledge and skills to the practice of counseling with individuals. Role playing, video and audio tapes, and demonstrations are used in helping students develop an integrated counseling style. This course is taken concurrently with HCE 691. Prerequisites: HCE 620, HCE 621, HCE 622 (school counseling specialty only), and HCE 626. Cr 3.

HCE 691 Individual Counseling Practicum Laboratory

This laboratory is an intensive experience in the direct application of counseling skills and techniques to individual clients within the context of counseling sessions. Audio and video tapes will be reviewed individually with a faculty supervisor. This course must be taken concurrently with HCE 690. Prerequisites: HCE 620, HCE 621, HCE 622 (school counseling specialty only), and HCE 626. Cr 3.

HCE 692 Advanced Individual Practicum

This is the advanced course in counseling practicum. In addition to building on the skills developed in HCE 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 knowledge of community resources available to the counseling clientele. Prerequisite: HCE 690. Cr 3.

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 the CAS program. 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.

HCE 696 Group Counseling Practicum

This course is an intensive supervised experience in applying professional knowledge and skills to the practice of counseling groups. Role-playing, video and audio tapes, and demonstrations are used in helping each student develop an integrated leadership style in working with groups. Prerequisites: HCE 690 and approval of the supervising professor. Cr 3.

HCE 699 Independent Study in Counselor Education

This course provides students the opportunity to pursue a project independently, planning and exploring an area of interest within the field of counseling. Most independent study projects are library based; all are intellectually sound and reflect a high caliber of performance. Specific content and methods of evaluation are determined in conjunction with the instructor. An approved proposal is a necessary prerequisite to registration. Prerequisite: Open to matriculated graduate students only. Cr 1-6.

HRD 545 Gender and Learning

In this course students explore the multiple and complex relationships of gender and learning from diverse theoretical perspectives, including topics such as feminist theories and pedagogies, historical perspectives on gender and education, and identity development. Gender is analyzed from infancy through adulthood in connection with other aspects of identity that impact learning, including race, class, sexual orientation, disability, and ethnicity. 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 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 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. This course introduces students to the adult education program, emphasizing educational planning, key ideas and themes, professional networking, reflective writing, and development of

an educational portfolio. This course is intended to help students succeed by introducing requirements, opportunities, and self-directed educational skills at the beginning of their 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 half or more of their coursework, to enable them to reflect upon and strengthen their interest in adult education and to plan the rest of their program, especially their directed study or internship and their capstone paper. Students carry out explorations of resources that can enhance their professional knowledge and practice. Prerequisite: To be taken the semester before HRD 687 or HRD 698. Cr 1.

HRD 606 Self-Directed Education: Comprehensive Essay

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 essay and future learning and work. Prerequisite: completion of other coursework (often taken with HRD 649) or by permission of the advisor. 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 centers, continuing education offices, and training and staff development departments in profit and nonprofit organizations. Particular attention is given to the development of mission statements, the use of advisory boards, community needs assessment approaches, personnel management, and the development of a management style. Cr 3.

HRD 635 Training and Development

This course acquaints students with the organization, staffing, function, methods, and techniques of training and staff development in contemporary work organizations. Attention is given to the strategic role of training and development in helping organizations achieve their mission and to the design, delivery, and evaluation of training and staff development programs that meet individual and organizational objectives for supervisors, managers, and support staff. This is an applied course in which students plan a training or staff development program based on adult learning theory and principles of effective practice. Cr 3.

HRD 637 Community Education

Community education is concerned with major issues and trends affecting the lives of all 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 639 The Heart of Teaching

This course explores the elements of fostering and supporting fundamental changes in adult learners through the process of teaching. Transformational learning theory is examined and applications to teaching are explored through exercises and discussion. Cr 3.

HRD 643 Multicultural Adult Development

This course examines adult cognitive and psychosocial developmental theory and practice from a multicultural perspective. It considers multiple identities within different social and cultural populations (gender, ethnicity, sexuality, disability, socioeconomic class), and presents an overview of the multicultural adult development literature intended for masters students preparing to work with young or middle-aged adults in educational, training, or supervisory settings. Cr 3.

HRD 646 Global Perspectives of Adult Education and Practices

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 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 653 Consulting: Fundamentals and Practice

This course provides students with an overview of consulting theory and practice. Particular attention is given to understanding a collaborative framework for establishing a consulting practice. Additionally, consulting is explored from a process perspective. This intent is to provide students with the background and skills to work more effectively as clients and as internal consultants. This is an applied course and students will work in teams doing a hands-on consulting project. Cr 3.

HRD 664 Culture, Tradition, and Diversity

This course focuses on developing multicultural awareness, understanding the role of culture and tradition in the life cycle, examining issues of diversity in human interactions, and exploring the attitudes and perceptions of diverse populations. The course surveys world views, values, and beliefs of specific groups to better understand and appreciate diversity as it relates to professional applications. This course includes a field experience. Cr 3.

HRD 667 Action Research and Evaluation Methodologies

This course provides an overview of the role of action research 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 and development across the life span from conception through childhood, adolescence, adulthood, and aging to death. The interaction of biological, cultural, and environmental factors will be con-

sidered in studying physical, cognitive, and psychosocial changes throughout the stages of life. This course includes a field experience. Cr 3.

HRD 669 Adolescent Development

This course introduces developmental theory and research as it relates to adolescence. A multi-disciplinary 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 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 693 Life Stories, Personal Mythmaking, and Spiritual Development

Life stories offer a subjective, developmental frame of reference for understanding and integrating life experiences, and can serve as tools for personal transformation and healing. This course examines a pattern of growth shared by the mythic journey of the hero and the mystic journey of the soul that might be viewed as a framework for understanding psycho-spiritual development. It views classic myth as enduring truth, personal mythmaking as sacred storytelling, and spiritual development as a conscious, practical, everyday path and practice for achieving optimal growth across the life cycle. The course provides a theoretical and methodological foundation for the in-depth study of individual lives within the context of world mythology and world religions. It serves as a reflective, self-exploration component of master's level programs, using a workshop approach in a seminar format, and suggests practical tools for educational and clinical applications. Cr 3.

HRD 698 Directed Study in Adult Education and 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.

SED 518 Instructional Strategies for Learners with Special Needs

The primary goal of this course is to learn and analyze principles and skills of teaching and learning that are effective with students with a wide range of abilities. The course will include: (a) applying and analyzing principles of learning in designing, leading, and assessing a learning environment; (b) applying and analyzing assessment strategies in establishing a cycle of continuous improvement and progress for students; (c) applying strategic learning strategies, differentiated instruction and effective instructional strategies. Participants will work individually and cooperatively in reading and analyzing current learning theory; designing, leading, and assessing learning activities. Participants will complete a minimum of 6 hours of practicum experience. Prerequisite: Open to ETEP and TEAMS interns or by Teacher Education Department permission. Cr 3.

SED 527 Understanding and Teaching Students with Diverse Abilities in the General Education Curriculum

This course develops knowledge of the characteristics of students with disabilities, students identified as gifted and talented, and students who are English Language Learners. That knowledge is used to examine cultural, developmental, and instructional issues and practices for providing students equitable access to an appropriate education. Students learn about principles and practices of universal design in learning and culturally responsive pedagogy. Upon profiling the developmental, cultural, and learning characteristics of students in their internship placements, students use the principles of culturally responsive pedagogy and universal design in education to create and implement lessons and curriculum in a classroom. Prerequisites: Open to matriculated interns in

the ETEP and TEAMS programs or by permission of the Teacher Education Department. Cr 1-3.

SED 540 Nature and Needs of Learners Who Are Exceptional

The primary goal of this survey course is to construct an understanding of the range of exceptionalities, including students with disabilities and those identified as gifted and talented. The course is based on the premise that students in special education should be educated and socially interact to the greatest extent possible with their peers engaging in the general education curriculum. Topics include characteristics of areas of exceptionality; planning and strategies for differentiating instruction; classroom management; assistive technology strategies; state and federal laws and regulations; working with parents; and inclusion philosophy and practices, including collaboration between general education and special education teachers. Cr 3.

SED 543 Seminar for Fostering Equity in Educating Diverse Learners

This second-year course synthesizes knowledge of students, knowledge of teaching, and knowledge of culture in examining the role of access to equitable education in a democratic society. Candidates will both analyze issues and practices and reflect on the impact of a commitment to equitable education on their own teaching. Prerequisites: Open to matriculated interns in ETEP and TEAMS, or by Teacher Education Department permission. Cr 3.

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 cards, and student contracts; working successfully with parents, resource teachers, and administrators; and considering current issues in gifted child education specific to the regular classroom environment. Cr 3.

SED 601 Introduction to Student Programming and Master's Goal Setting

This is an introductory master's course focusing on different types of student programming. The course will explicitly introduce Differentiated Instruction and Universal Design, along with other programming options. In addition, students will design their goals and objectives that they will use for designing their master's portfolio. Prerequisite: matriculation into a degree program or by permission of program coordinator. Cr 1.

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 Positive Behavioral Interventions and Supports

This course examines the foundations and essential features of Positive Behavioral Interventions and Supports (PBIS) at two levels; classroom and individual. Students will gain an understanding of basic principles and measurement of behavior and conduct applied projects that include creating, implementing, and evaluating data-driven intervention plans. 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 653/SPY 672 Assessment of Academic Achievement

This course is designed to prepare special educators, school psychologists, and other professionals who work in schools to select, administer, score, and interpret measures of academic achievement. Numerous measures of academic achievement, including published norm-referenced tests, criterion-referenced tests, curriculum-based assessment and measurement, and performance-based assessments will be studied. Students will develop an understanding of how to use measures of academic achievement as part of a comprehensive problem-solving process that fits with responsive interventions in schools. Prerequisites: Open to matriculated USM school psychology, special education, ETEP, and TEAMS students with permission of an instructor. School psychology students must complete EDU 600 and HCE 605 prior to taking SED 653/SPY 672. 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) devel-

oping 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 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 664 Gifted Students in Special Populations

This course is for individuals responsible for identifying and serving gifted students from special populations. These populations include underachievers, 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 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

This course will review the statutory and regulatory foundations of U.S. public policies pertaining to children and youth with disabilities. Key judicial interpretations of those policies will also be reviewed. The course will provide comprehensive overviews of The Individuals with Disabilities Education Improvement Act and other relevant federal and state legislation, regulations, and policy. 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 course designed to offer experience in administering special education programs. The course emphasizes the organization and administration of special education programs. Prerequisite: SED 540 or permission of instructor. Cr 3.

SED 684 Introduction to Special Education Administration

This course is designed to offer experience in administering special education programs. The course emphasizes the organization and administration of special education programs. A goal of the course is to give participants clear understandings of the decisions faced by regular and special educational leaders and of the skills and knowledge base necessary to perform effectively as leaders. Prerequisite: SED 540 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. Prerequisites: matriculated students who have completed nine (or more) courses, and program permission. Cr 3.

SED 687 Technology for Learning and Communicating

This course introduces students to the use of technology, including assistive technology, with all students, including those individuals with special learning and communication needs. A range of technologies will be examined from “low tech” devices such as simple switches to computers, adaptive devices, and software appropriate for individuals with disabilities. A variety of equipment, materials, software, and hardware will be available for student use. Cr 3.

SED 688 Professional Internship in Special Education

Interns complete a semester-long classroom internship in which she/he is assigned to a mentor teacher in a special education program in accordance with the USM Teacher Certification Standards and internship assessment system. A successful review of all the teaching standards is required for a passing grade for internship. Prerequisites: Open to matriculated candidates in the ETEP or TEAMS program or by permission of the Teacher Education Department. Cr 3-6.

SED 692 Transition From School to Adult Life

This course introduces participants to the concepts of transition from school to work and community living for secondary students (7-12th-graders) with disabilities. Students develop skills in interdisciplinary team planning and an awareness of community resources necessary to aid students with disabilities in achieving career goals and a satisfactory adjustment to adult life. Cr 3.

SED 697 Capstone Seminar and Portfolio

This is the capstone course for different programs in special education. One of the major components of this course is that students will complete their portfolio requirement. In addition, students will research and present to classmates and the professor, topics that they want to do further research in based on what they learned in a previous course, or an area of interest not already covered in their program. Prerequisite: All other courses in planned study. Cr 2.

SED 698 Universal Design Implementation

This is a capstone course for different programs in special education. Through the use of Universal Design, this course brings together all of the different ways students have learned to work with and support students in learning. Students will use Universal Design to create lessons and curriculums, and then will implement them in a classroom. Students will also analyze the effectiveness of their lessons and curriculums in terms of meeting the goals of these curriculums and lessons, and in supporting all students in the classroom as well as others that may have other differences in learning. Prerequisites: EDU 600, SED 601, SED 614, SED 615, SED 679 or 687, SED 550, SED 659, SED 662, EDU 559, EDU 561, EDU 562, EDU 563 or by permission of program coordinator. 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 instructor. Prerequisites: EDU 600, matriculated students only, and program permission. Cr var.

SPY 603 Consultation in School Psychology

This course examines how school psychologists can provide consultation services in school and clinical settings. A review of research that outlines a variety of consultation roles and procedures is incorporated with case studies and opportunities to explore the use of consultation as part of a problem-solving, data-based approach to school psychology. Prerequisites: Satisfactory completion of EDU 600, HCE 605, HRD 668, SPY 609, SPY 671, SPY 672, SPY 673, SPY 674, SPY 675, SPY 676, SPY 677, SPY 678, SPY 684, SPY 694, SED 611, SED 682 and/or permission of instructor. Cr 3.

SPY 609 Professional Ethics in Psychology

This course provides in-depth preparation for ethical practices in school psychology. Drawing from national and international ethical standards from the American Psychological Association (APA), Association of State and Provincial Psychology Boards (ASPPB), and the National Association of School Psychologists (NASP), the course includes readings and application of ethical standards for school settings. The course is designed to meet the ethics training standards set by APA, ASPPB, NASP, the Maine Board of Examiners of Psychologists, and the Maine Department of Education. Prerequisites: Matriculation in the Psy.D. in school psychology. Cr 3.

SPY 627 Advanced Response to Intervention for Reading

While functional behavioral assessment methodologies have typically focused on interfering behaviors (e.g., self-injury, aggression, stereotype, opposition, etc.), this course will focus on the extension of FBA to assessment-intervention-evaluation of students with reading disorders. This is an advanced class and assumes that the student has participated in workshop trainings or has completed prior coursework that has covered the theoretical and historical underpinnings of Response to Intervention (e.g., functional behavioral assessment, experimental analysis of behavior, single case experimental design). This course will include lecture, discussion, guided practice, and applied learning experiences in the assessment of reading problems, design of data-based reading interventions, and procedures for collecting data to determine the effectiveness of interventions. Cr 3.

SPY 628 Behavior Therapy

The primary focus of this course is to provide stu-

dents with exposure to assessment and intervention models that are used within ABA-based programs serving individuals with depression, anxiety, and other related disorders. Students learn the ways that ABA methods can be used to assess the needs of individuals with depression, anxiety, and other related disorders and to design interventions, including cognitive behavior therapy techniques that meet the needs of these individuals. Cr 3.

SPY 629 Applied Behavior Analysis and Developmental Disabilities

This course provides students with exposure to assessment and intervention models that are used within ABA-based programs serving individuals with developmental disabilities. Students learn the ways that ABA methods can be used to assess the needs of individuals with developmental disabilities and to design interventions that meet the needs of these individuals. Prerequisite: Open to matriculated students in the school psychology, special education, and certificate in applied behavior analysis programs or by instructor permission only. Cr 3.

SPY 659 Clinical Research Methods

This course examines research techniques appropriate for educational and clinical settings. The research techniques covered in the course emphasize a problem-solving assessment methodology with a particular focus on measuring progress toward reduction or elimination of problem behaviors. The research methods taught in the course are utilized by students to conduct a pilot study of a specific individual target behavior of concern, including academic, social-emotional, or social skill problems. Using a single-subject research design, students design, implement and monitor the efficacy of an applied intervention. Prerequisites: Satisfactory completion of EDU 600, HCE 605, SPY 609, SPY 671, SPY 672, SPY 673, SPY 674, SPY 675, SPY 676, SPY 677, SPY 678, SPY 684, SPY 694, SED 611, SED 682, or permission of instructor. Cr 3.

SPY 671 Physical Bases of Behavior

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

SPY 672 Assessment of Academic Achievement (co-listed with SED 653)

This course is designed to prepare special educators, school psychologists, and other professionals who work in schools to select, administer, score, and interpret measures of academic achievement. Numerous measures of academic achievement, including published norm-referenced tests, criterion-referenced tests, curriculum-based assessment and measurement, and performance-based assessments will be studied. Students will develop an understanding of

how to use measures of academic achievement as part of a comprehensive problem-solving process that fits with responsive interventions in schools. Prerequisites: Open to matriculated USM school psychology, special education, ETEP, and TEAMS students or with permission of instructor. School psychology students must complete EDU 600 and HCE 605 prior to taking SED 653/SPY 672. Cr 3.

SPY 673 Social Foundations of Behavior

This course provides knowledge and skills in the area of social psychology. The course includes an overview of basic social psychology methods and research findings as well as preparation of students to conduct assessment and intervention for social skills problems among school-age children. The course includes discussion of the importance of social skills and provide a rationale for promoting and teaching pro-social behavior. Students review and learn how to administer, score, and interpret both screening level and evaluation-level social skills assessment instruments. In addition, students review a variety of interventions and develop social skills interventions based on assessment information. Prerequisites: Matriculation in USM school psychology or special education program or permission of instructor. Cr 3.

SPY 674 Child and Adolescent Psychopathology

This course acquaints the student with definitions of and development of normal versus abnormal behavior from infancy through adulthood as well as presents common classification systems for psychopathology. Continuity from normal to abnormal behaviors, behavior problems in children as indices of pathology, and the prediction of psychopathology in adolescence and adulthood are also considered. The course takes a developmental orientation to psychopathology and discusses specific disorders in terms of symptoms, age considerations, and family and sociocultural dynamics. Cr 3.

SPY 675 Indirect Behavioral Assessment

This course examines a variety of analog behavior assessment methods addressing social-emotional behavior issues. Assessment techniques covered in the course include psychosocial interviews, behavior rating scales, and adaptive behavior assessments. This course includes practica experiences in which students are supervised in the administration, scoring, and interpretation of assessment procedures. Prerequisites: Satisfactory completion of EDU 600, HCE 605, SED 682, SPY 609, SPY 671, SPY 673, SPY 674, SPY 676, SPY 684. Cr 3.

SPY 676 Behavioral Principles of Learning

This course introduces behavioral principles and processes that are involved in learning. Starting with a foundation of knowledge delineated through basic research, the course includes a review of findings from an array of studies of learning mechanisms. Topics include respondent behavior and conditioning, operant behavior and conditioning, discrimination and

stimulus control, establishing operations, schedules of reinforcement, and verbal behavior and cognition. The content of this course provides the basis for SPY 684 Advanced Applied Behavior Analysis. Cr 3.

SPY 677 Cognitive Assessment

This course is an examination of the historical and theoretical bases of individual differences and intellectual testing. It includes supervised practice in selection, administration, scoring, interpretation, and reporting of cognitive assessment results. Prerequisites: Satisfactory completion of EDU 600, HCE 605, SPY 609, SPY 671, SPY 674, SPY 676, SPY 684, SED 540, SED 682 or permission of instructor required; open only to matriculated USM school psychology program students. Cr 3.

SPY 678 Functional Behavioral Assessment

This course prepares students to conduct functional behavioral assessments. Incorporating a variety of methodologies including interviews and different types of systematic observations, this course includes practica experiences in which students are supervised in the practice of functional behavioral assessment procedures and evaluation reports. Prerequisites: Satisfactory completion of EDU 600, HCE 605, SED 540, SED 682, SPY 609, SPY 671, SPY 673, SPY 674, SPY 675, SPY 676, SPY 684. Cr 3.

SPY 684 Advanced Applied Behavior Analysis

This is an advanced course that examines behavioral technologies used by independent practitioners, consultants, and behavioral team leaders to change socially meaningful behavior. These technologies are based upon the more complex behavioral principles derived from the experimental analysis of behavior. The behavioral technologies examined will include those based on positive and negative reinforcement, punishment, stimulus control, stimulus shaping and fading, simple and complex schedules of reinforcement, establishing operations, the matching law, behavioral economics, and behavioral momentum. Emphasis will be placed on behavioral technologies used to improve children's social and academic behavior, while reducing behaviors that interfere with functioning in mainstream settings. The course will also introduce students to the Association for Behavior Analysis, the *Journal of Applied Behavior Analysis*, and credentialing for ABA practitioners. Prerequisite: SPY 676 or instructor permission. Cr 3.

SPY 688 Internship in School Psychology

The internship is a 1,500-hour field experience in school psychology under a qualified supervisor in a public school setting. It is undertaken at the end of the program. Prerequisites: Satisfactory completion of EDU 600, HCE 605, HRD 668, SED 540, SED 682, SPY 603, SPY 609, SPY 671, SPY 672, SPY 673, SPY 674, SPY 675, SPY 676, SPY 677, SPY 678, SPY 684, SPY 694, and advisor approval. Cr var.

SPY 693 School Psychology Practicum I

The 300-clock-hour practicum is an introductory supervised experience within a public school.

Practicum 1 provides the student with introductory experiences in the culture and systems of school settings, instructional methods and materials, and school psychology practices. Graded Pass/Fail. Prerequisites: Matriculation in M.S. or Psy.D. in school psychology program. (Students must complete 3 credits during the first two years in the program.) Cr 1.

SPY 694 School Psychology Practicum II

The 300-clock-hour practicum is an advanced supervised experience within a public school setting. Practicum 2 provides the student with experiences in psychological assessment, consultation, intervention, and other aspects of school psychology practice. Graded Pass/Fail. Prerequisites: Satisfactory completion of 3 credits of SPY 693. (Students must complete 3 credits during the first 2 years in the Program.) Cr 1.

SPY 699 Independent Study in School Psychology

This course provides students with opportunity to pursue a project independently, planning and exploring a topic of interest within the field of school psychology. The project must be research-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. Prerequisites: Matriculation as a student in the school psychology program or permission of instructor. Cr var.

SPY 709 History and Systems of Psychology

This course covers the history of modern psychology. Beginning with the history of Western psychology, the course reviews the major historical, social, economic, and cultural factors that contributed to the rise of psychology as a distinct branch of science in Europe and the United States. The course includes readings and discussion of the similarities and differences between the science of human behavior and other scientific disciplines. Additionally, the course includes readings and discussion of the study of human behavior from other cultural traditions. Prerequisites: Psy.D. matriculants only. Cr 3.

SPY 727 Advanced Academic Intervention Methods

This course provides training in knowledge and skills for the use of advanced educational intervention practices in school psychology. Students learn how to select, use, and interpret data from advanced academic achievement assessment and intervention methods appropriate for school psychology practice. Through readings, discussion, practice and report-writing, students will develop the skills necessary to provide comprehensive intervention services for students with academic achievement difficulties. Prerequisite: matriculated Psy.D. students or permission of instructor. Cr 3.

SPY 728 Interventions for Individuals with Behavioral Disabilities

This course provides training in knowledge and skills for the use of advanced behavioral intervention practices in school psychology. Students learn how to select, administer, use, and interpret advanced behavioral intervention measures appropriate for school psychology practice. Through readings, discussion, practice administrations, and report-writing, students will develop the skills necessary to provide comprehensive intervention services for students with behavioral difficulties. Prerequisites: matriculated Psy.D. students only or permission of instructor. Cr 3.

SPY 729 Advanced Intervention Methods for Individuals with Developmental Disabilities

This course provides training in knowledge and skills for the use of advanced intervention practices in school psychology. Students learn how to select, use, and interpret data from advanced intervention measures appropriate for use with individuals who have developmental disabilities. Through readings, discussion, practice administrations, and report-writing, students will develop the skills necessary to provide comprehensive intervention services for low-incidence and high-risk student populations. Prerequisites: matriculated Psy.D. students only. Cr 3.

SPY 751 Advanced Research Seminar

This course examines research techniques appropriate for educational and clinical settings. The research techniques covered in the course emphasize a problem-solving assessment methodology with a particular focus on measuring progress toward reduction or elimination of problem behaviors. A selection of the research methods taught in the course will be utilized by students to conduct an intensive, year-long doctoral research related to best practices in school psychology. This course is taken in the semester before internship and is a prerequisite for SPY 759 Psy.D. Research Project. Prerequisites: matriculated Psy.D. students only. Cr 3.

SPY 752 Readings in Behavioral Research Methods

This elective course examines the conceptual and methodological foundations of research in fields relative to behavior analysis. Evidence-based research conducted in educational and clinical settings published in the primary journals of the discipline and in texts seminal to the establishment of behavior analysis as a science and research area will be critically examined. Prerequisites: EDU 600, SPY 659, and matriculation in Psy.D. program, or by permission of instructor. Cr 3.

SPY 759 Psy.D. Dissertation

This course includes the activities necessary to design, implement, evaluate, and summarize a dissertation related to the field of school psychology. Course participants will conduct a literature review and needs assessment to identify a dissertation. The project will be matched to an identified subject or sample to address specific research questions. Once appropriate informed consent for research is obtained, students will conduct the research and report the findings. This course is taken during the fall and spring semesters of the pre-doctoral internship. Prerequisites: matriculated Psy.D. students who have taken SPY 751 and all other prerequisite courses. Cr 3.

SPY 788 Pre-Doctoral Internship in School Psychology

The pre-doctoral internship is a 1,500-hour field experience in school psychology under the supervision of a licensed psychologist in a public school and/or clinical setting. It is undertaken at the end of the Psy.D. program. Prerequisites: Satisfactory completion of all Psy.D. doctoral program course requirements and permission of the program faculty. Cr var. (total of 9 semester hours for the internship).

University of Maine School of Law

Dean: Peter Pitegoff

Juris Doctor

Professors: Burke, Cluchey, Friedman, Knott, Lupica, Maine, Pitegoff, Rogoff, Wanderer, Ward, Wriggins, Zarr; *Associate and Assistant Professors:* Arey, Galbraith, Howard, Norchi, Northrop, Owen, Smith, Schindler; *Research Professor:* Heimes

The University of Maine School of Law offers high-quality 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 students who become capable and motivated attorneys.

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

The School averages less than 300 students, making it one of the smallest law schools in the country. The student body is remarkably varied in age, professional and academic experience, and background.

The School's 21 full-time faculty members, along with part-time instructors drawn from practicing attorneys and the judiciary, represent 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, it is the law school of the University of Maine System and an administrative unit of the University of Southern Maine. The School's location is accessible for students with disabilities and 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, ME 04102, (207) 780-4341, or visit the Law School Web site at www.maine.law.maine.edu.

Center for Law and Innovation

The Center for Law and Innovation was established in 1999 in recognition of the role of law in economic development based on investments in science and technology. The Center offers educational opportunities in intellectual property and technology-related law to students, practicing attorneys, and the Maine's technology sectors through courses, conferences, and seminars. The Center also engages in research projects that support Maine's investment in science and technology R&D. As home to the Maine Patent Program and the Intellectual Property Law Clinic, the Center offers education and assistance in patent, trademark, and copyright law to companies, inventors, and entrepreneurs around the state of Maine.

Cumberland Legal Aid Clinic

The Cumberland Legal Aid Clinic, established in 1969, is one of the nation's oldest continuously operating law school clinical programs and a highly respected provider of legal services. CLAC's clinical programs give third-year law students opportunities to provide direct representation to low-income clients. Students are admitted to practice in court as "student attorneys" and are directly responsible for all aspects of their cases. Maine Law offers three separate clinical courses through CLAC: General Practice Clinic, Juvenile Justice Clinic, and Prisoner Assistance Clinic.

Marine Law Institute

The Marine Law Institute is devoted to research and education in ocean law and policy. It supports the marine law curriculum and the Law School's student-edited Ocean and Coastal Law Journal. The Institute's current research areas include law of the sea, maritime security, comparative marine law, international maritime boundary delimitation, maritime ports, ocean and coastal resources and their management, and the marine environment of the Gulf of Maine. The Marine Law Institute has active ties and research collaborations with leading universities and maritime institutes around the world.

Lewiston-Auburn College

Dean: Joyce Gibson

Master of Arts in Leadership Studies

Program Director: Tara Grey Coste

Professors: Druker, Hitchcock; *Associate Professors:* Coste, Hammer, Robinson, Whitaker; *Assistant Professor:* Turesky

The master of arts in leadership studies supports the development of organizational and community leaders who seek to build a deep understanding of the dynamics of leadership, the convergence of leadership with other human relations, and the role of the individual as leader in society. The master's in leadership studies is an interdisciplinary professional program that blends the social and behavioral sciences and the humanities to explore the complex set of leadership issues and challenges that go beyond a particular subject or field of work. Graduates of the program will attain a mastery of leadership theory and skills that will enable them to perform successfully in leadership roles in organizations in which they work, their communities, and the world. In addition to developing new competencies, the program aims to develop behavioral orientations so that students may approach their leadership roles with a sense of social responsibility, a concern for ethics, and a commitment to the public good. The leadership studies program will foster understanding of the impact individuals can have on society and of the multidimensional nature of human relationships. Graduates will be prepared to exercise socially responsible leadership in service to organizations and communities.

The leadership studies program assumes that entering students possess a general understanding of the workings of organizations and will come from a wide variety of professions and sectors. Most will work in positions with significant responsibilities for people and projects. From this base, the degree program takes students through a rigorous course of study that will develop their skills in integrative analytic thinking, allowing them to function with increased expertise at work, in the community, and in their personal lives. The study of leadership explores significant questions through critical thinking, continual reflection, and examination of the self.

The program is primarily designed for part-time students who are already employed. Classes may be offered in the evenings, on weekends, and through selective use of online education. Admissions procedures for the degree program are designed to balance considerations of preparedness, high-quality standards, and access for mid-career adults. Applications may be obtained from the USM Office of Graduate Admissions or the LAC Office of Student Services. The application must include transcripts of previous undergraduate and graduate work; an essay explaining the candidate's interest in the program, qualifications, and goals; two professional recommendations from those able to comment on the applicant's academic preparation, ability to pursue graduate education, and take on leadership responsibilities; TOEFL scores where appropriate; and the required fee.

In addition, applicants to the degree program must demonstrate:

1. A basic understanding of how organizations work through a combination of prior undergraduate or graduate course work and at least two years of organizational or community leadership experience. Applicants should have taken LOS 300 Organization Theory or its equivalent.
2. Knowledge of quantitative research methods and analysis through prior undergraduate or graduate course work and/or submission of a research product completed substantially by the applicant that demonstrates knowledge of quantitative research (to be reviewed by the admitting faculty committee). Applicants should have taken LOS 329 Research Methods or its equivalent.
3. Computer literacy at the LAC 150 Microcomputer Applications level.
4. A strong record of success (a GPA of 3.0 or better on a 4.0 scale) in the last 30 credits of prior academic course work or, when prior academic work was completed more than five years ago, a prior learning portfolio of recently completed professional work that demonstrates the candidate's ability to successfully complete graduate-level work. For students whose native language is not

English, 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 is required.

Students who may lack some of the above requirements, but who show potential through work experience, a presentation of past work, and current writing skills, may be admitted on a probationary status and allowed to take two courses. If these students earn grades of B or better in their degree program coursework, they may apply for regular student status.

All applicants who meet the above requirements will be scheduled for a 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 and interviewing skills, and work experience.

Based on the applicant's performance on the criteria above, and other conditions noted in the degree program admissions brochure, the admissions committee will make a decision to accept or reject the application.

The LAC admissions committee will review all applications for admissions, and candidates will be ranked for order of acceptance into the program. Application is competitive, and each new class will be limited to 20 students. A five-person waiting list will be maintained for one semester. If a new class does not fill, a student may be admitted conditionally with a learning contract that must be completed before he or she may progress into the second year of the program.

The degree program curriculum provides students with a solid background in the history and theories of leadership, together with an examination of relevant cultural issues. Several competency areas will specifically focus on students strengthening their ability to gather and analyze information, on communication and relationship building skills, and on creativity and the ability to produce innovative results. It will also provide students with an appreciation of the contexts in which leaders operate, including different cultures, technological realms, politics, ethics, and globalism. Finally, students will integrate these theoretical and conceptual approaches with an applied capstone project or thesis. Above all, the degree program will emphasize development of the skills and orientations necessary for successful leadership. The curriculum has been designed so that specific threads run through all courses. These threads (listed in the detailed description of the curriculum to follow) will allow ongoing development of the higher order skills necessary for effective leadership.

The master's in leadership studies requires 36 credit hours of graduate work for completion. This is split between 30 hours of course work and six credits for a capstone thesis/project that will allow students to complete their studies by applying their knowledge and skills to specific situations. Many of the courses in the program will require service-learning through field projects, experiences with technology, and extensive writing.

Curriculum Threads

- Learning about societal and individual differences in diverse contexts
- Evaluating information critically and reflectively
- Applying values-based creative problem solving
- Determining effective communication strategies
- Engaging in service-learning activities
- Reflecting on one's own role in organizations and the community

Curriculum Components

- Cornerstones
- Competencies
- Contexts
- Capstone

Cornerstones (6 credits) required

Foundations of Leadership Studies I: History and Theory

Foundations of Leadership Studies II: Understanding and Leading Individuals and Groups

Competencies (9 credits) required
Methods of Inquiry
Communication and Relationship Building
Deliberate Creativity and Innovation

Contexts (6 credits) required
Cultural Contexts (required)
Students may select one of the following to complete the contexts requirement:
Ethical and Spiritual Dimensions of Leadership
Technology in Society
Leadership Study Abroad

Capstone (6 credits) required
Capstone Seminar (3 credits)
Capstone Project/Thesis (3 credits)

Electives (9 credits)
The Conflict Process
Community Leadership
Organizational Consulting
Special Topics

Electives or concentrations may also be selected from approved courses in other USM graduate programs:

Social Work
SWO 664 Social Work Supervision and Consultation
SWO 665 The Management of Social Services
SWO 667 Social Work and the Law
SWO 668 Community and Organizational Change

Health Policy and Management
HPM 636 Health Information Management
HPM 673 Fundamentals of Health Care Management
HPM 676 Health Care Planning and Marketing

Adult Education
HRD 632 Program Development in Adult Education and Human Resource Development
HRD 635 Training and Development
HRD 637 Community Education
HRD 638 Program Evaluation
HRD 640 Human Resource Development in Organizational Settings
HRD 667 Action Research and Evaluation Methodologies

Certificate Programs/ 4+1 Program

Graduate Certificate in Leadership Studies

This graduate studies certificate provides a sound, advanced level grounding in leadership theory and research and the skill sets required to work effectively in multiple contexts. It requires 12 credit hours of specific graduate-level leadership courses offered in a mix of traditional and virtual classroom styles. This program draws professionals from nonprofit, corporate, and civic sectors. It is an attractive option for those seeking additional education in leadership skills, but who are unable to commit to a full degree program.

Required courses include:

- LOS 500: Foundations of Leadership Studies I: History and Theory
- LOS 501: Foundations of Leadership Studies II: Understanding and Leading Individuals and Groups
- LOS 611: Communication and Relationship Building
- LOS 614: Leading Through Conflict

Graduate Certificate in Creative Leadership and Global Strategy

This unique post-baccalaureate certificate draws professionals interested in improving their understanding of the societal, cultural, historical, and philosophical aspects of creative leadership from a global perspective. Requiring 12 credit hours of specific graduate-level leadership courses offered in a mix of traditional and virtual classroom styles, it provides a solid, advanced-level grounding in leadership theory, the research and practice of deliberate creativity and innovation, and in working effectively in multicultural and multi-national environments.

Required courses include:

- LOS 500: Foundations of Leadership Studies I: History and Theory
- LOS 512: Deliberate Creativity and Innovation
- LOS 550: Cultural Contexts
- LOS 670: Leadership Study Abroad

4+1 Program in Leadership Studies

The Leadership Studies 4+1 curriculum allows students to earn both a bachelor's degree and a master's degree in five years (depending on students' full- or part-time attendance). Students focus on their bachelor degree requirements during their first three years; a mix of bachelor and graduate requirements in the fourth year; and exclusively graduate requirements in the fifth year. Students in the 4+1 program may use up to 12 credits of graduate work for both the undergraduate and graduate degrees (taking the place of general elective credit in the undergraduate program). Contact the LOS program coordinator at (207) 753-6523 for more information.

LOS 500 Foundations of Leadership Studies I: History and Theory

The course provides an overview of leadership theory and intellectual history using disciplinary and interdisciplinary approaches from philosophy, social science, the humanities (e.g., literature and history), and science. We explore the wealth of interpretive frameworks for leadership with the task of increasing our understanding of this complex and multifaceted phenomenon. The study of leadership can be applied across disciplinary fields and to examine critical issues emerging today. Questions considered include: Are leaders different from followers? What are the ends of leadership? What sort of leadership is needed today? Cr 3.

LOS 501 Foundations of Leadership Studies II: Understanding and Leading Individuals and Groups

The goal of this course is to further the development of students' knowledge of leadership theory and practice, with a special emphasis on the individual and group levels of analysis. Throughout this interdisciplinary exploration of the diverse factors that impact leadership, students will engage in a variety of readings, discussions, writings, and exercises designed to demystify the connections between theory and practice. Cr 3.

LOS 512 Deliberate Creativity and Innovation

Deliberate creativity studies investigate the theory and practice of facilitation methods that enable people, processes, products, and environments to be innovative. After exploring the numerous and diverse facets of this area of study, students should be able to demonstrate (both in discussion and practice) their ability to use their learning in an applied setting. Cr 3.

LOS 550 Cultural Contexts

This course provides an analysis of the role that culture and cultural differences play in contemporary occupational, social/civic, and interpersonal life. The essential question for the course is: how does one show leadership in creating and maintaining anti-racist, multicultural, and gender-fair relationships, organizations, institutions, and socio-political and economic systems? Cr 3.

LOS 610 Methods of Inquiry

This course considers the concepts, principles, and methods that may be used in research for organizational and leadership studies. Quantitative and qualitative research methods that can be used in organizational planning and decision making and in the social and behavioral sciences will be considered. The course will cover topic areas related to the application of appropriate methods of inquiry. Cr 3.

LOS 611 Communication and Relationship Building

This course investigates the communication and behavioral theories and techniques that mediate interpersonal dynamics. Students will engage in a course

of study designed to help them develop awareness of their communication abilities and difficulties and tools to effectively address the interpersonal challenges they face now and in the future. Cr 3.

LOS 614 The Conflict Process

Developing skills in framing conflicts and facilitating the communication processes that help groups mediate differences is key to successful leadership. The course examines research on leadership behaviors encountered in a variety of situations including small groups, organizations, communities, and internationally. Cr 3.

LOS 651 Technology in Society

Technology and society studies investigate the social implications of technology, the values expressed in uses of technology, and the policy decisions that affect and are affected by technological change. Students will analyze various arguments surrounding how technological change has affected the manner in which we live and how we as leaders should utilize technology in the future. Cr 3.

LOS 661 Ethical and Spiritual Dimensions of Leadership

What are the roles of ethics and spirituality in leadership? Where does ethics end and spirituality begin? This course approaches the study of leadership from the perspectives of meaning, values, and human connectedness. The hunger to understand our lives, be part of a larger whole, be complete, and serve are examined as they relate to the leadership process. Cr 3.

LOS 662 Community Leadership

This course studies how leadership principles and theories apply to the building of community. Consideration will be given to developing citizenship, volunteerism, and social equity among formal and informal leaders in communities. Cr 3.

LOS 665 Organizational Consulting: A Perspective on Leadership

In this course students learn what consultants do and how they do it effectively, including work in a local organization with a client leader who has a need. Topics include self-assessment, phases of consulting, system frameworks, intervention strategies, and ethical standards and practices. Cr 3.

LOS 670 Leadership Study Abroad

This course investigates the study and practice of leadership in other countries. Students will travel to other countries and examine leadership issues in different contexts. Cr 3.

LOS 688 Capstone Seminar

The seminar allows students the opportunity to work with faculty to develop their master's project or thesis. Seminar meetings will include collegial (student) as well as faculty critique and assistance in developing research and projects. Questions posed by both projects and theses will be discussed. The

capstone advisor must approve all projects. The capstone advisor and, when appropriate, an outside reader in an area of concentration must approve thesis topics. The seminar will conclude with students identifying the key questions for their continued study of leadership. Prerequisite: LOS 610. Cr 3.

LOS 689 Master's Project/Master's Thesis

The *project option* requires students to design an intensive theory-based, applied project that explores the role of leadership in developing and/or implementing meaningful change in an organization or community. Each student will work with a faculty advisor. When appropriate (e.g., when students have a concentration from another graduate program), an outside reader will also be selected jointly by the student and advisor. Written analysis of the project will include a survey of relevant literature, a detailed description of the situation or change being studied, presentation of the method(s) of inquiry and data, and an analysis of the data and other outcomes. The written presentation will include an executive sum-

mary and complete bibliography. Projects will also be formally presented to other students, community members, and LAC faculty. Students will be evaluated on both their verbal and written presentation skills.

The *thesis option* requires students to select a topic for intensive library research, reading, and analysis. It may, for example, summarize and analyze work in new methods or contribute a new theoretical proposal that calls for further testing or research. This work will be designed to produce an article of interest for the field of leadership studies. With a thesis advisor, the student will identify an appropriate professional or academic outlet for publication, and the paper will be prepared and submitted to this outlet. Students will formally present their theses to students, community members, and LAC faculty. Students will be evaluated on both their verbal and written presentation skills. Cr 3.

LOS 698 Independent Study

Cr 3.

Master of Occupational Therapy

Program Director: Roxie Black

Professor: Black; *Assistant Professor:* Winston; *Clinical Faculty:* Clark; *Field Work Coordinator:* Reidman

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 of occupational therapy program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA).

Occupational therapy (OT) is a health and human service profession that recognizes humans as occupational beings. People define who they are by what they do—or by the occupations in which they engage. Occupational therapists use meaningful occupation or activities as intervention to help people of all ages maximize wellness and perform the skills they need to participate as fully in society as possible. OTs intervene with people who are experiencing varying degrees of activity impairment as a result of developmental, physical, psychological, or environmental dysfunction. OTs assist people in developing, compensating for, or regaining the skills necessary for participation in meaningful life roles and skills of self care, work, 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, written, and electronic), problem solving, clinical reasoning, and professional behaviors. Realizing that consumers may receive occupational therapy services in a wide variety of settings, students are exposed to practice in hospitals, other health institutions, schools, community agencies and centers, and other facilities where potential clients may be effectively served.

Admission to the master of occupational therapy program is selective and limited to 24 spaces. The program seeks applicants who have a bachelor's degree in a field other than occupational therapy with a record of academic achievement and who are committed to employing interdisciplinary approaches and strategies in the study of occupational therapy. The program also seeks candidates who are committed to self-development as a necessary foundation for assisting others. Academic coursework and clinical experiences require that students be available throughout the day and some evenings. A part-time option is also available where students may complete their academic work in three years. In addition to four semesters of academic coursework, students are required to complete six months of full-time fieldwork in an occupational therapy setting.

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: Office of Graduate Admissions, USM, P.O. Box 9300, Portland, ME 04104-9300.

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 (3.0) 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 science courses were completed with a B or better more than six years ago, you may do one of the following: 1) use more current upper division courses in the discipline to satisfy the requirement; 2) retake the course; or 3) take a CLEP or equivalent exam if one is available. If you have questions regarding the prerequisite requirements, contact the M.O.T. director.

Prerequisite Courses:	<i>Credits</i>
Statistics (such as MAT 120D or SBS 328 or equivalent)**	3
College Algebra (such as MAT 108 or equivalent)*	3

College Level English*	6
(at least 3 credits must focus on writing)	
Intro to Sociology*	3
(or an upper level SOC or SBS course)	
Abnormal Psychology or Psychopathology***	3
Human Growth and Development or Developmental Psychology**	3
(Life span course)	
Intro to Physics with lab	4
Human Anatomy & Physiology I***	4
(or equivalent)	
Human Anatomy & Physiology II***	4
(or equivalent)	
Medical Terminology	1-3

* There are CLEP exams available for these courses.

** There are DANTES exams available for these courses.

*** There are Excelsior College Exams available for these courses.

4. If you have not already completed the English and math course requirements, please register to take Lewiston-Auburn College's placement exam in reading, writing, and math. The exam will determine whether you need to take any developmental courses in preparation for the college level math and English courses.
5. All applicants must complete a minimum of 15 hours of job shadowing or work experience in an occupational therapy department.
6. All applicants who meet the above requirements will be scheduled for a writing sample and interview.
7. Completion of the application requirements does not guarantee admission into the program. Admission will be based on a comparative evaluation of the applicants' materials as they relate to academic achievement, 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).
8. Based on the applicant's performance on the first six criteria, and other conditions noted in the M.O.T. admissions brochure, the admissions committee will make a decision, and inform the applicant of that decision within one month of acceptance.
9. Upon being accepted into the program, students must submit documentation that they are in good health as evidenced by a physical examination, including specific immunizations, prior to beginning the fall semester. Forms will be sent with acceptance letters.

The M.O.T. program has a rolling admissions process, and will accept applications from October 1 to August 1 prior to the fall semester to which one is applying. Unconditional acceptance to the M.O.T. program will be extended only to students who are competitive and who have submitted documentation that all of their requirements have been completed at the time of their application. Successful candidates who are in the process of completing prerequisite courses will receive conditional acceptances until all their requirements have been completed. Full-time students must have completed all prerequisites before the start of classes in September, while part-time students may take until the following fall to complete select courses. Students must select those courses with the MOT program director.

Although there is a rolling admission process, admission is competitive and the 24 spots will be filled on a first-come basis with qualified applicants. It is important that students submit their application as soon as possible.

Application Material

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

Time Limit Unless applying for a part-time option, the program's academic work is designed to be completed within five semesters of being admitted to the program. To ensure continuity of application of academic concepts and to meet accreditation standards, 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 B- (2.67) in order to carry graduate credit. If a student receives a grade below B-, 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 a course one time. If a student gets a grade below B- in a repeated 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. Students must also demonstrate satisfactory professional behaviors. Unsatisfactory ratings of professional behaviors in two semesters may result in termination from the program.

The M.O.T. 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 will 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) and will be eligible to practice. Most states require licensure in order to practice. In Maine, the license is based upon initial certification from the NBCOT certification examination. NBCOT is located at 800 S. Frederick Ave., Suite 200, Gaithersburg, MD 20877-4150.

Health Requirements

Students must comply with the University's immunization requirements. In addition, students must comply with the M.O.T. program's health policy requirements and any additional requirements of those health care agencies to which they are assigned for clinical practice. Students must show evidence of completion of the following immunizations:

PPD

Lab test (titer) providing immunity to:

Rubella

Rubeola

Mumps

Tetanus

Chicken Pox

Hepatitis Vaccine (3 doses) *and*

Hepatitis titer

Student health records must be on file with University Health Services and the M.O.T. program prior to entry into clinical courses. Health insurance, equal to or better than the USM Student Health Insurance Basic Plan, and CPR certification is *required* prior to beginning clinical coursework.

Program Requirements

Students in the M.O.T. program will complete 80 graduate credits consisting of 4 semesters of full-time coursework and 6 additional months of full-time fieldwork.

Students are required to complete three Level I Fieldwork experiences; one each in mental health, physical disabilities, and developmental disability settings. The Level I 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.

Students are required to have a current criminal background check. People with felonies must check with NBCOT and the Maine state licensure bureau regarding certification and licensure eligibility. Because of requirements from field sites, all MOT students are required to be fingerprinted prior to entering the MOT program and have evidence of such available for their field placements.

Students are required to become members of the American Occupational Therapy Association (AOTA) and the Maine Occupational Therapy Association (MeOTA).

Program of Study

FIRST YEAR

Fall Semester

			Credits
OTH	501	Occupational Therapy Foundations	4
OTH	502	Introduction to Occupation	3
OTH	503	The Reflective Practitioner	2
OTH	513	Applied Concepts of Movement	3
OTH	514	Human Anatomy: Structure and Function	4
OTH	515	Occupation and Populations	<u>2</u>
			18

Spring Semester

OTH	504	Applied Research I	3
OTH	505	Mental Health and Occupational Performance	7
OTH	507	Ethics and Social Justice	3
OTH	509	Level I Fieldwork: Mental Health	1
OTH	516	Organizations and Populations	1
OTH	517	Occupational Well-Being	<u>1</u>
			16

SECOND YEAR

Fall Semester

OTH	510	Level I Fieldwork: Physical Dysfunction	1
OTH	512	Applied Research II	3
OTH	601	Neuroscience	3
OTH	603	Occupational Performance in Adulthood	7
OTH	614	Adult Conditions	2
OTH	617	Leadership and Populations	<u>2</u>
			18

Winter/Spring Semester

Winter (8-week session)

OTH	511	Level I Fieldwork: Developmental Disabilities	1
OTH	604	Occupational Performance in Infancy through Adulthood	7
OTH	615	Childhood Conditions	<u>2</u>
			10

Spring (April/May/June)

OTH	620	Level II Fieldwork*	<u>6</u>
			16

THIRD YEAR

Summer Semester

OTH	608	Reflections on Practice: Cognition and Perception	3
OTH	616	Professional Presentations	1
OTH	618	Contextual Considerations in Practice	<u>2</u>
			6

Fall/Winter

OTH	621	Level II Fieldwork*	6
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Total credit requirements 80

*All students must complete two Level II Fieldwork experiences.

OTH 501 Occupational Therapy Foundations

This course introduces students to the profession of occupational therapy by studying its history, philosophy, and standards. Students will examine the multiple contextual factors that influence the practice, professional behaviors, responsibilities of practitioners, and evidence-based practice. Additionally, students will learn about the role and functions of OT practitioners; local, national, and international associations; the OT process; activity and occupational analysis; and OTR and OTA collaboration. Cr 4.

OTH 502 Introduction to Occupation

Introduces students to the theory of occupation and the relationship between occupation and occupational therapy practice. Several occupational performance models of practice in OT will be introduced, and students will thoroughly explore the OT practice framework. 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. Students will begin to reflect on their "therapeutic selves" in this course. Cr 3.

OTH 503 The Reflective Practitioner

Provides an understanding of human behavior; therapeutic use of self; and development of interpersonal communication both personally and professionally. Cr 2.

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. Students will learn to critically examine current research and to master basic research skills. Students will practice basic research skills through targeted assignments, and the development of research questions, a literature review, and a research project. Cr 3.

OTH 505 Mental Health and Occupational Performance

Emphasis is on occupational therapy theory, evaluation, planning, and intervention 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. Students will examine the importance of multiple contexts and their influence on occupational choice. Students problem solve using activity analysis and understanding of group dynamics to produce and evaluate occupation-based interventions. Prerequisite: OTH 502. Cr 7.

OTH 507 Ethics and Social Justice

This course is designed to assist students to understand the larger social, ethical, professional, and systematic issues that impact health care and occupational therapy practice. It will focus on ethical issues, dilemmas, and decision making, as well as the OT code of ethics. Health disparities, sociopolit-

ical pressures and legal issues, and their impact on ethical practice, will also be explored. 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. The combination of direct fieldwork experience plus an integrated seminar allows students to further integrate course material and provide a common link between the above mentioned classes. Corequisites: OTH 505, OTH 507, OTH 517. Cr 1.

OTH 510 Level I Fieldwork: Physical Dysfunction

Students are placed in clinical settings where they can begin to develop professional behaviors, communication skills, and skilled observation in a physical disabilities setting. The accompanying seminar allows students to share and process their experiences as a group. The combination of direct fieldwork experience plus an integrated seminar allows students to further integrate course material and provide a common link between the above mentioned classes. Prerequisites and corequisites: OTH 601, OTH 603, OTH 614. Cr 1.

OTH 511 Level I Fieldwork: Developmental Disabilities

Students are placed in clinical settings where they can begin to develop professional behaviors, communication skills, and skilled observation in a pediatric/developmental setting. The accompanying seminar allows students to share and process their experiences as a group. The combination of direct fieldwork experience plus an integrated seminar allows students to further integrate course material and provide a common link between the above mentioned classes. Prerequisites and corequisites: OTH 604, OTH 615. 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, collecting and analyzing data, culminating in a full research paper and presentation. Course sessions and assignments will be devoted to guiding students through the research process. Cr 3.

OTH 513 Applied Concepts of Movement

This course will cover the basic science needed to understand normal body movement. The student will gain an understanding of the functional anatomy of the musculoskeletal system and how it relates to the biomechanics, kinematics, and kinetics of human motion. In addition, the student will learn skills in assessment of musculoskeletal functioning from a biomechanical frame of reference. The

course will include hands-on laboratory experiences that will facilitate the learning of concepts and skills. It will also include the examination of medical terminology. Corequisite: OTH 514. 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 515 Occupation and Populations

This course explores groups of people and their occupations within their local and global communities. Students will come to understand how these groups engage in meaningful activities. Concepts of occupational justice will be introduced and examined to determine the barriers to participation in occupations for populations. This is the first of a three-course sequence where students engage with community partners. Cr 2.

OTH 516 Organizations and Populations

This is the second in a three-course sequence where students engage with community partners. Students learn about community service organizations and craft and implement a service-learning project with a local agency in an effort to meet the identified needs of a population. Cr.1

OTH 517 Occupational Well-Being

The profession of occupational therapy and the World Health Organization identify wellness as an important aspect of health status. Occupation, the engagement in meaningful activity, is necessary for health and wellness. This course explores the concept of wellness as it is understood in occupational science and practiced in occupational therapy. Cr. 1

OTH 601 Neuroscience

This course will provide foundational 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. Prerequisites or corequisites: OTH 514, OTH 603, OTH 614. Cr 3.

OTH 603 Occupational Performance through Adulthood

This course integrates occupational therapy theory and practice in the occupations of adults with physical impairments. The class format provides students with an opportunity to apply occupational therapy and new knowledge to clinical cases, develop clinical reasoning abilities, and learn hands-on skills needed for entry-level practice. Learning areas involve applying the OT practice framework to practice as well as integrating OT in a variety of practice settings with a variety of team members.

Written and verbal skills are highlighted, and role playing/modeling of interdisciplinary teamwork is stressed. It is expected that students are able to do professional research by accessing information on the Internet via relevant databases. Prerequisites and corequisites: student is matriculated into the M.O.T. program, and has successfully completed OTH 510 and OTH 514, or is currently taking OTH 601 and OTH 614. Cr 7.

OTH 604 Occupational Performance in Infancy through Adulthood

This course integrates OT theory and practice in the occupations of individuals birth to 21. The format of the class includes weekly lectures, class discussions, lab experiences, and community-based learning opportunities. This will help students to apply new knowledge to clinical cases, develop clinical reasoning skills, and learn hands-on skills needed for entry-level practice. Pre- or co-requisites: OTH 511, OTH 513, OTH 514, OTH 601, OTH 615. Cr 7.

OTH 608 Reflections on Practice: Cognition and Perception

This course explores integration of brain function and its relationship to occupational performance across the life span. Emphasis is on how human beings learn and participate in their environments, with respect to the perceptual and cognitive functions of the brain that are most pertinent to occupational performance. Reflecting on their previous fieldwork experiences, the class examines the relationship of states of damage and dysfunction to engagement in occupations. Students will discuss the psycho-social, physical, and developmental practice domains of occupational therapy as they relate to brain functions. Students will understand assessments, and begin to design preparatory and occupation-based interventions for people, regarding perceptual and cognitive issues. Cr 3.

OTH 614 Adult Conditions

Clinical conditions and diagnoses for adults with physical dysfunction will be addressed. Emphasis will be on understanding medical conditions as they relate to occupational therapy practice. Prerequisites or corequisites: OTH 510, OTH 601, OTH 603. Cr 2.

OTH 615 Childhood Conditions

Medical and developmental conditions from birth, early childhood, and adolescence will be described and identified in this course. The impact of these conditions on occupational performance will also be addressed. Prerequisites or corequisites: OTH 511, OTH 513, OTH 514, OTH 601, OTH 604. Cr 2.

OTH 616 Professional Presentations

This course provides students with the opportunity to disseminate their research results in a professional forum. Students will work with a faculty advisor to prepare their research projects for professional presentation to the community. Course sessions and assignments will be devoted to guiding students

through the research dissemination process and transition to the role of a professional. Prerequisites: OTH 504 and OTH 605. Cr 2.

OTH 617 Leadership and Populations

This is the concluding course in a three-semester sequence where students continue to engage with community partners. Leadership theory is introduced for student application within organizations. Students identify their personal leadership styles and skills and examine how these can be utilized in their work with populations. Cr 2.

OTH 618 Contextual Considerations in Practice

This course utilizes and builds on the fieldwork experiences of students as they gain knowledge and reflect on observed practice skills needed for basic management. An examination of the context of practice will incorporate readings, assignments, and class discussions of effective supervision, reimbursement mechanisms, accrediting agencies, and their impact on departmental operations. Regulation, politics, and changing policies of serv-

ice provision will be studied, as well as the ethical considerations, program evaluation, and communications necessary for managing people. Students will be taught to consider alternatives, advocate for change, and influence policy decisions. Cr 2.

OTH 620 Level II Fieldwork

This fieldwork requirement is a 12-week, full-time, 40-hours per week supervised experience in an occupational therapy setting, or emerging practice area. Students apply theoretical knowledge and practice skills with clients who are experiencing a variety of disorders, taking on an ever-increasing caseload throughout the 12 weeks. Cr 6.

OTH 621 Level II Fieldwork

This fieldwork requirement is a 12-week, full-time, 40-hours per week supervised experience in an occupational therapy setting, or emerging practice area. Students apply theoretical knowledge and practice skills with clients who are experiencing a variety of disorders, taking on an ever-increasing caseload throughout the 12 weeks. Cr 6.

College of Nursing and Health Professions

Interim Dean: Judith Spross

School of Nursing

Director: Krista Meinersmann

Coordinator, Graduate Nursing Programs: Marjorie Thomas Lawson

Master of Science in Nursing

Professors: Spross, Thompson; *Associate Professors:* Childs, Hart, Healy, Johnson, Lawson, Moody, Peake-Godin, Sepples, Toy

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, clinical nurse specialists, and clinical nurse leaders. 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. 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, families, and high risk populations. Master's students gain skills in clinical decision making and differential diagnosis; in case management and consultation; in client teaching; in assessments and interventions; and, in program design, implementation, and evaluation.

Students in the *adult and family nurse practitioner concentrations* gain advanced skills in the care of individuals and families with acute and chronic health problems. Upon graduation, adult and family nurse practitioner students may choose to sit for certification as an adult or family nurse practitioner respectively. In the *adult psychiatric/mental health/clinical nurse specialist/nurse practitioner concentration*, students gain advanced skills in interventions with individuals, families, and groups. Graduates are prepared to sit for certification as a clinical nurse specialist in adult psychiatric mental health nursing and as an adult psychiatric mental health nurse practitioner. In the *adult health clinical nurse specialist concentration*, students gain advanced skills in medical-surgical and home care intervention with individuals, families, and groups. 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. Graduates are prepared to sit for the clinical nurse specialist certification. Depending on electives selected, a student may receive a certificate in health policy and management from the Muskie School of Public Service. The *clinical nurse leader concentration* is a part-time program of study in which graduate students are prepared for clinical leadership in all health care settings. They also are prepared to implement outcomes-based practice and quality improvement strategies. Graduates are prepared to sit for the clinical nurse leader certification. In collaboration with the School of Business, the School of Nursing offers a joint Master of Science in Nursing/Master of Business Administration (M.S./M.B.A.). Graduates are prepared for leadership positions in health care with emphasis on developing the skills needed to inform and guide organizational change. Admission to this program is done jointly by the School of Nursing and the School of Business.

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's application for admission will be evaluated based on a composite of the following recommended standards. Students applying for the M.S./M.B.A. must take either the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT).

1. A baccalaureate degree with a major in nursing from a degree program accredited by the National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education.
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.
5. A score that ranks in the 45th percentile (or higher) for intended major on the Miller Analogy Test, or combined aptitude scores of 1000 (V.Q.) (or higher) on the Graduate Record Examination taken within the past 5 years.

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

Application Material

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

1. Two letters of reference reflecting professional practice and academic achievement.
2. Evidence (photocopy) of current licensure as a registered professional nurse in Maine.
3. An essay reflective of professional goals.

Application Deadlines

Application deadlines:

1. Second Degree MS-Option Program—December 1.
2. Clinical Nurse Leader—April 1
3. All other programs and concentrations have the following application cycles:
Spring semester admission—October 1
Fall semester admission—April 1

Health Requirements

Students must comply with the University's immunization requirements. In addition, students must comply with School of Nursing health policy requirements and any additional requirements of those health care agencies to which they are assigned for clinical practice.

PPD – times 2 (last PPD given within the past calendar year)

Lab test (titer) providing immunity to:

Rubella

Rubeola

Mumps

Varicella

Tetanus & Diphtheria

Hepatitis Vaccine (3 doses) and Hepatitis titer

Student health records and evidence of an unencumbered RN licensure must be on file in the School of Nursing prior to entry into clinical courses. Health insurance, equal to or better than the USM Student Health Insurance Basic Plan, and professional rescue-level CPR certification is required prior to beginning clinical coursework.

Program Requirements

The M.S. program in nursing is four to five academic semesters in length for students taking an average of twelve (12) credits per semester. Both full-time and part-time studies are available. A total of 31-54 credit hours are required for completion of the master's degree program in nursing depending on chosen concentration. The number of required clinical hours (contact hours) is based on national certification examination requirements, not on a credit hour to contact hour basis. The M.S./M.B.A. dual degree program does not require clinical credit hours.

Background Checks

Students must pay for and complete a comprehensive background check prior to starting graduate clinical courses. In addition, students must sign a disclosure agreement allowing the school to provide access to this background information to our

			<i>Credits</i>
FALL I			
NUR	603	Nursing Theory and Knowledge Development	3
NUR	606	Leadership, Health Policy, and Role	3
NUR	671	Foundations of Advanced Practice Mental Health Nursing	2
NUR	672	Biological and Behavioral Components of Mental Health and Illness	2
NUR	680	Advanced Psychopharmacology	3
			Total credits 13
SPRING I			
BIO	545	Advanced Pathophysiology	3
NUR	602	Advanced Health Assessment	4
NUR	673	Clinical Practicum and Supervision I	3
NUR	674	Advanced Adult Psychiatric/Mental Health Nursing I	3
			Total credits 13
SUMMER I			
NUR	675	Advanced Adult Psychiatric/Mental Health Nursing II	3
NUR	678	Clinical Practicum and Supervision II	3
NUR	604	Nursing Research	3
			Total credits 9
FALL II			
NUR	676	Advanced Adult Psychiatric/Mental Health Nursing III	3
NUR	679	Clinical Practicum and Supervision III	3
NUR	658	Graduate Clinical Project Elective (Graduate)	3
			Total credits 12
SPRING II			
NUR	681	Advanced Child and Adolescent Psychopathology*	3
NUR	683	Clinical Practicum and Seminar: Child and Adolescent*	3
NUR	690	Role Seminar**	1
			Total credits 7

Total Graduate Program credits: 48 Adult PMH/Clinical Nurse Specialist (CNS)
48 Adult PMH/CNS/Nurse Practitioner (NP)
54 Family PMH/Nurse Practitioner (NP)

*Required only for Family Psychiatric/Mental Health Nurse Practitioner students

**Taken in SPRING I semester for Adult PMH/CNS/Nurse Practitioner (NP) students

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

			<i>Credits</i>
FALL I			
BIO	545	Advanced Pathophysiology	3
NUR	601	Advanced Pharmacotherapeutics or	3
NUR	680	Advanced Psychopharmacology	3
NUR	602	Advanced Health Assessment	4
NUR	606	Leadership, Health Policy, and Role	3
			Total credits 13
SPRING I			
NUR	603	Nursing Theory and Knowledge	3
NUR	608	Applied Theories for Advanced Interpersonal Skills	3
NUR	644	Advanced Practice Adult Health Nursing I*	3
NUR	646	Clinical Practicum and Seminar I*	3
			Total credits 12
FALL II			
HPM	6XX	One course from the following list:	3
HPM	670	The American Health Care System	
HPM	673	Fundamentals of Health Care Management	
HPM	636	Health Information Management	
HPM	681	Quality and Outcomes of Health Care	

NUR	604	Nursing Research	3
NUR	645	Advanced Practice Adult Health Nursing II*	3
NUR	648	Clinical Practicum and Seminar II*	3
		Total credits	12
SPRING II			
NUR	647	Advanced Practice Adult Health Nursing III*	3
NUR	649	Clinical Practicum and Seminar III*	3
NUR	658	Graduate Clinical Project	3
NUR	690	Role Seminar	1
		Elective (Graduate)	3
		Total credits	13

Total Graduate Program credits: 50 Adult Health Clinical Nurse Specialist (AH/CNS)

*The Graduate Nursing Program reserves the right to delay offering the 18-credit theory/clinical sequence for this concentration until a sufficient cohort is enrolled; minimum of 10 students.

Clinical Nurse Leader Concentration

The Clinical Nurse Leader (CNL) concentration is a part-time graduate program. A total of 31 credit hours is required for completion of this master's degree program in nursing. Applicants must adhere to the same admission criteria and process of all other graduate applicants. In addition to the application materials described in the USM Graduate Catalog Admissions chapter and the CONHP's Admission section, applicants to this concentration are required to: 1) provide evidence of a minimum of two years clinical experience post-baccalaureate degree in nursing, and 2) submit two letters of reference reflecting professional practice; one letter from a current clinical nurse peer and the second from a current nurse manager/supervisor. This concentration has a total of 468 clinical hours: 84 hours in clinical semester one, 84 hours in clinical semester two, and 300 hours in clinical semester three.

Sample: Part-Time Program Sequence

SEMESTER I				<i>Credits</i>
NUR	604	Nursing Research	3	
NUR	614	Theoretical Foundation of CNL Role*	3	
		Total credits	6	
SEMESTER II				
NUR	608	Applied Theories of Advanced Interpersonal Skills	3	
NUR	610	Pathophysiology/Health Assessment/Pharmacology*	4	
		Total credits	7	
SEMESTER III				
NUR	628	Health Care Environment Organization*	3	
NUR	621	Clinical Seminar I*	3	
NUR	615	Clinical Project I*	1	
		Total credits	7	
SEMESTER IV				
NUR	624	Clinical Care Initiatives*	3	
NUR	622	Clinical Seminar II*	3	
NUR	617	Clinical Project II*	1	
		Total credits	7	
SEMESTER V				
NUR	623	Clinical Seminar III*	3	
NUR	618	Clinical Project III*	1	
		Total credits	4	

Total Graduate Program credits: 31 Clinical Nurse Leader (CNL)

*The Graduate Nursing Program reserves the right to delay offering the 25-credit sequence for this concentration until a sufficient cohort is enrolled; minimum of 10 students.

R.N. to Master of Science Degree Program for Registered Nurses

The R.N. to Master of Science degree program at the University of Southern Maine School of Nursing has been created specifically for registered nurses whose career goals will be enhanced through graduate study. The program facilitates and supports educational mobility and strengthens the leadership abilities of nurses who already have a foundation of professional experience. When required undergraduate courses have been completed, students in this program proceed directly into the master's program, bypassing the baccalaureate degree.

This program 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. completes courses in new areas of content. In addition, there is assessment of and credit for previously attained knowledge and skill.

The R.N. to master's program is built upon prerequisites to the nursing major that include courses in the natural 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, and human anatomy and physiology. Prior learning assessment examinations can earn credits for non-nursing required courses. Call Joyce Lapping, director of Prior Learning Assessment, 780-4663, for an appointment or information.

Required Undergraduate Courses		<i>Credits</i>
PSY/MAT	Statistics	3
BIO 345	Pathophysiology	3
CON 308	Professional Communications and Technology Utilization in Nursing and the Health Sciences*	3
NUR 309/310	Health Assessment I Practicum	4
CON 321	Health-Related Research	3
NUR 314	RN Credit Options	30
CON 356	Concepts in Community Health	3
NUR 419	Community Nursing Partnerships for RNs**	2

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

**NUR 419 may not be taken unless RN credit options have been completed and posted.

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 concentrations total 31-54 credits.

Admission Requirements

Admission to the R.N. to Master of Science program for registered nurses is on a competitive basis. Each student's application will be evaluated based on a composite of the following recommended standards:

1. An associate degree or diploma in nursing.
2. Evidence (photocopy) of current unencumbered licensure as a registered professional nurse in Maine.
3. Two letters of reference reflecting professional practice and academic achievement.
4. A score in the 45th percentile (or higher) for intended major on the Miller Analogy Test, or combined aptitude scores of 1000 (V.Q.) (or higher) on the Graduate Record Examination taken within the past 5 years.
5. Transcripts from a diploma school or an associate degree program with a minimum 3.0 GPA on a 4.0 scale or a B average.

Dual Degree—Master of Science in Nursing and Master of Business Administration

The dual master's degree in nursing and business administration at the University of Southern Maine is designed for students in the health professions who wish to combine advanced nursing practice with the analytical tools of business.

Several factors are evaluated in determining a candidate's admissibility to the two programs that make up the dual degree. Included in the assessment of a candidate's potential to perform satisfactorily in the programs are the undergraduate grade point average, accredited nursing baccalaureate degree, academic performance in any previous graduate coursework, GRE scores (combined aptitude scores of 1000 [V.Q.] or higher) or GMAT scores (500 or higher), three letters of recommendation, and a candidate's record of successful professional experience.

Program Requirements

All courses are 3 credit hours

MBA Foundation Courses* (15 credit hours)

BUS	340	Managing Organizational Behavior
MBA	501	Economic Analysis
MBA	502	Fundamentals of Accounting
MBA	504	Probability and Statistics for Business Decision Making
MBA	505	Financial Management (Prerequisites: MBA 501, 502, 504)

*MBA Foundation courses may be waived based on prior undergraduate coursework with equivalent content and grade of C (2.0) or better.

MBA Core and Electives (30 credit hours)

ACC	630	Management Accounting Systems (Prerequisites: MBA 501, 502)
MBA	611	Introduction to Organizational Change (Prerequisite: BUS 340)
MBA	612	Topics in International Business (Prerequisites vary by instructor)
MBA	615	Ethical and Legal Issues in Business
MBA	62X	Select Finance course (Prerequisite: MBA 505)
MBA	660	Managerial Marketing (Prerequisite MBA 502)
MBA	670	Management Science (Prerequisite: MBA 504)
MBA	674	Topics in Information Systems Management
MBA	675	Production/Operations Management (Prerequisite: MBA 670)
OR		
MBA	672	Supply Chain Management (Prerequisite: MBA 670)
MBA	698	Practicum (Taken in the final semester of coursework.)

Electives (9 credits – fulfilled by Theoretical Nursing Core)

Theoretical Nursing Core (21 credit hours)

NUR	603	Nursing Theory and Knowledge Development
NUR	604	Nursing Research
NUR	606	Leadership, Health Policy, and Role
NUR	608	Applied Theories for Advanced Interpersonal Skills (Must precede or be concurrent with NUR 658)
NUR	658	Graduate Clinical Project (Prerequisites: NUR 604 and NUR 603)
NUR	697	Nursing Management Clinical Immersion I
NUR	698	Nursing Management Clinical Immersion II (Prerequisite: NUR 697)

Post-Master's Certificate of Advanced Study

Post-Master's Certificates of Advanced Study (CAS) as:

- Adult Nurse Practitioner (ANP)
- Family Nurse Practitioner (FNP)
- Adult Health Clinical Nurse Specialist (AH/CNS)
- Adult Psychiatric/Mental Health/Clinical Nurse Specialist (APMH/CNS)
- Adult Psychiatric/Mental Health/CNS/Nurse Practitioner (APMH/CNS/NP)
- Family Psychiatric/Mental Health Nurse Practitioner (FPMH/NP)

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 for Adult and Family Nurse Practitioner

			<i>Credits</i>
NUR	601	Advanced Pharmacotherapeutics	3
NUR	602	Advanced Health Assessment	4
BIO	545	Advanced Pathophysiology	3
NUR	608	Applied Theories for Advanced Interpersonal Skills	3
Clinical Concentration Courses NUR 664, NUR 665, NUR 666, NUR 667, NUR 668, and NUR 669			18
NUR	650	Primary Care of the Adolescent	1
NUR	651	Primary Care of Women	1
NUR	652	Primary Care Management of the Well Child*	1
NUR	653	Primary Care of the Ill Child*	2
NUR	654	Primary Care of the Well Prenatal Woman*	1
NUR	690	Role Seminar	1
Total credits:			34 or 38

* Required only of Family Nurse Practitioner students

Program Requirements for Adult Psychiatric/Mental Health Clinical Nurse Specialist, Adult Psychiatric/Mental Health/CNS/Nurse Practitioner, or Family Psychiatric/Mental Health Nurse Practitioner

			<i>Credits</i>
NUR	671	Foundations of Advanced Practice Mental Health Nursing	2
NUR	672	Biological and Behavioral Components of Mental Health and Illness	2
NUR	680	Advanced Psychopharmacology	3
BIO	545	Advanced Pathophysiology	3
NUR	602	Advanced Health Assessment	4
Clinical Concentration Courses NUR 673, NUR 674, NUR 675, NUR 676, NUR 678, and NUR 679			18
NUR	681	Advanced Child and Adolescent Psychopathology*	3
NUR	683	Child Practicum and Seminar I *	3
NUR	690	Role Seminar	1
Total credits			33 to 39

* Required only of Family P/MH Nurse Practitioner students

Admission Requirements

Students applying for admission must meet the following requirements:

1. M.S. degree in nursing (official transcripts) from an NLN or CCNE 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 unencumbered licensure as a registered professional nurse in Maine.
5. Evidence of current national certification (photocopy)
 - As an Adult Nurse Practitioner if returning for a CAS as a Family Nurse Practitioner.
 - As an Adult Psychiatric/Mental Health Clinical Nurse Specialist if returning for a CAS as either an Adult or Family Psychiatric/Mental Health Nurse Practitioner.

M.S. Option for Non-Nurses with Baccalaureate Degrees

This program 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 program 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 summer of the second year, students begin graduate non-clinical nursing courses with regularly enrolled master's students. Upon completion of the summer of the second year or after completing 9 credits of graduate study following completion of undergraduate courses, students must sit for the State Board Examination (NCLEX-RN) and become

licensed as a registered nurse. Failure to pass the NCLEX-RN licensure examination prior to the first graduate clinical practicum will stop progression in the program. Upon completion of all graduate courses, a Master of Science in Nursing is conferred.

Admission to the M.S. Option Program

Admission is competitive and limited. This program requires full-time enrollment in the planned sequence of study. Some scholarship and traineeship monies are available. Each student's application for admission will be evaluated based on a composite of the following recommended standards.

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 in the 45th percentile (or higher) for intended major on the Miller Analogy Test or combined aptitude scores of 1000 (V.Q.) (or higher) on the Graduate Record Examination taken within the last five years.
4. Two letters of reference.
5. An essay reflective of professional goals.
6. A personal interview may be required.

Prerequisite Course Requirements

Due to the intensity of the Options Program, every applicant is required to have completed two of the following undergraduate-level courses prior to their May matriculation; one of which must be a statistics course. All remaining prerequisite courses not completed prior to matriculation will be incorporated into the first summer course schedule (Summer I).

1. Completion of a course in introductory statistics (applied statistics is recommended; including descriptive and inferential statistics) with a grade of B- or above. Course must be completed before starting Summer I semester.
2. Completion of a course in pathophysiology with a grade of B- or above.
3. Completion of a research methods course with a grade of B- or above.
4. Completion of a concepts in community health course with a grade of B- or above.

Completion of a course in anatomy and physiology is highly recommended.

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.)

Prerequisite Courses (see above)

Statistics (mandatory), pathophysiology, research methods, and concepts in community health (3 credit hours each)

SUMMER I				<i>Credits</i>
CON	302/502	Pharmacology for M.S. Option Students		3
NUR	209	Health Assessment		3
NUR	210	Health Assessment Practicum		2
NUR	211	Transition to Professional Nursing		1
NUR	214/514	Fundamentals of Nursing Lab for M.S. Option Students		3
NUR	212/512	Nursing Arts & Science for M.S. Option Students		2
NUR		Prerequisite course (see above)		3
Total credits				17
FALL I				
NUR	323	Adult/Older Adult Health Nursing		3
NUR	325	Adult/Older Adult Health Nursing Lab		4
NUR	330/530	Mental Health Nursing		3
NUR	331	Mental Health Nursing Lab		2
NUR	538	Older Adult Health Nursing Community Partnership for M.S. Option Students		2
NUR	332	Nursing Care of the Older Adult in the Community		3
Total credits				18

SPRING I			
NUR	311	Reproductive and Sexual Health Nursing	3
NUR	312	Reproductive and Sexual Health Nursing Lab	2
NUR	315	Child Health Nursing	3
NUR	316	Child Health Nursing Lab	2
NUR	413	Advanced Nursing Skills Lab	1
NUR	423/523	Management of the Critically Ill Adult/Older Adult for M.S. Option Students	3
NUR	526	Management of the Critically Ill Adult/Older Adult Clinical for M.S. Option Students	4
			Total credits
			18

SUMMER II

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

- Adult Nurse Practitioner
- Family Nurse Practitioner
- Adult Psychiatric/Mental Health Clinical Nurse Specialist
- Adult Psychiatric/Mental Health Clinical Nurse Specialist and Adult Nurse Practitioner
- Family Psychiatric/Mental Health Nurse Practitioner

See previous pages for sample program sequences.

Total Program Credits:

Graduate Program = 48-54 Credits

Undergraduate Program = 49-61 Credits

Total Credits = 97-115

Master of Science Degree for Certified or State- Approved Advanced Practice Nurses

The Master of Science degree program for certified or state-approved Advanced Practice Nurses is designed to meet the educational needs of certified 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 R.N. to M.S. program. Certified and state approved Advanced Practice R.N. to M.S. students are not required to take undergraduate health assessment, microbiology, pathophysiology, or NUR 419 (Community Nursing Partnership for RNs).

Sample Curriculum

FALL I				<i>Credits</i>
NUR	601	Advanced Pharmacotherapeutics	3	
NUR	603	Nursing Theory and Knowledge Development	3	
			Graduate Elective I	3
			Total credits	9
SPRING I				
NUR	604	Nursing Research	3	
NUR	608	Applied Theories of Advanced Interpersonal Skills	3	
			Graduate Elective II	3
			Total credits	9
FALL II				
NUR	606	Leadership, Health Policy, and Role	3	
NUR	658	Graduate Clinical Project	3	
			Graduate Elective III	3
			Total credits	9
			Total Program credits	27

Note: R.N. to M.S. students (not having a baccalaureate degree in nursing) must complete additional undergraduate coursework.

For women's health nurse practitioner, 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.

Certificate of Graduate Study in Nursing Education

This 9-credit certificate program prepares students to teach in entry- and master's-level nursing programs in both didactic and clinical courses and engage in other professional roles such as staff development. Three required courses (3 credits each) for

this certificate provide a foundation in theories of nursing education, external factors that influence nursing education, curricular models, teaching methodologies and strategies, and critical analysis of theories of learning and teaching. All courses will be offered as on-line courses. The third course may have a low-residency requirement as it entails a clinical practicum with supervision by faculty and an identified preceptor for either a didactic and/or clinical experiential component.

Curriculum

NUR 636	Foundations of Nursing Education
NUR 637	Methods of Education in Nursing
NUR 638	Education Practicum and Seminar

Admission Requirements

1. A baccalaureate or master's degree in nursing from an accredited college or university.
2. Completion of the Application for Graduate Certificate Program which can be found at www.usm.maine.edu/grad.

Program Policies

In addition to the general policies described in the University of Southern Maine Graduate Catalog 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. No graduate courses that are older than five years will be accepted for admission credit. Graduate courses in Advanced Pharmacology, Advanced Psychopharmacology, or Advanced Health Assessment will not be accepted for admission credit if older than three years. A maximum of six credit hours may be approved for admission credit provided a grade of at least a B was earned in each individual course. Exceptions to the maximum credits allowed at time of admission must be approved by the Graduate Curriculum, Admission, and Advancement Committee (GCAAC).

Transfer Credit This credit must be approved at the time of admission and request for approval included as part of the admissions application. No graduate courses that are older than five years will be accepted for transfer credit. Graduate courses in Advanced Pharmacology, Advanced Psychopharmacology or Advanced Health Assessment will not be accepted for transfer credit if older than three years. Up to a total of nine credit hours may be approved as transfer credit provided a grade of at least a B was earned in each individual course. Additional transfer credit may be approved in unusual circumstances.

Background Check Policy Students must pay for and complete a comprehensive background check prior to starting graduate clinical courses. In addition, students must sign a disclosure agreement allowing the school to provide access to this background information to our clinical affiliates. Affiliates have the right to deny clinical placement based on criminal background. Denial of clinical placements will stop progression in the graduate nursing program.

Program Grade Policies In the undergraduate portion of their program, students in the R.N.-M.S. Program and students in the M.S. Option Program for non-nurses, must achieve a minimum of a B- in all NUR, CON, statistics, and pathophysiology 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 Graduate Nursing Program and academic withdrawal from the University. A grade of less than C- in a required undergraduate course will result in dismissal from the Graduate Nursing Program and academic withdrawal from the University.

Second degree option students must receive a minimum of "pass" in undergraduate clinical courses to progress. For a second degree option student who receives a first low pass grade in an undergraduate clinical course, the first low pass course may be repeated once. If the student receives a second low pass in the same or another undergraduate clinical course, the student will be dismissed from the Graduate Nursing Program. Second degree option students complete all undergraduate course and clinical requirements before being eligible to start graduate courses.

Second degree option students who fail NCLEX-RN cannot progress in their course of studies without review by the GCAAC and permission of the director of the School of Nursing.

In the graduate portion of their program, all students must achieve a minimum of a B- grade for all required graduate courses. The first time a student earns below a B-, the course must be retaken successfully (B- or above) in order to continue with program progression. A graduate course can only be retaken one time. Failure of the course retaken or of a second course will result in dismissal from the Graduate Nursing Program and academic withdrawal from the University. If the course in which a grade below a B- has been earned has a concurrent clinical course, progression in the theory/practice course sequence stops. A grade of B- or better must be achieved in the course which is repeated before the theory/practice course sequence resumes.

Because of the interrelatedness of concurrent clinical and theory courses, the following policies apply. If a student fails a clinical course (C+ or below) but passes the concurrent theory course (B- or above), the student must repeat the clinical course within one calendar year. If more than one calendar year elapses between failing and repeating the required clinical course, the student will be required to retake the concurrent theory course.

If the student fails a theory courses (C+ or below) but passes the concurrent clinical course (B-or above), and the student retakes the theory course within one calendar year, the student will be required to perform 8 hours of clinical, including attendance at clinical seminar every week. If more than one year elapses between failing a required theory course and retaking it, the clinical course must be repeated in its entirety.

A grade of C or below in the clinical component of a course will result in dismissal from the Graduate Nursing Program and academic withdrawal from the University. (Please refer to the Academic Policies section of this catalog.)

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 Graduate Nursing Program and academic withdrawal from the University. An incomplete grade in a clinical and/or concurrent theory 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 in any one semester will result in dismissal from the Graduate Nursing Program and academic withdrawal from the University.

The GCAAC and program faculty reserve the right to review a student's record to make recommendations regarding progression.

General Enrollment Policies

Students enrolled in either the M.S. Option for Non-Nurses with Baccalaureate Degrees or the R.N. to Master of Science Degree programs must successfully complete all of the required undergraduate requirements before starting their graduate course of study. If students in either of these programs choose to drop back into the traditional undergraduate nursing program they will be withdrawn from the Graduate Nursing Program. Students may then reapply to the graduate nursing program once they have successfully completed the Bachelor of Science degree with a major in nursing.

Matriculated students in the early phase of their graduate studies may choose to change their area of specialization prior to starting the specialty core. Once graduate students have started in the theory/clinical sequence of their specialty concentration no changes will be permitted.

Program Progression

Continuous Enrollment Once matriculated into the graduate program, students must be continuously enrolled in the program unless a written, formal request for a leave of absence has been submitted to and approved by the coordinator of the Graduate Nursing Programs or the chairperson of the GCAAC. Continuous enrollment requires that every graduate student 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. If the continuous enrollment policy is not maintained, a letter will be sent to the student, the advisor, and the Office of Graduate Studies from the coordinator of the Graduate Nursing Programs.

Leave of Absence Students enrolled in the full-time MS Option for Non-Nurses with Baccalaureate Degree Program are not eligible for a leave of absence. All other students in the Graduate Nursing Programs may request a leave of absence. The leave of absence waives the continuous enrollment policy for a period of one calendar year. Note that when a request for a leave of absence is made at midterm, USM's current grading policies apply. Approval of the leave of absence is the responsibility of the coordinator of the Graduate Nursing Programs or the chairperson of the GCAAC. Once a decision has been made regarding the leave of absence, a letter will be sent from the coordinator to the student, the advisor, the Office of Graduate Studies, and the registrar. To request a leave of absence, the student must:

- Meet with his or her advisor to discuss the potential impact of the leave of absence on progression
- Collaborate with the advisor and describe the terms of the request
- Submit a written request to the coordinator or chairperson of the GCAAC with a copy to the advisor
- Confer with the coordinator prior to the end of the leave of absence to ensure that the student can register

Background Check Policy Affiliates have the right to deny clinical placement based on criminal background. Denial of clinical placements will stop progression in the graduate nursing program.

Inactivation Policy Student admission, matriculation, and/or progression will be inactivated under the following conditions:

- Failure to maintain continuous enrollment as outlined above
- Absence of written communication with the advisor and/or coordinator regarding matriculation/progression plans (e.g., no request for leave of absence)

The School of Nursing will advise the registrar of the student's inactive status. Students, whose file has been inactive for greater than or equal to one calendar year, may be required to repeat courses or reapply for admission. Students who have been placed on inactive status must meet with the coordinator or the GCAAC chairperson to determine what requirements must be met to activate registration.

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, University of Southern Maine, 96 Falmouth St., Portland, Maine 04103, (207) 780-4386.

The College of Nursing and Health Professions is accredited by the Commission on Collegiate Nursing Education. For additional information contact: the Commission on Collegiate Nursing Education, One Dupont Circle, NW, Suite 530, Washington, D.C., 20036; (202) 887-6791.

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

Commitment to Civility

The concepts of community and social justice are central to the mission and philosophy of the University of Southern Maine College of Nursing and Health Professions. Faculty, students, and staff are committed to promoting a healthy and just environment that supports transformative learning, academic integrity, open communication, and personal and professional growth among the diverse members of our academic community. We believe that these commitments are grounded in intellectual openness, in personal and professional accountability, and in the democratic values of inclusivity and mutual respect which are guided by rational discourse and by a relational ethic of care.

We are grateful for the opportunities to learn and work with peoples of diverse ethnic, racial, religious, cultural, political, and economic backgrounds as well as with people who are disabled and people of different gender, sexual orientation, and age. Acknowledging the ethics and values that underlie the health professions, it is our belief that these ethics and values should be recognized, practiced, and cultivated in our learning and work environments. Our goal is to increase the awareness of students, staff, and faculty to the importance of civility, its implications, and the behaviors that are acceptable and not acceptable in our learning community.

Civility is the art of treating others, as well as ourselves, with respect, dignity, and care. Civility is apparent when we are sensitive to the impact that our communications, practices, and behaviors have on others, and when we acknowledge each person's self-worth and unique contributions to the community as a whole.

As members of the College, we are committed to learning and practicing in ways that support a caring and socially just community. The following are examples of how we create and sustain civility.

1. Support the autonomy and just treatment of self and others by facilitating an open, respectful, and caring environment.
2. Accept responsibility and accountability for one's own behavior when interacting with students, faculty, and staff.
3. Respect and protect the rights and property of others.
4. Speak or behave in a manner that does not disrupt or interfere with the learning or work of others.
5. Practice personal and academic integrity and expect it from others.
6. Demonstrate respect for others by actively discouraging prejudice, bias, bigotry, violence, coercion or intimidation against any member of the academic community.
7. Demonstrate a willingness to listen and be open to hearing the perspectives of others. This includes actively seeking to hear from and making a safe space for voices of dissent.
8. Explore controversial issues through open dialogue and respectful deliberation.
9. Respect freedom of expression while recognizing that such tolerance does not require agreement with expressed ideas.
10. Engage institutional resources and persons to resolve conflict when necessary.

We will not tolerate disrespectful or abusive speech and/or disruptive behavior from individuals or groups. Everyone has the responsibility to foster a safe and supportive learning and work environment. This can include any individual asking others to stop disrespectful or abusive speech and/or disruptive behavior. Collectively, faculty, staff, and students in the College of Nursing and Health Professions are responsible for ensuring a safe and supportive learning and work environment.

Advanced Practice Concentrations 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. The regulatory aspects of drug administration and prescription from the perspective of advanced nursing practice will be examined. The development of clinical decision-making skills essential to safe, effective, and ethical pharmacological interventions will be the focal point 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 Health Assessment

This course builds upon undergraduate knowledge of anatomy, physiology, pathophysiology, and health assessment of individuals across the life span. It provides an opportunity to develop physical assessment skills needed for advanced practice nurses. Abnormal assessment findings are related to underlying pathophysiology. Cr 4.

NUR 603 Nursing Theory and Knowledge Development

This course explores contemporary issues in theory development and the social production of knowledge for nursing. The social and historical context of knowledge development in nursing will be examined with an emphasis on the relationship between theory, research, and practice in nursing. Cr 3.

NUR 604 Nursing Research

This course prepares advanced practice nurses to appraise and use research and other evidence to provide high quality health care, to initiate change and to improve nursing practice and to evaluate their own practice systematically. Emphasis is on developing relevant clinical questions, searching for studies and other evidence, systematic appraisal of evidence, and determining whether and how to apply the findings. Commonly used research designs are explained. Strategies for organizing evidence and implementing evidenced-based practice changes are explored. Cr 3.

NUR 606 Leadership, Health Policy, and Role

This course examines the complexity of the American Health Care System and current efforts to restructure the system. Past, current, and potential roles of advanced practice nurses related to access, and the goals of Healthy People 2010 are examined. Sociopolitical, economic, and ethical issues embedded in public policy decisions are explored. Attention is given to the role of advanced practice nurses in influencing, creating, and implementing policy. Cr 3.

NUR 608 Applied Theories of Advanced Interpersonal Skills

Theories of communication, group, family/developmental, stress, consultation, and crisis are examined as they relate to interpersonal relations. The empha-

sis is on the acquisition of advanced communication skills and strategies for analyzing effective and ineffective communication. Self-reflection is an underlying thread when applying a range of theories to practice. Cr 3.

NUR 644 Advanced Practice Adult Health Nursing I

This is the first theory course in the adult health clinical nurse specialist (CNS) concentration. While all advanced practice competencies are introduced, the major emphasis of the course is on the patient sphere of influence and the direct care competency of the adult health CNS role. Nursing assessments and interventions for common, acute medical surgical illnesses, trauma, and acute manifestations of chronic illnesses are emphasized. Prevention and management of adverse events, emergencies, and complications are addressed. Basic strategies for integrating evidence-based guidelines into practice are introduced. Cr 3.

NUR 645 Advanced Practice Adult Health Nursing II

This is the second theory course in the adult health clinical nurse specialist (CNS) concentration. Emphasis is on advanced nursing assessments and interventions for patients with chronic illnesses as well as interdisciplinary care of this population. Contemporary evidence-based approaches to assessment, management, and outcome evaluation are addressed. Strategies for synthesizing various sources of evidence are discussed. Cr 3.

NUR 646 Clinical Practicum and Seminar I

This is the first clinical course in the adult health clinical nurse specialist (CNS) concentration. The focus of the course is on the patient sphere of influence and the direct care role of the CNS. Emphases are on CNS role acquisition, the clinical application of theories and science, and the use of advanced nursing assessments and interventions in patients with acute medical-surgical problems. Approaches to anticipating, preventing, and managing adverse events, emergencies, and complications are addressed. Cr 3.

NUR 647 Advanced Practice Adult Health Nursing III

This is the third theory course in the adult health clinical nurse specialist (CNS) concentration. The health care system's sphere of influence and the leadership and management competencies of the CNS are the focus of this course. Managing and negotiating health care delivery systems and monitoring and ensuring the quality of health care are emphasized. Content on staffing, resource management, and rules and regulations as they relate to this advanced practice role is presented. Strategies for integrating theoretical, evidence-based, and practical approaches to quality improvement, to managing risk, change, and complexity, and to program development are discussed. Cr 3.

NUR 648 Clinical Practicum and Seminar II

This is the second clinical course in the adult health clinical nurse specialist (CNS) concentration. Applications of pathophysiology, and nursing and interdisciplinary management of chronic illnesses are emphasized. The focus is on the synthesis and use of various sources of evidence in advanced medical-surgical practice. CNS role acquisition and socialization, particularly related to patient and nursing personnel spheres of influence, are discussed. In addition, advanced practice competencies of the CNS are analyzed. Cr 3.

NUR 649 Clinical Practicum and Seminar III

This is the third clinical course in the adult health clinical nurse specialist (CNS) concentration. Utilization of evidence-based strategies for managing and negotiating health care delivery systems and monitoring and ensuring the quality of health care are addressed. Clinical application of leadership and management competencies of the CNS role is emphasized. Emphasis is on quality of care initiatives, program development and management, change implementation, and assessing the impact of rules, regulations, and other internal and external contextual factors on care delivery. Cr 3.

NUR 650 Primary Care of the Adolescent

The emphasis in this course is on evidence-based assessments and interventions for adolescents. Anticipatory guidance and education for the parents of these adolescents and strategies for prioritizing adolescent and family health care and health education needs are emphasized. Cr 1.

NUR 651 Primary Care of Women

This course is designed to prepare advanced practice nurses to provide primary care to women. The emphases are on prevention, promotion, maintenance, and restoration of health. Evidence-based approaches to assessment, intervention, and evaluation of women's health issues are addressed. Cr 1.

NUR 652 Primary Care Management of the Well Child

The emphasis in this course is on evidenced-based assessments and interventions for well infants and children. Anticipatory guidance and education for the parents of these children and strategies for prioritizing child and family healthcare and health education needs are emphasized. Cr 1.

NUR 653 Primary Care of the Ill Child

The emphases are on assessment and interventions for children with acute illnesses and education for the parents and children. Development of physical and psychosocial assessment and intervention skills specific to the pediatric population in the primary care setting are addressed. Decision making related to prioritizing child and family health care and health education needs is emphasized. Cr 2.

NUR 654 Primary Care of the Well Prenatal Woman

This course is designed to prepare advanced practice nurses to provide primary care to the well prenatal woman. Focus is on health promotion, assessing and minimizing risk, and preventing complications. Emphasis is on collaboration and ensuring continuity of care. Cr 1.

NUR 658 Graduate Clinical Project

This course is designed to promote the effective application of research and other evidence to clinical practice. Examples may include evaluating and/or modifying current practice standards, disseminating research results, increasing clinical application of evidence-based interventions, or adapting and designing a research-based intervention. Cr 3.

NUR 664 Primary Health Care of the Adult I

This is the first in a sequence of three courses designed to prepare advanced practice nurses to provide health promotion and primary care to individuals and families in the context of community. The emphases are on assessment, diagnosis, intervention and management strategies related to acute episodic care and health maintenance of adolescent and adult populations. Particular focus is on the development of physical, psychosocial, and cultural assessment and intervention skills specific to the populations in primary care settings. Cr 3.

NUR 665 Primary Health Care of the Adult II

This is the second in a sequence of three courses designed to prepare advanced practice nurses to provide health promotion and primary care to individuals and families in the context of community. Within the context of chronicity, the emphases are on assessment, diagnostic, intervention, and management strategies related to long-term health problems and the accompanying social and cultural issues in adolescent and adult populations. Particular focus will be on interdisciplinary and collaborative aspects of the advanced practice role, direct care for selected groups, and principles of evidenced-based practice. Cr 3.

NUR 666 Primary Health Care of the Adult III

This is the final in a sequence of three courses designed to prepare advanced practice nurses to provide health promotion and primary care to older adults. The focus is on gerontological concerns and complex health issues. Utilizing the framework of ageism, emphases are on the approaches to assessment and management of older adults within the context of family and community across settings and on the utilization of evidenced-based practice. Cr 3.

NUR 667 Clinical Practicum and Seminar I

This is the first in a sequence of three clinicals/seminars designed to prepare advanced practice nurses to provide health promotion and primary care to individuals and families in the context of community. The emphases are on the application of assess-

ment, diagnostic, intervention, and management strategies to selected populations who need acute care and health maintenance. Particular focus is on using physical, psychosocial, and cultural assessment and intervention skill, and reflection on process issues related to clinical practice. Cr 3.

NUR 668 Clinical Practicum and Seminar II

This is the second in a sequence of three clinicals/seminars designed to prepare advanced practice nurses to provide health promotion and primary care to individuals and families in the context of the community. The emphases are on the application of assessment, diagnostic, intervention, and management strategies to selected populations related to long-term health problems and the accompanying social and cultural issues. Particular focus is on the integration and application of didactic information into clinical practice, development and refinement of the clinical decision-making process, critical evaluation of evidenced-based decisions, and reflection on process issues related to clinical practicum. Cr 3.

NUR 669 Clinical Practicum and Seminar III

This is the final in a sequence of three clinicals/seminars designed to prepare advanced practice nurses to provide health promotion and primary care to individuals and families in the context of community. The focus is on the application of assessment, diagnostic, intervention, and management strategies in selected populations across the life span with emphasis on the older adult. Emphasis is also on the refinement of skills reflective of beginning-level competency as an advanced practice nurse. Cr 3.

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 2.

NUR 672 Biological and Behavioral Components of Mental Health and Illness

This course inclusively examines mental health and illness from several theoretical perspectives across the life cycle. Theory and applications of biological psychiatry, behavioral neuroanatomy, psychiatric epidemiology, and psychosocial theories will be included. A focus of this course is to examine the foundations of mental health and mental illness examining the spectrum of symptoms based on a continuum from acute to chronic and level of severity. Major psychiatric disorders are discussed with emphasis on presenting symptoms, neurobiological factors, and

environmental factors. Emphasis is on developing knowledge and skill in diagnosis using the DSM IV. The course examines common medical problems that mimic the major psychiatric disorders and identify strategies for making differential diagnosis. Cr 2.

NUR 673 Clinical Practicum and Supervision I

This is the first clinical practicum in the psychiatric mental health concentration. Focus for this clinical involves application of theory in working with individuals across the life cycle with emphasis on the advanced practice role of the individual psychotherapist. Pharmacological interventions and effective medication management are integrated. Cr 3.

NUR 674 Advanced Adult Psychiatric/Mental Health Nursing I

This is the first course in a sequence of three courses designed to examine the theoretical, research, and practice foundations of advanced psychiatric nursing with individuals across the life cycle. Specific emphasis is on interventions with individuals who have Axis I and Axis II diagnoses based on the DSM IV criteria. Cr 3.

NUR 675 Advanced Adult Psychiatric/Mental Health Nursing II

This is the second in a sequence of three courses designed to examine the theoretical, research, and practice foundations of advanced psychiatric nursing with families. Major frameworks for family therapy are explored. Cr 3.

NUR 676 Advanced Adult Psychiatric/Mental Health Nursing III

This is the third in a sequence of three courses designed to examine the theoretical, research, and practice foundations of advanced psychiatric nursing practice. Focus is on expanding the theory and practice toward complex systems, and working with groups and vulnerable populations. Advanced practice options and special interest areas are explored. Cr 3.

NUR 678 Clinical Practicum and Supervision II

This is the second of three clinical courses in the psychiatric mental health advanced practice concentration. Focus for this course is the application of family theory and principles of family therapy. Clinical work builds on previous work with individuals to explore how family dynamics impact the individuals within the family as well as the overall family functioning. Assessments and interventions focus on the family as a system. Emphases are on advanced practice with families who have family members with mental illness, on families in crisis, and on identifying families at risk. Pharmacological interventions and effective medication management are integrated. Cr 3.

NUR 679 Clinical Practicum and Supervision III

This is the third clinical practicum in the psychiatric mental health concentration. Focus for this clinical involves the application of theory in working with groups and vulnerable populations across the life

span. Emphasis is on integrating the advanced practice competencies and working collaboratively with members of the health care team in providing holistic care to clients. Pharmacological interventions and effective medication management are integrated. Cr 3.

NUR 680 Advanced Psychopharmacology

This course is designed to prepare the advanced practice nurse (APRN) in the clinical application of pharmacotherapeutic principles to psychiatric disorders across the life span. Theory and principles of neurobiology are analyzed and applied. The major classes of psychotropic agents are studied, including antidepressants, anxiolytics, mood stabilizers, antipsychotics, sedative-hypnotics, stimulants, and cognitive enhancers. Other drugs and drug classes are examined as appropriate and relative to the clinical context. Drug pharmacodynamics, pharmacokinetics, indications, contraindications, interactions, and side-effects are evaluated in detail. Methods for evaluating efficacy of treatment and adjustment of pharmacotherapeutic regimens will be emphasized. Cr 3.

NUR 681 Advanced Child and Adolescent Psychopathology

This course is designed to prepare psychiatric nurse practitioners with the knowledge to address the mental health needs of children and adolescents. A developmental psychopathology framework is utilized to examine common psychiatric diagnoses including symptom clusters and comorbidities. Emphases are on the approaches to assessment,

diagnosis, and management of children and adolescents with a range of mental health needs based on current evidence-based research. Cr 3.

NUR 683 Clinical Practicum and Seminar: Child and Adolescent

This seminar is designed to prepare advanced practice nurses to provide psychiatric care to children and adolescents who present with a variety of mental health needs. The focus of this seminar is on the clinical practice and the application of theory and evidence-based practice in the psychiatric treatment of children and adolescents. Emphases are on the application of assessment, diagnosis, and management of strategies in working with children and adolescents with mental health needs. Cr 3.

NUR 690 Role Seminar

The major focus of the seminar is to prepare students to make a successful transition from graduate student to advanced practice nurse. Issues such as becoming credentialed, negotiating a contract, developing a portfolio, networking, resume writing, and utilization of resources will be addressed. Emphasis is placed on developing strategies for negotiating systems and creating work environments supportive of novice advanced practice nurses. 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.

Dual M.S. in Nursing/M.B.A. Courses

NUR 697 Nursing Management Clinical Immersion I

This is the first in a sequence of two clinical courses in the M.S. portion of the M.S./M.B.A. Program. The focus is on synthesis and application of knowledge gained in the nursing and business core courses and role acquisition and socialization as a nurse administrator. Emphasis is on assessment and need identification in an organization, resulting in appropriate intervention strategies to impact the delivery of patient care in health care organizations. Economic, political, and other relevant factors

affecting the organization and delivery of health care will be analyzed. Cr 3.

NUR 698 Nursing Management Clinical Immersion II

This is the final in a sequence of two clinical courses in the M.S. portion of the M.S./M.B.A. Program. The focus is on models of innovation and change in the health care system. Implementation and evaluation of intervention strategies for the delivery of quality patient care within an organizational setting are emphasized. Cr 3.

Clinical Nurse Leader Concentration Courses

NUR 610 Integrated Epidemiology, Health Assessment, Pathophysiology, and Pharmacology

This course prepares Clinical Nurse Leaders (CNL)® to refine and extend clinical judgments related to common, complex health problems, with a focus on achieving specific clinical outcomes. Essential principles of epidemiology, health assessment, pathophysiology, and pharmacology are reviewed. An integrated understanding of evidence-based nursing and interdisciplinary approaches to outcomes management is emphasized. Cr 4.

NUR 614 Theoretical Foundations of the Clinical Nurse Leader (CNL)® Role: Application to Practice

Through the lens of complexity science, multiple theories integral to implementing the CNL role are explored. The emphasis is on acquisition and application of leadership, organizations, ethics, interpersonal, and information management concepts that will enable CNLs to improve clinical processes and patient and institutional outcomes. Cr 3.

NUR 615 CNL® Clinical Project I

This is the first course in a two-course sequence designed to facilitate evidence-based practice with an emphasis on clinical leadership and project

development. Examples may include evaluating and/or modifying current practice standards, disseminating research results, increasing clinical application of evidence-based interventions, or adapting and designing a research based intervention. The focus of the first course is on project identification and development. Cr 1.

NUR 617 CNL® Clinical Project II

This is the second course in a three-course sequence designed to facilitate evidenced-based practice with an emphasis on clinical leadership and project implementation. Examples may include evaluating and/or modifying current practice standards, disseminating research results, increasing clinical application of evidence-based interventions, or adapting and designing a research-based intervention. The focus of the second course is on project implementation. Cr 1.

NUR 618 CNL® Clinical Project III

This is the third of a three-credit course sequence designed to facilitate evidenced-based practice with an emphasis on clinical leadership and project implementation. Examples may include evaluating and/or modifying current practice standards, disseminating research results, increasing clinical application of evidence-based interventions, or adapting and designing a research-based intervention. The focus of this course is on project completion. Cr 1.

NUR 621 CNL® Clinical Seminar I

This is the first in a sequence of clinical seminars, designed in partnership with clinical agencies, to prepare graduate nursing students for the Clinical Nurse Leader (CNL®) role. The emphases are on the roles of advocate; team, information, and outcomes manager; risk anticipator; clinician and educator. Students develop multidisciplinary team building and change agent skills in an acute care setting. Self-reflection on the evolving CNL® role is emphasized. Clinical practicum is required. Cr 3.

NUR 622 CNL® Clinical Seminar II

This is the second in a sequence of clinical seminars, designed in partnership with clinical agencies, to prepare graduate nursing students for the Clinical Nurse Leader (CNL®) role. The emphases are on the roles of advocate; team, information, and outcomes manager; risk anticipator; clinician and educator. Students continue to develop multidisciplinary team building and change agent skills in an acute care setting. Self-reflection on the evolving CNL® role is emphasized. Clinical practicum is required. Cr 3.

NUR 623 CNL® Immersion: Clinical Seminar III

This is the third in a sequence of clinical seminars, designed in partnership with clinical agencies, as a 300-hour capstone CNL® clinical immersion practicum. Weekly seminars are conducted where students, faculty, and preceptors meet to discuss experience, issues, role development, and implementation. Self-reflection on the evolving CNL role is emphasized. Cr 3.

NUR 624 Clinical Care Initiatives

Utilizing a multidisciplinary theoretical approach, the focus for the CNL® is on community management of complex illness with specific emphasis on such areas as palliative care, geriatrics, complementary therapies, and chronic care models. Cr 3.

NUR 628 Health Care Environment

Organization: Outcomes, Politics, Policy, and Economics

The health care environment organization is explored with an emphasis on improved patient safety and quality outcomes. Sociopolitical, economic, and ethical issues embedded in public policy decisions are explored. The focus is on macro and micro analysis of health care policy and ethics, politics, finance, and budgeting essential for the CNL® to influence, create, and implement unit-based and nationally based health policy decisions. Cr 3.

M.S. Option Program Courses

CON 502 Pharmacology for M.S. Option Students

This course provides an overview of the principles of pharmacokinetics and pharmacodynamics. The major drug categories are reviewed with emphasis placed on the therapeutic use, action, and adverse reactions of selected prototype drugs. Emphasis is placed on the benefits and risks of drug therapy, thereby preparing the nursing student for safe, therapeutic pharmacologic interventions. First semester of curriculum. Cr 3.

NUR 512 Nursing Arts and Sciences for M.S. Option Students

This course introduces the student to concepts and skills basic to the art and science of nursing. The nursing process is introduced as the problem-solving tool, and is used along with scientific principles in the teaching of foundational nursing therapeutics

used in most practice settings. First semester of curriculum. Cr 3.

NUR 514 Fundamentals of Nursing Labs for M.S. Option Students

Provides an historical and contemporary perspective on the nature and scope of nursing and focuses on theory, scientific principles, and psychomotor skills used to implement the foundational nursing therapeutics that promote, maintain, and restore the health of the client. Concurrent with NUR 212. Cr 3.

NUR 523 Management of the Critically Ill Adult/Older Adult for M.S. Option Students

Students examine evidence-based therapeutic nursing intervention that supports adult and older adult clients experiencing complex health problems. Viewing clients as holistic beings, students study and analyze the skills necessary for delivery of care

to high acuity adult and older adult clients. Concurrent with NUR 526. Cr 3.

NUR 526 Management of the Critically Ill Adult/Older Adult Clinical for M.S. Option Students

Students will intervene therapeutically with adults and older adults experiencing complex health problems. Students practice problem-solving skills and critical thinking as they perform nursing roles in acute care settings. Open to second degree option students only. Concurrent with NUR 523. Cr 4.

Electives

NUR 519 Introduction to Forensic Nursing

This introductory course provides the student with knowledge and nursing strategy to better meet the needs of those affected by forensic-related health care situations and ultimately improve patient outcomes. The history and development of forensic nursing as a scientific subspecialty of nursing is explored. The forensic nursing process; application of the forensic nursing role (i.e. sexual assault management, death investigation, child death review, abuse/neglect, emergency department, etc.); violence and victimology; injury identification and interpretation; evidence recognition, collection, preservation, and documenta-

NUR 530 Mental Health Nursing for M.S.

Option Students

This course examines the theory and practice of psychiatric/mental health nursing. Assessment of clients and intervention strategies are explored. Interdisciplinary aspects of mental health care delivery and current issues in mental health nursing are discussed. First semester of curriculum. Cr 3.

NUR 538 Community Nursing Partnership for M.S. Option Students

This is a combination of Community Nursing Partnership and NUR 332 Nursing Care of the Older Adult in the Community. Cr 2.

tion; and, forensic nursing and the medico / legal interface are also explored. Cr 3.

NUR 682 Sports Medicine Orthopedic Evaluation and Treatment for the Primary Health Care Professional

This course reviews the current clinical literature on the prevention, recognition, assessment, and treatment of sports-related orthopedic conditions that occur in the physically active. A lab component is included that provides practice in common orthopedic screening techniques as part of pre-participation screening as well as practice in evaluation of sports-related injuries and initial interventions. Cr 3.

Certificate of Graduate Study in Nursing Education Courses

NUR 636 Foundations of Nursing Education

This course is the first graduate nursing course in a sequence of three courses designed to prepare the professional nurse for teaching roles. Historical and philosophical underpinnings of education are explored. Emphasis is given to reflection on personal experience, exploration of current issues in nursing education, nursing education theory, and critical analysis of theories of learning and teaching. Cr 3.

NUR 637 Methods of Education in Nursing

This course is the second graduate nursing course in a sequence of three courses designed to prepare the professional nurse for teaching roles. Components of course and curriculum development including assessment of learners' needs, course objectives and outcome measures, content selection and development,

and teaching strategies are examined. Emphasis is on developing expertise as an educator by increasing sensitivity, knowledge, and skill in creating effective teaching programs that reflect an understanding of the learner, context, and content. Cr 3.

NUR 638 Education Practicum and Seminar

This course is the third graduate nursing course in a sequence of three courses designed to prepare the professional nurse for teaching roles. In this course the concept of "praxis" is fully realized. With guidance from the faculty, students will select an educational experience to develop, implement, and evaluate. Experiences may include, however are not limited to, in-service programs, classroom and clinical teaching, and community education programs. Cr 3.

Edmund S. Muskie School of Public Service

Dean: William H. Foster

Associate Deans: Barbara Fraumeni, Dahlia Lynn

Professors: Barringer, Clary, Coburn, Colgan, Fraumeni, Hartley, Kartez, Lapping, MacTaggart, Payne, Thompson; *Associate Professors:* Bolda, Kilbreth, Lambert, LaPlante, Lynn, Richert; *Assistant Professors:* Howard, Lahti, Merrill, Morris, Nalli

The Edmund S. Muskie School of Public Service is a non-partisan education, research, and public service organization dedicated to educating leaders, informing policy and practice, and strengthening civic life. The School combines the expertise of three nationally recognized research institutes with master's programs in community planning and development, health policy and management, and public policy and management, as well as a doctoral program in public policy.

The Muskie School is frequently sought after as a source of knowledge on issues of national, regional, state, and local importance. Faculty and staff now number over 300, and, in 2007, externally funded grant and contract awards totaled over \$36 million. This success is attributable to growing expertise, a practical, innovative approach to issues, and a commitment to spanning traditional boundaries among university, government, and nonprofit organizations.

The School's research and public service activities encompass a range of public policy areas, including health policy, child and family policy, economic and tax policy, public administration, community planning, and the environment. The School conducts research and provides program evaluation, policy analysis, technical assistance, and training. These activities provide faculty and students with real-life experience that expands and informs classroom learning. Many graduate students take advantage of the School's research programs through assistantships and internships.

Muskie School Research Institutes

The Muskie School is home to a research institute with four nationally recognized program areas: children, youth, and families; disability and aging, justice policy, and population health and health policy. The Catherine E. Cutler Institute conducts projects for federal, state, and local agencies as well as private foundations, and is committed to bringing the resources of the University to bear on problems of critical importance to Maine and the nation. Collaborative partnerships with agencies and organizations have served as vehicles for innovative policy and program development.

The School is also home to four national research centers. Community Partnerships for Older Adults is a program funded by the Robert Wood Johnson Foundation that works to improve long-term care and supportive services for older adults. The Maine Rural Health Research Center is one of eight federally funded centers focused on critical issues related to rural health in the United States. The National Child Welfare Resource Center for Organizational Improvement assists all 50 states with advances in public services for children and families. The New England Environmental Finance Center focuses on creative approaches to environmental protection and management, especially with respect to questions of financial support for such activities.

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 and a joint degrees program with the School of Business and Health Policy and Management). 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. 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.

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. Separate admission is required.

The joint degrees program in Business Administration and Health Policy and Management offers a Master of Business Administration (M.B.A.) through the USM School of Business and a Master of Science (M.S.) in Health Policy and Management through the Muskie School of Public Service. The program allows students to earn the M.B.A. and M.S. simultaneously by designating a certain number of crossover courses that satisfy the graduation requirements of each degree. Full time students may thus complete both degrees in three years instead of the four years that would ordinarily be required. Separate admission is required.

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 Admissions. 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. Ph.D. applications are considered in the spring for fall matriculation. Applications are accepted every other year for admission.

Application Deadline

The application deadline for the master's degree programs is February 1 for the fall semester (September), and December 1 for the spring semester (January). Applications received by these deadlines receive priority consideration for scholarships and assistantships. Applications received after the deadline will be considered on a space available basis until July 1.

The application deadline for the Ph.D. program is February 1. (Applications to the Ph.D. program are not being accepted for the 2009-2010 academic year.) 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. GREs are waived for those holding an advanced degree.
3. Official transcripts of all undergraduate and other graduate education.
4. Three letters of recommendation.
5. Application fee (\$50.00).

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 from the semester in which they matriculated in the program.

Full-Time Master's 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 all remaining 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/Nonmatriculated Students

Public service professionals and community residents may, with instructor permission, enroll in Muskie School courses as special students. Because special student status is dependent on space availability, those interested are urged to contact instructors as early as possible. Students may also contact the Muskie School for information on space availability and registration information. Special students may take up to 9 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 program Academic Affairs Committee, students may receive up to 9 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 director 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 appropriate 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.

Capstone Requirements

The capstone project is an integrative research requirement for each of the master's degree programs in the Muskie School. Depending upon the academic program, the substantive foci may differ and the format may vary from an individualized to a group research effort. Regardless of academic program, it is the policy of the Muskie School that all students applying for graduation must have completed and successfully presented a capstone proposal no later than two weeks prior to graduation. Additional program requirements may apply. Students are urged to contact their academic program advisors or capstone coordinators for additional information regarding program specific requirements.

Certificates of graduate study may be taken as additional credits of coursework to augment the master's degree, or as a 11-15 credit certificate program that does not require matriculation in a degree program. Certificate programs include courses selected from the master's programs' curricula.

The following certificates of graduate study are offered by the Muskie School:

- Applied Research and Evaluation Methods
- Child and Family Policy and Management
- Community Planning and Development
- Health Policy and Management
- Nonprofit Management
- Performance Management and Measurement
- Practice Management
- Public Health (15 credits)

Certificate of Graduate Study in Applied Research and Evaluation Methods

The certificate of graduate study in applied research and evaluation methods is designed for students and practitioners who want to learn to use data more effectively on the job and in the community. The certificate emphasizes data acquisition, data analysis and presentation, choosing and applying statistical techniques to real world problems, and practical application of analytical tools. There is no mathematics or statistics prerequisite. Students select four courses (12 credits) including one required course and three from a list of approved courses.

Required Course

PPM 601 Applied Statistics for Public Policy and Management

Select an additional nine credits

AMS 535 Introduction to Epidemiologic Research

AMS 545 Applied Biostatistical Analysis

CPD 622 Introduction to ArcView

CPD 625 Community Planning Analysis and Land Use Modeling

PPM 503C Applied Cost-Benefit Analysis

PPM 503H Graphing Data with Excel

PPM 531 Measuring Performance in the Public and Nonprofit Sectors

PPM 602 Research Design

PPM 603 Applied Research Methods

PPM 603A Applied Survey Methods

Certificates of Graduate Study

PPM	603B	Introduction of Forecasting Using Regression Analysis
PPM	603D	Special Topics: Methods Analysis
PPM	603F	Introduction to Correlation and Regression Methods
PPM	603G	Hands-on Multiple Regression
PPM	604	Evaluation Methods
PPM	606	Survey Methods and Design

Certificate of Graduate Study in Child and Family Policy and Management

Today's multifaceted social problems and an evolving definition of "family" need sound public policies, effective programs, and management strategies/skills to address the needs of children and families. The certificate of advanced study in child and family policy and management is a collaborative effort of the Muskie School's nationally accredited public policy and management master's degree program (PPM) and the School's Institute for Child and Family Policy (ICFP).

The interdisciplinary curriculum gives students an opportunity to gain the knowledge and competencies needed to affect change, guide policy development and implementation, and manage programs serving children and families. The certificate is designed for child and family professionals, children's advocates, teachers, justice system personnel, policy makers, and others wishing for a better understanding of children and family policy and management.

Students select four courses (12 credits) from among the following courses in the graduate programs at the Muskie School. Students are required to take PPM 526 Public Policy and Children, one course from each of the other groups listed below, and a fourth course from either group.

Required Course:

PPM 526 Public Policy and Children

Select 3 credits of management coursework:

PPM 531 Measuring Performance in the Public and Nonprofit Sectors

PPM 535 Managing in the Nonprofit Sector

PPM 615 Foundations for Public Service and Management*

PPM 632 Human Resource Management in Public, Nonprofit, and Health Organizations

PPM 633 Strategic Planning in the Public and Nonprofit Sectors

Select 3 credits of policy coursework:

HPM 672 Politics of Health Policy

PPM 527 Child and Family Policy and Law

PPM 639 Topics in Public Policy and Management

*with faculty permission only

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 planning 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 Introduction to Community Planning

CPD 661 Land Use Control and Zoning

CPD	664	Principles of Town Design
CPD	668	Local Environmental Planning
Group B		
CPD	615	Citizen Involvement and Dispute Resolution in Planning
CPD	652	Introduction to Community Development
CPD	667	Housing and Real Estate
PPM	650	State and Regional Economic Development

Certificate of Graduate Study in Health Policy and Management

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

Students take four courses (11 credits) from the graduate program in health policy and management. Courses are offered at the Muskie School in Portland, with several offered at 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.

The certificate typically consists of the following courses:

HPM	530	Fundamentals of Leadership in Health Care
HPM	570	The American Health Care System
HPM	574	Community Health and Medical Care
HPM	676	Health Care Planning and Marketing

Students may request substitution of *one* of the following courses for any one of the preceding four courses:

HPM	636	Health Information Management
HPM	678	Health Law
HPM	681	Quality and Outcomes of Health Care

Certificate of Graduate Study in Nonprofit Management

The certificate program in nonprofit management provides traditional students, working professionals, and volunteers in the nonprofit sector with the knowledge, managerial skills, and techniques 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.

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.

Students select four courses (12 credits) including one required course and three from a list of approved courses from the graduate program in public policy and management.

Required Course

PPM	535	Managing in the Nonprofit Sector
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Select three of the following courses:

PPM	545	Grant Writing in Public and Nonprofit Organizations
PPM	601	Applied Statistics for Public Policy and Management
PPM	615	Foundations for Public Service and Management*
PPM	632	Human Resource Management in Public, Nonprofit, and Health Organizations
PPM	633	Strategic Planning in the Public and Nonprofit Sectors
PPM	636	Management Information Systems in the Public and Nonprofit Sectors
PPM	639	Topics in Public Policy and Management
PPM	641	Financial Management for Nonprofit Organizations*

*with faculty permission only

Certificate of Graduate Study in Performance Management and Measurement

The certificate program in performance management and measurement is designed to equip managers with the knowledge and skills needed to monitor and report on organizational performance, to present results-oriented information in alternative formats to diverse, nontechnical audiences, and to contribute to improving performance in public organizations. The certificate in performance management and measurement is a collaborative effort of the Muskie School's accredited public policy and management master's degree program (PPM) and a research center known nationally for leading edge evaluation and technical assistance, the Institute for Public Sector Innovation. Students select four courses (12 credits) including one required course and three from a list of approved courses.

Required Core Course

PPM	531	Measuring Performance in the Public and Nonprofit Sectors
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Select an additional 9 credits

PPM	519	Communication Skills for Public Managers
PPM	535	Managing in the Nonprofit Sector
PPM	601	Applied Statistics for Public Policy and Management
PPM	615	Foundations for Public Service and Management*
PPM	632	Human Resource Management in Public, Nonprofit, and Health Organizations
PPM	633	Strategic Planning in Public and Nonprofit Sectors
PPM	636	Management Information Systems in the Public and Nonprofit Sectors
PPM	641	Financial Management for Nonprofit Organizations*

*with faculty permission only

Certificate of Graduate Study in Practice Management

The Certificate of Graduate Study in Practice Management provides comprehensive training in strategic and operational management of physician and other professional health care practices. Upon completion of this certificate program, students will (i) understand the broad health care market and environment, (ii) acquire management and strategic skills necessary to provide leadership to a professional practice, and (iii) acquire sufficient knowledge of administrative processes to effectively manage a staff in day to day activities that advance short-term financial and operational objectives of a professional practice.

The practice management certificate is awarded upon successful completion of five courses (14 credit hours) from the health policy and management curriculum.

HPM	530	Fundamentals of Leadership in Health Care
HPM	570	The American Healthcare System
PPM	632	Human Resource Management in Public, Nonprofit, and Health Organizations
HPM	634	Health Care Finance I
HPM	683	Topics in Practice Management

Certificate of Graduate Study in Public Health

The Certificate of Graduate Study in Public Health provides individuals from diverse backgrounds with a solid foundation of knowledge and skills in public health, health policy, community health, and epidemiology as well as offering students an opportunity to pursue interests in evaluation, planning, or quality.

The public health certificate can serve to augment a student's previous academic training and facilitate advancement in a variety of private health and service organizations as well as public agencies. Alternatively, the certificate can serve as a strong introduction and preview to the field of public health prior to committing to a formal master's program.

The public health certificate is awarded on successful completion of five courses (15 credit hours) from the Health Policy and Management curriculum. If successfully completed, certificate program courses will fulfill degree requirements for students who apply for, and are admitted to, a master's degree program. Courses are held at the Muskie School on the USM Portland campus. Some courses are offered at other campuses in the University of Maine System via the University's distance education network.

The following three courses are required for the certificate:

- HPM 570 The American Healthcare System
- HPM 574 Community Health and Medical Care
- HPM 682 Social and Behavioral Foundations for Public Health

One of the following courses is also required:

- AMS 535 Introduction to Epidemiology Research
- AMS 545 Applied Biostatistics Analysis

The fifth course is an elective selected from the following:

- HPM 676 Health Care Planning and Marketing
- HPM 681 Quality and Outcomes of Health Care
- PPM 524 Gender, Race, Politics, and Public Policy
- PPM 604 Evaluations Methods

And either

- AMS 535 Introduction to Epidemiology Research

or

- AMS 545 Applied Biostatistics Analysis

Master of Community Planning and Development

The master's degree in community planning and development degree provides an opportunity for those with an interest in shaping the environment and economy of cities and towns to acquire the skills and knowledge needed to be effective members of the planning and economic/community 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 and New England. 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 (GIS). 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. 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 in community planning and development requires 48 credits. A required core of 30 credits (including capstone and field experience) combines basic skills for planning (such as geographic information systems and conflict resolution), with basic courses in planning as theory and practice, economics, and methods of analysis.

Core Curriculum

CPD 601	Planning Theory and History	3
CPD 602	Sustainable Communities	3
CPD 603	Planning Workshop	3
CPD 605	Elements of Plan Making	3
CPD 615	Citizen Involvement and Dispute Resolution in Planning	3
CPD 622	Introduction to Arc/GIS	3
CPD 696	Field Experience	0
CPD 699	Capstone	3
PPM 601	Applied Statistics for Public Policy and Management	3
PPM 611	Economics and Public Policy	3
PPM 640	Public Finance and Budgeting	3
Total Core Credits		30

Research Methods

Select three credits from the following courses:		3
CPD 607	Analytic Methods for Planning and Development	
CPD 625	Community Planning Analysis and Land Use Modeling	
GEO 608	GIS Applications I	
PPM 603	Applied Research Methods	
PPM 606	Survey Methods and Design	

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.

Land Use and Environment Track

Select 3 credits			
CPD 660	Introduction to Community Planning		3
CPD 661	Land Use Control and Zoning		3
CPD 664	Principles of Town Design		3
Select 3 credits			
CPD 652	Introduction to Community Development		3
PPM 650	State and Regional Economic Development		3
Select 9 credits			
ANE 638	Reading the Cultural Landscape		3
ANE 641	Environment and Culture		3
CPD 622	Introduction to ArcView		3
CPD 625	Community Planning Analysis and Land Use Modeling		1
CPD 665	Transportation Planning		3
CPD 667	Housing and Real Estate		3
CPD 668	Local Environmental Planning		3
CPD 669	Historic Preservation Through Growth Management		3
CPD 670	Growth Management Workshop		3
LAW 635	Land Use and Growth Policy		3
PPM 519	Communication Skills for Public Managers		3
PPM 603	Applied Research Methods		3
PPM 623	Risk and Public Policy		3
PPM 633	Strategic Planning in the Public and Nonprofit Sectors		3
PPM 637	Intergovernmental Relations		3

Community and Economic Development Track

Required Course			
CPD 652	Introduction to Community Development		3
Select 3 credits			
CPD 660	Introduction to Community Planning		3
CPD 661	Land Use Control and Zoning		3
Select 9 credits			
CPD 665	Transportation Planning		3
CPD 667	Housing and Real Estate		3
CPD 669	Historic Preservation Through Growth Management		3
MBA 649	Special Topics in Management: Introduction to System Dynamics		3
PPM 519	Communication Skills for Public Managers		3
PPM 551	Public Policy Dispute Resolution		3
PPM 633	Strategic Planning in the Public and Nonprofit Sectors		3
PPM 650	State and Regional Economic Development		3
PPM 651	Government-Business Relations		3
PPM 652	Community Economic Development		3
PPM 666	Environmental Policy		3
PPM 623	Risk and Public Policy		3

Health Planning Track

Required course			
HPM 670	The American Health Care System		3
Select 3 credits			
CPD 652	Introduction to Community Development		3
CPD 660	Introduction to Community Planning		3
Select 9 credits			
CPD 622	Introduction to ArcView		1-3
HPM 634	Health Care Finance I		3
HPM 672	Politics of Health Policy		3
HPM 674	Community Health and Medical Care		3
HPM 676	Health Care Planning and Marketing		3
PPM 519	Communication Skills for Public Managers		3
PPM 633	Strategic Planning in the Public and Nonprofit Sectors		3

Available in all tracks			
GEO	605	Remote Sensing	3
GEO	608	GIS Applications I	3
GEO	618	GIS Applications II	3
GEO	658	Research Applications in GIS	3
PPM	513	Law and Public Policy	3
PPM	610	Foundations of Public Policy and Management	3

***Law and Community
Planning Joint Degree***

Select 3 credits			
CPD	660	Introduction to Community Planning	3
CPD	661	Land Use Control and Zoning	3
Select 12 credits*			
LAW	633	Natural Resources Law	3
LAW	637	Environmental Law	3
LAW	658	Marine Resources Law	3
LAW	684	Alternative Dispute Resolution	2
LAW	689	Environmental Law Clinic	3

*Or other University of Maine School of Law courses approved by the CPD chair.

Cross-Listed Courses

For cross-listed course descriptions, please see the respective departmental listings.

American and New England Studies

ANE	612	Documenting America: Ethnography and Oral History
ANE	638	Reading the Cultural Landscape
ANE	641	Environment and Culture

School of Law

(Contact the Law School directly for law course descriptions.)

LAW	616	State and Local Government	3
LAW	618	Health Care Law	3
LAW	633	Natural Resources Law	3
LAW	635	Advanced Land Use	3
LAW	637	Environmental Law	3
LAW	658	Marine Resources Law	3
LAW	684	Alternative Dispute Resolution	2
LAW	687	Coastal Zone Law	3
LAW	689	Environmental Law Clinic	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

CPD 602 is designed for students who have previously been exposed to planning history and theory (CPD 601 or its equivalent). Its purpose is to introduce the student to one current approach to community planning, known as sustainable communities, which embraces a holistic approach to community development as a goal to be pursued in the complex interplay among natural, economic, and social systems. The course aims to establish command of the basic concepts, principles, policies, and obstacles associated with sustainable development, sustainable communities, and, as a practical example, smart growth. Prerequisite: CPD 601 or permission of the instructor. 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 605 Elements of Plan Making

The course focuses on the foundations of planning primarily at the regional, local, and neighborhood levels. It covers the legal and political foundations of plan making, including an introduction to planning and zoning law; the architecture of plans; and themes around the integration of planning elements, such as transportation/land use and urban form/classical zoning. Cr 3.

CPD 607A Analytic Methods for Planning and Development: Fiscal Impact Analysis

A five-week course covering the theory and techniques used to conduct fiscal impact analyses for state and local governments. Issues to be covered include the impact of land-use activity on community demographics, government revenues and expenditures, demand for services, and state funding formulae. Cr 1.

CPD 615 Citizen Involvement and Dispute Resolution in Planning

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 622 Introduction to Arc/GIS

An introduction to the ArcMap program, a Windows-based Geographic Information Systems

program. Covers beginning and intermediate uses of the program. Cr 1-3.

CPD 625 Community Planning Analysis and Land Use Modeling

Introduction to estimating and projecting the demand for land, housing, and public space for long-range land use planning; developing future growth scenarios at the town and regional scale; and using GIS tools such as buildout calculators and planning support systems to organize and visualize these analyses. Prerequisites: GIS course and CPD 660 or CPD 661 or instructor permission. Cr 3.

CPD 652 Introduction to Community Development

An investigation of the nature and role of community development activities as a strategy to increase the assets a community has at its disposal to solve problems. Examines both local government and not-for-profit sector organizations for community development with a focus on public/private partnerships and community development corporations as major vehicles for contemporary community development efforts, as well as the continuing role of the federal Community Development Block Grant program. Cr 3.

CPD 660 Introduction to Community 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 Town Design

This course addresses a range of community design and site design issues at the local level. It requires a student to become familiar with literature on town design, conduct field observations and measurements, perform limited land use ordinance research, communicate design observations and ideas in writing, through drawing, by using photographs, newspaper research, as well as in class discussions. Cr 3.

CPD 665 Transportation Planning

The basic elements of transportation planning and engineering and the relationship between trans-

portation 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, social, and historical factors affecting the development of the housing marketplace and the interplay between these factors and land use planning. Cr 3.

CPD 668 Local Environmental Planning

An in-depth look at several contemporary environmental protection issues and planning responses pursued by local governments and their community-based partners. Selected scientific and technical aspects of environmental protection are introduced for laypersons, with a focus on landscape ecology and water quality issues and their other applications to biodiversity, watersheds, and growth management. Cr 3.

CPD 669 Historic Preservation through Growth Management

This course examines the policy foundations for preservation of historic landmarks, buildings, districts, and other cultural 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 670 Growth Management Workshop

Growth Management refers to the legal and political arrangements through which state, local, and

regional governments share authority and responsibilities for shaping overall patterns of development. This course provides background on the history, principles, and track record of growth management in the United States. Through a semester-long workshop format, students will have hands-on opportunities to learn how state and local governments in Maine interact under Maine's Growth Management Program. Prerequisites: CPD 660 and CPD 661 or CPD 664. Cr 3.

CPD 695 Independent Study

Cr 3.

CPD 696 Field Experience

Internship in a planning or development agency. Students without significant professional experience in the planning or development field will complete a field experience. Students should consult their advisor or the program chair early in their career to assess the need for a field experience and identify suitable options for filling this requirement. Students with sufficient professional experience (generally six months or more in a responsible position in a planning or development agency) may have this requirement waived. Cr 0.

CPD 699 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.

Master of Science in Health Policy and Management

The master of science in health policy and management program offers a competency-based curriculum designed to prepare students for a rapidly changing health policy and management environment that is characterized by increasing emphasis on outpatient care and population health, a constantly changing reimbursement and regulatory environment, and performance-based management and decision making.

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 program has been accredited by the Commission on Accreditation of Healthcare Management Education.

Program Requirements

Forty-seven credits of coursework are required to complete the master's in health policy and management. Coursework is characterized by both individual and group assignments designed to build skills and to integrate learning across the curriculum. In addition to course content, writing and communication skills are developed 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. Students are required to declare a track in either management or policy. The declaration establishes the additional content courses that the student is required to successfully complete.

The Curriculum

At the center of the curriculum is a required Core course of study providing a foundation of knowledge and skills for effective performance in health policy and management. For either track, the following courses are required. Students are advised to take these courses as early as possible in order to inform their selection of a track.

Core			<i>Credits</i>
HPM	570	The American Health Care System	3
HPM	574	Community Health and Medical Care	3
HPM	530	Fundamentals of Leadership in Health Care	2
HPM	676	Health Care Planning and Marketing	3
HPM	678	Health Law	3
HPM	681	Quality and Outcomes of Health Care	3
PPM	611	Economic Public Policy and Management with Health module	<u>3</u>
Total:			20

For those students electing the policy track, the following additional core courses are required:

Policy Track			
AMS	545	Applied Biostatistical Analysis	3
HPM	672	The Politics of Health Policy	<u>3</u>
Total:			6

In order to reach the 47 credits required for the degree, students who have declared a policy track will satisfy 16 additional credits among the elective courses that are available to them.

For those students electing the management track, the following additional core courses are required:

Management Track			
HPM	634	Health Care Finance I	2
HPM	636	Health Information Management	3
HPM	680	Health Resource Seminar	1
HPM	684	Health Care Finance II	2
MBA	504	Probability and Statistics for Business Decision Making	3

PPM 632	Human Resource Management in Public, Nonprofit, and Health Organizations	3
		Total: 14

In order to reach the 47 credits required for the degree, students who have declared a management track will satisfy 8 additional credits among the elective courses that are available to them.

Electives

To satisfy elective credits, students may select from the above courses which are not required for a student's selected track. Students may also select courses from the following list. Finally, students, with advisor approval, may substitute other graduate-level courses offered at USM to satisfy elective requirements.

AMS 535	Introduction to Epidemiologic Research
HPM 679	Research Seminar in Health Care Policy
HPM 682	Social and Behavioral Foundations for Public Health
HPM 683	Topics in Practice Management
PPM 524	Gender, Race, Politics, and Public Policy
PPM 526	Public Policy and Children
PPM 602	Research Design
PPM 603	Applied Research Methods
PPM 604	Evaluation Methods
PPM 630	Organizational Dynamics

Other courses:

Field Experience	2
Capstone	3
Total	47

Field Experience

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 options is available to students who have earned at least 24 credits in the HPM program.

Capstone Project

The capstone project is undertaken by students working independently 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.

Concentration in Public Health

The concentration in public health further emphasizes public health competencies in epidemiology, biostatistics, community health, evaluation, social health as well as management, all within a public policy context. In addition to the core courses, the concentration specifies the completion of AMS 535, PPM 604, and HPM 682. Students are also required to complete their field experience and capstone project in an area of public health.

Concentration in Practice Management

The concentration in practice management further emphasizes those skills related to the management of physician and other professional health care practices. The concentration specifies the completion of the management track, plus HPM 683. Students are also required to complete their field experience and capstone project in an area of practice management.

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 growing national research agenda.

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 the Institute's faculty and staff, and internship and field experiences. HPM students will also have the opportunity to access the Institute's extensive databases for capstone and other projects.

AMS 535 Introduction to Epidemiologic Research

This course is 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, 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, hypothesis testing, 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.

HPM 530 Fundamentals of Leadership in Health Care

This course will focus students on understanding, learning, and ultimately internalizing what they can do to become more effective leaders. This course will include theories and types of leadership as well as an understanding and development of leadership skills around motivation, power, delegation, communication, teaming, conflict resolution, diversity, and performance evaluation. The course will also discuss change management at both the strategic and operational level of an organization. Case studies will be used extensively to analyze and demonstrate the application of theories to the management of health care organizations and systems. Cr 2.

HPM 570 The American Healthcare System

Introduces students to the organization, financing, and management of the American health care system and the dynamic changes that are affecting health care organizations as a result of market-based and policy forces. The course develops an understanding of the key elements of health care systems and organizations and the relationship among consumers and purchasers, providers, and the regulatory and policy environment in which the system functions. Students will explore political, policy, and market forces affecting the health care system and will examine the implications of these trends for health care organizations, federal, and state-level policy and health system reform efforts. Cr 3.

HPM 574 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; and public health and vulnerable populations. Current models of community-based health needs assessment using primary and secondary data are used by students to assess the needs of vulnerable populations in Maine. Cr 3.

HPM 634 Health Care Finance I

This course will begin with a review of analytical techniques for examining and understanding the financial characteristics and performance of health care organizations. An understanding of the revenue cycle, cost and pricing structures, and budgeting in different health care organizations as well as the management of these critical financial activities will be addressed. Prerequisites: an introductory, college-level accounting course, or permission of instructor, and knowledge of Excel. Cr 2.

HPM 636 Health Information Management

This course addresses the uses of health information by managers. With an emphasis on the strategic management that depends on timely, accurate information, the course inventories the numerous systems (patient record, finance, scheduling, laboratory, pharmacy, etc.) within the health care system that generate such information, with current examples from southern Maine organizations. The course also addresses data security, the procurement of information systems, and the use of health information technology for process improvement. Cr 3.

HPM 672 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 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 678 Health Law

This course explores legal issues that permeate the health care system, addressing: (i) the sources of applicable law affecting health care; (ii) the tensions

between conflicting goals, expectations, ethical obligations, and rights and duties of various participants in the system (such as patients, providers, payors, purchasers, and different levels of government); and (iii) specific legal issues, with an emphasis on governmental regulation of health care delivery and payment. The course examines the development and implementation of the law affecting the health care delivery system, understood as the result of advocacy in various forums by parties with differing interests. Topics covered include: the regulatory licensing, certification, and credentialing, as well as indirect regulation through requirements for reimbursement and tax-exemption; client/patient rights issues such as consent, confidentiality, and health care decision making; government oversight of competition, including antitrust enforcement, insurance regulation, and other mechanisms; issues in public health, and governmental strategies to promote access to health care. 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. Prerequisite: HPM 670 or permission of instructor. Cr 3.

HPM 680 Human Resource Seminar

This course will be arranged around a case study that focuses on human resource issues and challenges that are a consequence of changing environmental, regulatory or structural factors that impact a health care organization. Students will be required to analyze and develop human resource solutions and strategies that address the case. Examples include, but are not limited to, the human resource issues associated with a merger or acquisition, the management of a workforce reduction initiative or the development and implementation of an outsourcing strategy. Prerequisite: PPM 632 or permission of instructor. Cr 1.

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. Prerequisites: HPM 670 and AMS 545 or permission of instructor. Cr 3.

HPM 682 Social and Behavioral Foundations for Public Health

This course provides an overview of the evolution of theory, frameworks, and approaches to population-based social and behavioral health services as well as practical applications of current approaches to program design, implementation, and evaluation.

HPM 683 Topics in Practice Management

This course will examine topics related to human resource, financial, marketing, and legal issues that are critical to the successful strategic and operational management of a professional practice. These topics include, but are not limited to: scheduling, compensation, pricing, coding, billing, payables, collections, risk management, HIPPA, reporting, quality management, and informational technology. Students will be required to analyze and make recommendations on a significant management issue that has been identified by an operational practice. Cr 3.

HPM 684 Health Care Finance II

Second in the finance sequence, this course addresses financial investment analysis, capital budgeting and decision-making, sources of capital for health care organizations, and financial business planning. The course will also address the financial dimension associated with special topics around managed care and prospective reimbursement, mergers, and acquisitions, pay for performance, taxes, and real estate, across different health care organizations. Prerequisite: HPM 634. Cr 2.

HPM 695 Independent Study Cr 3.

HPM 696 Field Experience Cr 2.

HPM 699 Capstone Project Cr 3.

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. and was reaccredited by NASPAA in 2002.

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.

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.

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 39 credits is required to earn the master's degree in public policy and management. A core curriculum of 18 credits assures an understanding of basic principles of political science, management, economics, 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 six 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 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, management, research design, and public finance and budgeting.

			<i>Credits</i>
PPM	601	Applied Statistics for Public Policy and Management	3
PPM	602	Research Design	3
PPM	610	Foundations of Public Policy and Management	3
PPM	611	Economics and Public Policy	3

PPM 615	Foundations for Public Service and Management	3
PPM 640	Public Finance and Budgeting	3

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 or nine 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 Applied Research Methods: Modules B-L

PPM 604 Evaluation Methods

PPM 622 Applied Policy Analysis

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

CPD 622 Introduction to ArcView

PPM 511 Economic Business Data and Measurement

PPM 513 Law and Public Policy

PPM 519 Communication Skills for Public Managers

PPM 524 Gender, Race, Politics, and Public Policy

PPM 526 Public Policy and Children

PPM 551 Public Policy Dispute Resolution

PPM 623 Risk and Public Policy

PPM 633 Strategic Planning in the Public and Nonprofit Sectors

PPM 642 Seminar in Financial Analysis

PPM 650 State and Regional Economic Development

PPM 666 Environmental Policy

Public Management Track

Organizational Management

Required Course

PPM 630 Organizational Dynamics

Select an additional six credits

PPM 513 Law and Public Policy

PPM 604 Evaluation Methods

PPM 632 Human Resource Management in Public, Nonprofit, and Health Organizations

PPM 633 Strategic Planning in the Public and Nonprofit Sectors

PPM 636 Management Information Systems in the Public and Nonprofit Sectors

PPM 641 Financial Management for Nonprofit Organizations

Select an additional three credits

PPM 519 Communication Skills for Public Managers

PPM 535 Managing in the Nonprofit Sector

PPM 545 Grant Writing and Financial Management in the Nonprofit Organization

PPM 622 Applied Policy Analysis

PPM 637 Intergovernmental Relations

PPM 639 Topics in Public Policy and Management

Financial Management

Required Course

PPM 640 Public Budgeting and Finance

Select an additional nine credits

CPD 656 Principles of Development Finance

HPM 634 Health Care Finance I (2 credits)

LAW 616 State and Local Government

PPM 545 Grant Writing and Financial Management in the Nonprofit Organization

PPM 603 Applied Research Methods

PPM 613 Law and Public Policy

PPM 630	Organizational Dynamics
PPM 634	Managing the American City
PPM 641	Financial Management for Nonprofit Organizations
PPM 642	Public Financing and Budgeting II
PPM 649	Applied Research in Finance

Beyond the core and track requirements, students take six credits of electives of their choice which may include further courses from the tracks, the beginnings of a certificate, or other combination of courses.

Field Experience

A field experience is required for pre-service 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. PPM students may also complete their PPM field experience requirement within the Muskie School Research Institutes as long as the assignment is related to professional-level experience. 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. All PPM students are required to complete and submit a Field Experience Waiver Form by the end of their first semester of enrollment as a matriculated student in the PPM program. This form will indicate whether or not they intend to petition to waive or complete the field experience requirement. 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 educational and applied learning from all program courses, and should be taken in the final year of study, just prior to graduation. Students are required to obtain faculty approval and signature to register for PPM 699 Capstone (whether individual or group experience).

PPM 503C Applied Cost-Benefit Analysis

Provides an opportunity to learn how to conduct cost-benefit analysis. Students will work individually and in teams to analyze the quantitative and qualitative issues involved in measuring and forecasting costs and benefits and in preparing analysis for decision makers. The emphasis will be on learning the practical issues involved in conducting cost-benefit analysis. It is assumed that students will be familiar with the underlying economic theory, either from an economics course or from the text. Prerequisite: familiarity with spreadsheet use. The course will use Microsoft Excel for the analytical exercises. Students may use another spreadsheet or statistics package, but instruction will focus on Excel. Cr 1.

PPM 503H Graphing Data with Excel

Provides students with the skills to use graphs effectively to illustrate data and communicate findings. Students will use Excel charting features to prepare and refine a variety of chart types, evaluate the technical aspects and communication impact of graphs and visual transformation of data. Prerequisite: Excel basics. Cr 1.

PPM 511 Economic Business Data and Measurement

Introduces students to economic data commonly used in public policy and to methodologies used in constructing data. Includes work with an underlying data set to frame the importance of understanding data and to make the course relevant to contemporary policy issues. Cr 3.

PPM 513 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 519 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 524 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 526 Public Policy and Children

Explores policies affecting the well-being of children including early education and care, home visiting, child welfare, juvenile justice, child health care, and welfare reform. Discussion within each category of child social policy will examine the history of the policy, recent legislation, interesting aspects of the policy, and possible future developments. Assignments involve the development of practical skills including producing fact sheets, testimony, and policy analysis. Cr 3.

PPM 527 Child and Family Policy and Law

This course examines the legal issues affecting children and families and the policy implications of these issues. The course will give students a basic understanding of the law (statutory and case law) as it relates to children and families and how policy decisions are made and analyzed within that context. The course will emphasize the laws, cases, and policies from the viewpoint of children and families and will examine how policymakers can affect children and families both positively and negatively. Cr 3.

PPM 531 Measuring Performance in the Public and Nonprofit Sectors

This course is an introduction to performance measurement and other related activities such as strategic planning and benchmarking. Students who complete the course will be prepared to develop basic performance indicators for public and nonprofit agencies in a variety of policy and management arenas. Specific attention is given to reviewing a variety of performance indicator systems currently in use or under development in Maine and elsewhere. Readings, interactive lectures, guided Internet research, class work, and graded assignments will be designed to help students understand how to do performance measurement and will provide students with practice conceptualizing and developing measures. An emphasis will be placed on "hands-on" learning so that students gain confidence in using measurement techniques and learn how to apply practical measurement strategies in real world settings. Cr 3.

PPM 535 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 545 Grant Writing in Public and Nonprofit Organizations

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 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. Prerequisite: Excel basics. 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 603/503 Applied Research Methods

Topical modules in statistics, research methods, evaluation, and computing. Cr 1.

PPM 603B Applied Research Methods: Introduction of Forecasting Using Regression Analysis

Introduces students to forecasting using regression analysis. Students will work individually and in teams to conduct a series of forecasting projects using autoregressive, multiple regression, and mixed models. The emphasis will be on learning the theoretical and practical applications of regression analysis and

introducing the problems of forecasting. Prerequisite: familiarity with spreadsheet use. The course will use Microsoft Excel for the analytical exercises. Students may use another spreadsheet or statistics package, but instruction will focus on Excel. Cr 1.

PPM 603D Special Topics: Methods Analysis

Selected topics in methods analysis determined from time to time. Cr 1.

PPM 603F Introduction to Correlation and Regression Methods

Provides an introduction to explanatory data modeling using correlation analysis and linear regression. The course may be taken to obtain an initial introduction to these topics or as a refresher for students with some previous exposure to correlation and regression analysis. The course emphasizes application to real world policy, planning, and management issues. Prerequisite: PPM 601 or equivalent introduction to statistics. Cr 1.

PPM 603G Hands-on Multiple Regression

A computer lab-based course that extends and refines the student’s understanding of basic regression analysis. Using data supplied by the instructor, students build models to practice regression methods, to see how violations of regression assumptions affect model parameters, and to learn to diagnose problems, evaluate impact, and take remedial action where indicated. Prerequisite: PPM 603F or a prior regression course. Cr 1.

PPM 603I Computer Applications and Data Analysis

Introduces the student to a selected quantitative or qualitative software package for analyzing research. Emphasizes acquiring competency using the software with real world research problems and data.

PPM 603J Interviewing Methods: Individual and Focus Group Settings

This course introduces students to the appropriate use of this data gathering procedure as part of a mixed-methods or qualitative only research design. Students will be trained in the basics of one-to-one interviewing and how to facilitate a focus group interview. Prerequisite: PPM 602 or instructor permission.

PPM 603K Qualitative Data Analysis

This course introduces students to the processes of coding and developing themes from non-numeric data with the use of a software program. Much of the work of the course is hands-on data analysis and the development of written propositions towards theory building or other type of analytic findings. Prerequisite: PPM 602 or instructor permission.

PPM 603L Non-Parametric Statistics

This module is an introduction to the application of non-parametric tests in applied research, program evaluation. The course objectives are to identify

when non-parametric statistics should be applied and to introduce students to a select number of tests. Prerequisite: PPM 602 or instructor permission.

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 PPM 602. Cr 3.

PPM 605 Advanced Research 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, PPM 602, and PPM 603 or permission of the instructor. Cr 3.

PPM 606 Survey Methods and Design

Introduces students to the practice of survey research. Students will work individually and in teams to design survey samples, develop survey instruments, and analyze survey data. The emphasis will be on learning the theoretical and practical applications of survey research in planning and policy settings. Prerequisite: familiarity with spreadsheet use. The course will use Microsoft Excel for the analytical exercises. Students may use another spreadsheet or statistics packages, but instruction will focus on Excel. Cr 3.

PPM 610 Foundations of Public Policy and Management

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 615 Foundations for Public Service and Management

Considers temporary perspectives, issues, and strategies regarding the management of public sector organizations, the importance of public service and provides a basic understanding of public management theory. Topics covered include a wide range of management concerns and prepares public and nonprofit managers to be leaders of public and nonprofit institutions who can enhance the capability of these institutions. The course presents a realistic view of effective management and leadership in government and nonprofit organizations and the ways in which these organizations work and interact. 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 PPM 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 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 631 Performance Measurement in Public Organizations

This course is an introduction to performance measurement and its application in government and nonprofit settings. Students who complete the course will be prepared to develop basic performance indicators for public and nonprofit agencies in a variety of policy and management arenas. Specific attention is given to reviewing a variety of performance indicator systems currently in use or under development in Maine and elsewhere. Cr 3.

PPM 632 Human Resource Management in Public, Nonprofit, and Health Organizations

This course examines human resource management in the public, nonprofit, and health sectors and introduces basic conceptual frameworks, techniques of analysis, and considers contemporary issues in human resource management. Topics include the historical development of employment systems, the functions associated with personnel management (workforce planning, acquisition, recruitment, retention, selection, performance appraisals, compensation, training, employee motivation, and collective bargaining). Contemporary human resource management issues considered include strategic human resource management, contracting and outsourcing, downsizing and workforce reductions, HR metrics, knowledge management, and work-life balance issues. 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 636 Management Information Systems in the Public and Nonprofit Sectors

Designed to give those who work in the public and nonprofit sectors the knowledge and skills they need to understand the underlying principles and theories of management information systems and the roles which they play in public and nonprofit organizations. Students will participate in the design, implementation, and evaluation of information systems in their organizations, and become conversant with key issues and problems in contemporary public policy and law relative to information policy and telecommunications. Cr 3.

PPM 637 Intergovernmental Relations

This course analyzes the revolutionary changes taking place in traditional relationships among the federal, state, and local levels of government. Topics include: how traditional intergovernmental approaches are changing and what those changes mean for the future of government; what innovative

policies and methods federal, state, and local governments are using to make policy and deliver services in an era of declining resources; and how governments are using mandates to enforce policy decisions at other levels of government. Special attention will be given to Maine state and local governments as well as national trends and perspectives. Cr 3.

PPM 639 Topics in Public Policy and Management

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

PPM 640 Public Finance and Budgeting

Equips students with the knowledge, vocabulary, skills, and practical tools needed to participate skillfully and ethically in public finance decision-making and to assume a leadership role in guiding dialogue about resource acquisition and allocation choices. Teaches participants to assess context, to identify and analyze budgetary opportunities and constraints facing state and local decisionmakers, to generate and evaluate alternatives using frameworks from public finance, and to project impact of choices, including identifying the potential for unintended consequences. State and local governments are the focus of the course, with the federal budget considered only from the perspective of its impacts on the economies and fiscal options of lower governmental levels. Prerequisite: PPM 601 or similar introductory statistics course. Cr 3.

PPM 641 Financial Management for Nonprofit Organizations

Examines the management of finances in nonprofit organizations from the perspective of managers. Topics include an introduction to accounting for non-accountants, financial statement analysis, working with a board, internal resource analysis, cash budgeting, fiscal administration, risk management, and measuring financial health. Cr 3.

PPM 642 Public Finance and Budgeting II

The course focuses on the financial analysis of government, including the measurement and evaluation of government financial condition. Specific topics include an introduction to accounting for non-accountants, G.A.A.P. standards for government, preparation and analysis of government financial statements, cash budgeting, financial ratio analysis and the analysis of economic and financial condition. Prerequisite: PPM 601 or equivalent introductory statistics course. 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 con-

cepts, economic impact analysis, and economic modeling. Students work extensively with economic data for Maine and other states. 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 695 Independent Study

An independent study is a self-directed learning experience designed to develop a student's ability to plan, organize, research, and report as well as develop specific skills beyond the classroom activity. An independent study must be related to the student's academic program and is approved and monitored by a program faculty member. Independent studies may take the form of either a reading or a special project. Students are required to obtain faculty approval and signature to register for 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 0.

PPM 699A Capstone Seminar (Group)

The capstone seminar is designed to provide the PPM student with the opportunity to work as a member of a group on a capstone project under faculty supervision. The precise form of the capstone project is determined by the faculty member and may focus on a specific public policy or management issue. The project may take many forms, including a piece of policy research, the development of a strategic plan for a public, nonprofit agency, an organizational or human resource analysis, or a financial study, among others. The seminar meets on a regular basis throughout the semester. Students are required to obtain faculty approval and signature to register for PPM 699A Capstone. Cr 3.

PPM 699B Capstone Project (Individual)

The capstone project is undertaken by students working independently or in a team, under faculty supervision. The capstone project requires the student to integrate knowledge and skills acquired in the PPM program, and to demonstrate competence in their application to a specific topic in public policy or management. The project may take many forms, including a piece of policy research, the development of a strategic plan for a public nonprofit agency, 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. Students are required to obtain faculty approval and signature to register for PPM 699B Capstone. Cr 3.

Ph.D. Program in Public Policy

Program Objectives

The Ph.D. in public policy is designed for those students who are interested in questions surrounding the origins, development, implementation, and analysis of public policy decisions in government and related institutions. The program prepares students to function within a variety of fields while focusing their dissertation research on a specific topic. Students undertake the Ph.D. in order to develop answers to questions about the ways in which policy is formulated and implemented, and to make their own original contribution to the knowledge of these public questions. In pursuing the Ph.D. program, students acquire skills as independent researchers, the ability to interpret and assess the research of others, and the ability to communicate their knowledge to a wide variety of audiences. Those who successfully complete the degree are equipped to bring their knowledge to senior policy and management positions in government, nonprofit agencies, school districts, research organizations, consulting firms, and in college and university faculty and administrative appointments.

Admission

The Ph.D. program in public policy admits students to study *every other year*, beginning in 2003. Students begin study in the fall and are expected to complete the policy core in three semesters. (*Applications are not being accepted for the 2009-2010 academic year.*)

Admission to the program is highly selective. A small number of applicants will be chosen for admission based on evidence of their capability to undertake studies at the doctoral level, their demonstrated readiness for doctoral studies, the match between the applicant's proposed field of advanced study and faculty research interests, and programmatic capacity. The following sections describe the admission criteria and the application review process. Persons interested in applying to the program are strongly encouraged to talk with the Ph.D. program chair and Muskie School faculty prior to submitting their applications.

Criteria for Admission

The program has the following admission criteria:

1. The applicant's capability to undertake doctoral studies
2. The applicant's demonstrated readiness for doctoral studies
3. Programmatic capacity and the match between applicant and faculty research interests

To be admitted, applicants must demonstrate outstanding potential to be successful in the course work required for doctoral studies and to conduct doctoral-level research appropriate to their policy field of study. Applicants are expected to be outstanding in academic qualifications, standardized examinations, and professional experience. Applicants must also submit a statement of research interests outlining their professional goals and areas of doctoral study. Each applicant's record is reviewed as a whole; performance which is not outstanding on a single criterion may be compensated for by superior performance on the remaining criteria.

1. The applicant's capability to undertake doctoral studies: Capability to undertake doctoral studies is assessed by review of the applicant's previous academic record, scores on the Graduate Record Examination (GRE), recommendations, and professional experience.

Previous academic record: Applicants must have either a master's degree or complete all requirements for a master's degree by the spring of the year in which their application is reviewed. Master's degrees and/or graduate study in public policy, or related fields such as public administration, planning, political science, or economics are preferred, but degrees in other fields may be presented for evaluation to the extent to which the master's degree program or graduate study prepares the students for doctoral studies in public policy. The applicant's overall academic record should demonstrate a superior level of accomplishment. Successful applicants will have maintained a grade point average (GPA) of 3.3 or higher on a 4.0 scale, or the equivalent in post-baccalaureate studies. An applicant's previous academic record is assessed based on grade point averages, fields of study, analysis of transcripts, and recommendations.

Scores on the Graduate Record Examination (GRE): Applicants must submit official scores for the GRE. Scores must be for tests taken within five years of application deadlines. (The Educational Testing Service, which administers the GRE, does not retain scores after five (5) years from date of testing.) Applicants who present scores of less than 550 on the quantitative portion, less than 550 on the verbal portion, and/or less than 4 on the analytic writing portion of the post-October 2002 GRE, or who present scores of less than 550 on each portion of the pre-October 2002 GRE, should present records of exceptional academic accomplishment, but two are preferred.

Recommendations: Three letters of recommendation are required. Applicants must submit at least one recommendation from a person familiar with their academic, scholarly, and/or research interests and performance.

2. The applicant's readiness for doctoral studies: *Professional experience in the proposed field of study:* Applicants must have a minimum of two years of professional-level work experience prior to commencing doctoral study, preferably in the proposed field of study. Normally, professional experience does not include university-sponsored work experience while an undergraduate or graduate student.

Applicants are asked to submit a "statement of research interests" with their University application materials. This statement should address the applicant's motivation and preparedness for doctoral study in public policy and how doctoral studies at the Muskie School of Public Service fit with the student's previous academic record, previous professional experience, and professional goals in light of the mission of the Ph.D. program. The statement will play an important role in assisting the Admissions Committee to determine the applicant's readiness for doctoral studies and the potential match between the applicant's areas of interests and the expertise of the faculty.

In their statement, applicants are asked to respond to the following points:

1. Describe your professional goals and how doctoral study in public policy at the Muskie School will help you achieve them.
2. Describe your professional and/or research experience and how they help prepare you for doctoral study in public policy.
3. In light of your professional goals and the mission of the Ph.D. program, please describe your current research interests and/or the research you would like to pursue as part of doctoral studies in public policy at the Muskie School. This portion of the statement may take a number of forms, including identifying specific questions of public policy that you wish to assess or previous works in a field that have inspired your interests in doctoral studies in public policy. Be as clear and specific as possible about your research interests.

The suggested length for the statement is a maximum of 5-7 pages double spaced, minimum 10 point font.

3. Programmatic capacity and the match between applicant and faculty research interests: There must be a clear match between an applicant's research interests and the capacity of the program to make available faculty who share such interests and who can mentor the doctoral student through his or her research. Applicants with the potential to undertake doctoral study may not be accepted into the program if the match between the applicant's interests and those of program faculty cannot be assured.

The Muskie School faculty has a broad range of expertise for guiding doctoral studies, which is defined generally by the fields in which the School offers master's degrees. In addition, the School can draw on faculty resources from other schools and colleges of the University of Southern Maine. Applicants who seek to undertake doctoral studies involving fields outside of the Muskie School are strongly encouraged to contact the chair of the doctoral program and faculty in other units of the University prior to submitting applications.

Program capacity also includes the number of students in the program in relation to the number of faculty who can serve as Doctoral Research Committee chairs.

Application Process

To be considered complete, an application must include:

1. A completed application form.
2. Three letters of recommendation. Applicants must submit at least one recommendation from a person familiar with their academic, scholarly, and/or research interests and performance.

3. Official transcript(s) of all previous undergraduate and graduate work.
4. Official scores from the Graduate Record Examination (GRE); scores must be for tests taken within five years of the application deadline.
5. If the applicant's native language is not English and the applicant has not completed a degree program in an accredited North American institution, a score on the Test of English as a Foreign Language (TOEFL) must be submitted. The TOEFL score must be 550 or higher on the paper-based test or 213 or higher on the computer-based test.
6. If departmental financial aid is requested, a statement requesting financial aid and describing the need for aid.
7. A nonrefundable application fee, the amount of which is determined by the University.

Application forms for admission to the program are obtained from and submitted to the USM Office of Graduate Admissions.

Admissions cycle: Applications are accepted for study beginning in the fall semester only and are reviewed every two years, beginning in 2003.

The deadline for a completed application to the program is February 1. For an application to be considered complete, all elements listed in 1-7 above, if applicable, must be received by the USM Office of Graduate Admissions by February 1. Only completed applications will be reviewed for admissions. In unusual cases, such as international mail delays, a time extension may be granted for incomplete applications.

Program of Study

Students pursue their Ph.D. studies in four stages:

1. *Core courses in the field of public policy* (18 credit hours). Knowledge and competencies are assessed in the preliminary examination.
2. *Core courses in research methods* (15 credit hours). Knowledge and competencies are assessed in the research methods examination.
3. *Specialized study* (12 credit hours). Courses preparing the student to conduct doctoral research directed toward context, practice, and performance in support of public policy. Knowledge and competencies assessed by successful defense of the dissertation proposal. At this point students are admitted to doctoral candidacy.
4. *Doctoral Research* (12 credit hours minimum). Knowledge and competencies assessed by successful defense of the completed research dissertation.

1. The Policy Core: 18 credits

At the conclusion of this stage of doctoral study, students should demonstrate in the preliminary examination their:

- Understanding of the basic intellectual frameworks and perspectives that are used to analyze and influence policy development and implementation (economics, political science, organizational behavior, sociology, etc.)
- Ability to cross disciplinary boundaries.
- Ability to accurately and appropriately critically evaluate and to apply the theories, perspectives and overall contributions of key thinkers and analysts in the field of public policy.
- Understanding of the tensions between values and knowledge/information utilization in policy development and implementation.
- Ability to analyze complex public policy issues.
- Ability to frame a policy issue and relevant research questions.

Courses in the Policy Core expose students to an overview of the major questions that scholars have asked about public policy and public organizations as well as the substance and process of theory building in the field. Emphasis is on such questions as what is public policy, who makes it, and how is it made, the role of organizations in the shaping of how policy is made and its consequences, and formal exploration of key economic concepts that tend to drive the study of public policy. Heavy emphasis in these courses should be on frequent student "production" in discussions or written assignments.

The six courses in the Policy Core will be offered two each in the fall, spring, and fall semesters of the two-year cycle. All students admitted to the program will be required to take at minimum these Policy Core courses. They will then be expected

to take the preliminary examination after the third (fall) semester in their second year. Full-time students may take courses in the Research Core during these first three semesters.

The Policy Core courses are:

PPM	701	Intellectual Foundations of Public Policy
PPM	702	Seminar in Public Policy
PPM	703	Economic Foundations for Public Policy Research (Prerequisite: PPM 611 or equivalent)
PPM	704	Seminar in Public Organization and Management
PPM	705	Seminar in Policy Analysis
PPM	706	Seminar in Policy Research

At the conclusion of the Policy Core, students sit for the preliminary examination (see the Examinations section of this chapter).

2. *The Research Core: 15 credits*

Courses in the Research Core are designed to provide doctoral students with the study design and the quantitative and qualitative methods used in the policy sciences. Students also will have the opportunity to begin to develop specific skills in those methods they expect to use in their own doctoral research. The goals of the research courses are to provide:

- Fundamental understanding of basic research methods and designs and the appropriate application of these to policy research—quantitative, qualitative, and mixed.
- Ability to apply research methods appropriately and interpret their results.
- Awareness of both the strengths and weaknesses of various methodologies and strategies for making appropriate design choices for different policy settings and research purposes.
- Ability to communicate clearly about complex questions of research methodology and complex issues of public policy.

There are five Research Core courses.

PPM	710	Conduct of Inquiry
PPM	711	Seminar in Quantitative Methods (Prerequisite: PPM 601, HPM 545 or equivalent)
PPM	712	Advanced Quantitative Methods (Multivariate Methods) (Prerequisite: PPM 711)
PPM	713	Qualitative Design and Methods for Policy Research

and

Research Methods Defined by the Student's Committee This course (or courses if one-credit modules) will provide the student with advanced training in research techniques specific to the student's planned area of dissertation research.

With the approval of their Advising Committee, a student may request a course substitution for PPM 712 Advanced Quantitative Methods. A course substitution may be made only for graduate courses in research methodology that are appropriate to the student's proposed research area. The student must specify the content of the course to be substituted, the faculty who will teach the course, and provide a statement of the competencies in the research methodology that they expect to obtain. The faculty member who teaches the course that will be substituted must also agree to participate in the research examination for the student through preparation of questions and grading of the examination. Requests for a substitution must be made in accordance with the schedule for course waivers.

The Research Methods Examination provides the opportunity for the candidate to demonstrate attainment of the knowledge and competencies covered in the Research Core. All students who have completed PPM 710-713 are expected to take the examination at the first opportunity following completion of the research courses.

3. *Specialized Study: 12 credits*

At the conclusion of this stage of doctoral study, students should demonstrate in their dissertation proposal their:

- Ability to formulate researchable questions and develop research strategies to address the planned study topic.

- Fundamental understanding of the policy context in which their study is relevant.
- Familiarity with the literature in their chosen substantive area, including an ability within this literature to critically assess ideas in the literature.
- Appropriate grounding in the specific body of knowledge relevant to their planned study including extending their familiarity with theory building and content from the core to a specific area of study.
- Ability to apply research skills appropriate to the chosen area of research including familiarity with the major research methodologies of relevance to their field.

In this stage, each student's study focus becomes individualized. The student defines the precise means of achieving these objectives in consultation with their committee. The student and committee chair are jointly responsible for preparing a plan of study for this period and for working with the committee to approve the plan. Within the 12 specialization credits, one three-credit course will be taken in common with all Ph.D. students.

PPM 720 Dissertation Pro-Seminar This seminar provides an intensive review of the process of preparing to undertake a major research project such as the dissertation. It will cover such topics as literature reviews, evaluation of research methodologies, and preparation of research proposals.

Other elements of the student's individualized plan consisting of nine credits of electives may include:

- Regular courses taken at the Muskie School or, with permission of the student's chair, at other institutions.
- Individualized readings courses, preferably with members of the student's committees.
- Advanced research courses directly appropriate to the student's planned doctoral research. An illustrative array of 1-3-credit courses could include: health services research, epidemiology, logistic regression, cost benefit analysis, program evaluation, forecasting, economic impact analysis.
- Mini-Research projects. These should generally be no more than three credits in length and should focus in particular on data development and analysis preparatory to the dissertation.

Course Scheduling Courses in the Policy Core will be scheduled over three semesters at a rate of two courses per semester during the first two academic years in which a new class of students is admitted. *All students are expected to complete the policy core over these three semesters.* Courses in the Research Core will be offered at least once every two years. The dissertation pro-seminar will be offered at least once every academic year.

Course Waivers A student may request a waiver from a required course in the Ph.D. program based on prior study at the graduate level. The following process will be followed in the case of waiver requests:

1. The student submits a request, with appropriate supporting documentation (e.g. course syllabi, descriptions), to the chair of his/her Advising Committee. The chair forwards the request with or without endorsement to the chair of the Academic Affairs Committee, with a copy to the chair of the Ph.D. program.
2. The Academic Affairs Committee decides whether to grant the waiver based on the documentation submitted by the student, the advice of the chair of the student's committee, and, upon request of the committee, the advice of faculty who normally teach the course for which a waiver is requested.
3. The decision of the Academic Affairs Committee will be communicated in writing to the student, the chair of the student's advising committee, the chair of the Ph.D. program, and the Office of Student Affairs.

An approved course waiver waives the credit requirement; however, the student remains responsible for demonstrating knowledge of the material covered in the waived courses at the time of their preliminary or research examination.

A student may not waive PPM 720 Dissertation Pro-Seminar, and may not waive the required number of dissertation credits. Course waivers for more than 12 credits of policy or research core courses will not normally be granted.

4. *The Doctoral Dissertation*

The dissertation is a comprehensive, independent research project that demonstrates the candidate's ability to undertake empirical analysis appropriate to the question they are addressing. It should contribute to knowledge in the field of public policy and provide new information to the theory and empirical knowledge of the subject they are studying and the potential contribution of the research. Finally, the dissertation research should be worthy of presentation at national conferences and publication in policy-relevant journals. The dissertation is orally defended to the committee and the scholarly community at large.

Dissertation Proposal The topic, focus, and quality of the student's doctoral research should be directed toward a significant public policy issue and provide the opportunity to demonstrate that the student can develop a theoretically interesting and researchable question. The dissertation proposal should define the scope of the student's doctoral research, address specific hypotheses, propositions, or research questions to be examined, discuss data collection and analysis procedures, and provide a timeline for the research project. The general form of the dissertation proposal should be essentially the same as a research proposal sent to a funding organization for peer review.

Human Subject Research Review If a student's dissertation proposal involves human subject research as defined by the University of Southern Maine Institutional Review Board (IRB), the student must obtain IRB approval for the proposed research prior to a dissertation proposal receiving final approval by the Doctoral Research Committee. Students are advised to contact the IRB or to visit their Web site (www.usm.maine.edu/orc/irb) if they will be conducting human subject research.

Admission to Candidacy for the Doctoral Degree A student is considered admitted to candidacy for the Ph.D. upon completion of all required course credits and examinations, completion of an oral defense of their dissertation proposal before their Doctoral Research Committee with IRB approval, if required, as outlined above, and submission of a written version of the proposal signed by the committee chair and committee members, to the program chair, the Muskie School Office of Student Affairs, and USM's Office of Graduate Studies.

Completed Dissertation Final oral examination of the dissertation is intended to judge the quality of the dissertation, the amount of original work being presented, and the ability of the candidate to defend the approach, methods, and conclusions of the dissertation. The committee must approve the dissertation by majority vote. The committee may make approval conditional upon certain changes in the dissertation being made by the candidate. For editorial changes, the committee may refer final approval to the chair of the committee. If substantive changes are required for approval, committee members are expected to withhold their signatures of approval until the required changes have been made.

If a majority of the committee does not approve the dissertation, the candidate shall receive a written explanation of the committee's review. One re-examination, possibly after additional revisions of the dissertation, may be requested.

The candidate's dissertation is considered complete when it has been successfully defended orally before the student's Doctoral Research Committee and a copy of the dissertation, bearing the signatures of the committee members on the cover page, is filed with the Office of Graduate Studies.

Upon approval of the dissertation by their Doctoral Research Committee, a copy of the dissertation meeting applicable standards of formatting set forth by University Microfilms Incorporated (UMI) if an arrangement has been made with UMI, must be submitted to the Office of Graduate Studies. There is a \$100 dissertation review fee plus a dissertation microfilming fee (set by UMI) which must be paid prior to receipt of the degree.

Students who anticipate participating in the University's graduation ceremony must submit a completed and correctly formatted dissertation to the Office of Graduate Studies no later than one month prior to the date of graduation to allow adequate time for review and revisions.

Credit Requirements and Time Limits A candidate must enroll in a minimum of 12 credits for work on the dissertation proposal and dissertation research in PPM 799 or GRS 701. The dissertation must be completed within five years after candidacy status is attained. A student working on the dissertation who wishes to maintain eligibility for financial aid and loan deferment, as well as to maintain visa compliance, eligibility for

health insurance, and access to University services, and who is not enrolled in 6 credits of coursework, must register for GRS 701 (1 credit). Other students may be enrolled for fewer than 6 credits. If those students have completed their coursework, including 12 credits between GRS 701 and PPM 799, they should register for GRS 701 or GRS 702 (one credit) or have an approved leave of absence.

Examinations

The examinations provide an opportunity for the student to demonstrate the competencies and materials of the policy and research cores as defined above.

The Preliminary Examination The preliminary examination provides the opportunity for the candidate to demonstrate attainment of the knowledge and competencies addressed in the Policy Core. A student should be able to respond to questions that cross subjects, theories, and fields of research with coherent arguments, well grounded in the literature that they have studied.

The preliminary examination is offered in the winter only. All students who have completed the Policy Core are expected to take the examination at the first opportunity following completion of the policy courses.

An Examining Committee is appointed by the program chair for each examination (see below). The Examining Committee will provide students who will take the examination with a statement of the format and procedure for the examination no later than October 15 for examinations following the fall semester, and no later than March 15 for examinations following the spring semester.

The Research Examination The Research Examination will be offered annually in the spring, and may be offered at other times as determined by the program chair.

Examinations are written and graded by the Examining Committee. The Examining Committee for the research examination will generally be comprised of faculty who have taught the Policy and Research Core courses.

Students will be notified by the Examining Committee of the format and process of the examination on the same schedule as the preliminary examination for regularly scheduled examinations. For non-regularly scheduled exams, the Examining Committee will provide students with a statement of format and process not less than 30 days before the exam.

Failure of Examinations A student who fails either the preliminary or research examination will be withdrawn from the program. A student who fails one section of either examination may be allowed to retake that part of the examination within a time specified by the Examining Committee appointed for that examination, generally no more than one month following the grading of the first examination.

Examination Prerequisites A student must have completed and have no grades of I, I*, or INC except as noted below in any of the policy core courses at the time they take their preliminary examination, or in research core courses PPM 710-713 at the time they take their research examination. A student with grades of I, I*, or INC in the relevant courses will be permitted to take the examination only with the approval of the program chair on the basis that resolution of the incompletes is imminent at the time of the examination. A student who cannot resolve the incompletes may be suspended from taking courses until such time as the incompletes are resolved and the examination passed.

The Statement of Research Interests and Doctoral Studies Plan

Doctoral Studies Plan All doctoral students must submit a completed doctoral program of studies form to their advisor in the first semester of doctoral study. The form is available in the Student Handbook and from the Muskie School Office of Student Affairs. Students are encouraged to use the form throughout their program as a planning mechanism. It can be updated as needed.

Statement of Research Interests Students who have not begun preparation of a dissertation proposal shall submit an annual statement of research interests to their Advising Committee. The statement will identify areas of public policy that the student proposes to investigate in courses, research projects, and readings ultimately leading to the dissertation. The statement serves as a means of self-assessment and reflection by the student and the basis for guidance by the advising committee.

Review of the statement of research interests normally will take place in the spring semester, or at such time as the chair of the Advising Committee and student agree.

Appeals

Students wishing to appeal a grade in a course may do so using the appeals procedure specified in the University of Southern Maine Graduate Catalog.

Students wishing to appeal a decision to withdraw them from the program as the result of a failed preliminary or research examination may lodge an appeal with the chair of the program. An appeal may only be made on grounds of procedural defect and must be made in writing within three months of the student being notified of the examination failure. The program chair shall refer the appeal to the Academic Affairs Committee for a recommendation. The recommendation to uphold or deny the appeal shall be transmitted to the program chair who will make a recommendation to the dean. The dean will make a final decision based on the program chair's recommendation.

Students whose appeals of a withdrawal decision are being heard during an academic semester may remain enrolled while their appeals are being heard. If the appeal is denied, their withdrawal will be effective at the end of the semester in which the appeal is decided.

Academic Affairs Committee members who served on the Examining Committee for the student making the appeal will not review the student's appeal. If the program chair served on the Examining Committee, the dean shall serve in place of the program chair for purposes of this process.

Academic Integrity

All students must adhere strictly to the University of Southern Maine policies regarding academic integrity. For more information on these policies, the possible penalties for violation, and appeals, see the USM Graduate Catalog.

Withdrawal from the Program

A student may be withdrawn from the program by the Ph.D. program director if he/she has not made satisfactory progress toward fulfilling degree requirements, failed to maintain a cumulative grade point average of 3.3 (B+) for three or more semesters, has failed the preliminary or the research examination (*see Examinations information earlier in this section*), or has not completed the dissertation within 5 years after attaining candidacy status or within 10 years of matriculating.

Leaves of Absence

A student who anticipates that they will not register for any courses or for GRS 601 or GRS 701, or for dissertation credits in PPM 799 during one or more consecutive semesters must request a leave of absence from the program. The leave of absence must be endorsed by the chair of the student's Advising or Doctoral Research Committees. The endorsed leave request must be filed with the Office of Student Affairs no later than September 30 for a leave beginning in the fall semester or January 31 for leaves beginning in the spring semester.

Leaves of absence will not normally be approved for periods exceeding two years.

PPM 701 Intellectual Foundations of Public Policy

Public policy concerns itself fundamentally with the creation, articulation, implementation, and evaluation of “ideas” and “theories” applied to problems and issues within the public sphere or in the civic realm. Perhaps the most revolutionary among these ideas is the very notion of “democracy” itself and the culture of democracy that it fosters and that is created by it. Broadly defined, democracy implies self-government built upon majority rule with protection of the minority, the elaboration and protection of liberties and freedoms, respect for legal entitlements, the guarantee of free discussion and discourse, and the uncensored distribution of news and fair comment. Democracy has an “intrinsic value” in that civic participation and freedom of human life expands and enriches the lives of its citizens. Democracy has an important “instrumental value” in enhancing the hearing that people get in expressing and supporting claims to political attention, and by holding governments responsible and accountable. Democracy also has a crucial “constructive value” in that its practice helps citizens to learn from one another and to form values and priorities along with an understanding of needs, rights, and duties. Though ancient in origin, the 20th century and our current era have witnessed both the universalization and globalization of the democratic idea. No longer do we say that certain communities are either “fit for democracy” or not. The emphasis now has become one in which it is acknowledged that all communities become “fit through democracy.” Understanding the history and meaning of democracy is integral to a mature, robust, and supple understanding of public policy and management in the American context. The programs of the Muskie School are about the practice of public policymaking and the management of public institutions and processes within a democratic society and a culture of democracy. This course seeks to address the problems inherent in the practice of democracy as it relates to public policy and management. Cr 3.

PPM 702 Seminar in Public Policy

This course provides students in the doctoral program with an overview of the major topics in the literature on public policy. The emphasis is on different theoretical approaches to public policy as these manifest themselves in both actual policy research and in the study of policy. The emphasis is on providing students with a background in the public policy literature that will be useful in framing research questions for the dissertation and which will provide the foundation for the public policy sections of the doctoral exams. Cr 3.

PPM 703 Economic Foundations for Public Policy Research

This course provides the economic foundations for analyzing public policy issues. The focus is on microeconomic theory and applications, including economic behavior at the consumer and producer level, the nature of markets, market structure, and

economic efficiency concepts. Emphasis is placed on the underlying assumptions, postulate of rationality, and optimizing behavior for individual agents, efficiency of optimizing behavior, efficiency of markets, and compensation criteria. Applications focus on income maintenance programs, in-kind welfare transfers, education production function, markets, and the incidence and burden of taxation. Students determine which economic model is appropriate for specific policy issues and learn how to conceptualize policy issues using these models and interpret outcomes of such models. Prerequisite: PPM 611 or equivalent. Cr 3.

PPM 704 Seminar in Public Organization and Management

This course provides an overview of organization theory, research on behavior within organizational settings, various perspectives on the nature of public agencies (political, cultural, and economic). Various schools of organizational theory are addressed, from early classical theory through recent formulations based on chaos theory. The literature on organizational behavior is examined, especially as it pertains to policy leadership and implementation. The course is designed to accomplish three goals: (1) understanding of organizational theory and behavior and how it applies to governmental organizations; (2) awareness of the various theoretical constructs which can be applied in conceptualizing and analyzing agencies within the public sector; and (3) development of basic research skills in the analysis of organizations, including problem formulation, application of conceptual frameworks, writing of literature reviews and oral presentation of information. Cr 3.

PPM 705 Seminar in Policy Analysis

This course provides an overview of the process, role, and methods of policy analysis. The role of policy analysis in the policy development process is explored, along with various ways in which the processes of policy development and policy analysis coincide and diverge. Students are introduced to major methods of policy analysis, including historical analysis, quantitative and qualitative research, simulation and forecasting, and operations research and their application to policy analysis. Cr 3.

PPM 706 Seminar in Policy Research

Examines issues, frameworks, and approaches in policy research. Specific consideration is given the social and behavioral sciences and their application in basic and applied research within the broad area of public policy. The course begins with a general consideration of the scientific method, the philosophical questions it raises (e.g. the fact-value dichotomy) and how it is employed in inquiry, from paradigm to theory through empirical verification. Ethical issues of social research (e.g. confidentiality and research review boards) are explored as well as the role that politics plays in the research act. Issues of operationalization are considered, especially alternative concepts of validity and

scale and index construction and data quality. The process of designing studies (true, quasi, and non-experimental) is a primary topic along with applications in cross-sectional and longitudinal research. The quantitative versus qualitative research debate is reviewed as well as the topics of grounded theory and triangulation (and associated multi-method strategies). Basic methodological approaches are described including sampling (probability and non-probability), experiments, survey research, qualitative field inquiry (simple observation, participant observation, semi-structured interviewing, focus groups), unobtrusive data (content analysis, statistical records) and program evaluation. Assignments focus on the conduct of literature reviews, interpretation of empirical research, and the design of actual policy studies. Cr 3.

PPM 710 Conduct of Inquiry

This course examines the history, philosophies, and methods of science as it is used in the behavioral and social sciences and, more specifically, within policy and organizational research. Theories of science will be described, analyzed, and assessed. Case studies wherein various forms of “social knowledge” have been utilized to shape public policy will be evaluated. A review of more recent thinking on these issues (e.g., casual inference, naturalistic inquiry, chaos theory, hermeneutics, etc.) within the context of the social sciences is also a topic of the course. Finally, some current ideas and debates in policy analysis, program evaluation, and other areas of applied research in public policy and management are presented. Cr 3.

PPM 711 Seminar in Quantitative Methods

This course provides the statistical foundations upon which to conduct public policy research. It prepares students to be able to communicate and become proficient in statistical research methods. Material covered will deal with descriptive statistics, probability and probability concepts, randomness and fundamental sampling concepts, statistical inference and hypothesis tests, correlation concepts, and simple linear regression analysis. Prerequisites: PPM 601, HPM 545 or their equivalents; and a computer laboratory. Cr 3.

PPM 712 Advanced Quantitative Methods (Multivariate Methods)

This second requirement in statistical research methods will expose the student to standard and advanced treatment of multivariate statistical techniques found in modern day statistical research and econometrics used in public policy analysis. The emphasis of the course will include both application and theory to enable the student to develop proficiency in applications in a variety of research settings, and develop a strong foundation in applied quantitative research at the professional level. This course also will include a laboratory component. *Under certain circumstances, a student may request that another course be taken in place of this course. Refer to the Program of Study section in this chapter.* Prerequisite: PPM 711. Cr 3.

PPM 713 Qualitative Design and Methods for Policy Research

The primary goal of this course is to develop an understanding of the breadth of perspectives in qualitative research with particular emphasis on the unique issues involved in the design and conduct of research studies in public policy. Attention will be given to single and multi-site case study designs as well as the design and implementation of field work. Primary emphasis will be given to providing opportunities for students to develop their skills in the collection and analysis of qualitative data. Cr 3.

PPM 720 Dissertation Pro-Seminar

This seminar provides an intensive review of the process of preparing to undertake a major research project such as the dissertation. It will cover such topics as literature reviews, evaluation of research methodologies, and preparation of research proposals. Cr 3.

PPM 730 Directed Doctoral Studies

Independent readings or other studies undertaken under faculty supervision. Cr 3.

PPM 740 Supervised Research

Applied policy research project conducted by doctoral student under faculty supervision. Cr 3.

PPM 799 Dissertation

Prerequisite: candidacy status.
Cr Variable up to 12 credits.

GRS 601 Graduate Studies

A student who has completed the 12 required credits for dissertation research must register for GRS 601 to maintain enrollment in the Ph.D. program up to the time of dissertation completion. Cr 0.

GRS 701 Dissertation Completion

This course is primarily intended for students who have completed course work for the Ph.D. but have not completed their dissertation. It permits doctoral degree candidates to retain eligibility for financial aid including University-funded fellowships, scholarships, graduate assistantships, and loan deferment, as well as to maintain visa compliance, eligibility for health insurance, and access to University services including USM Libraries and Internet. Prerequisite requirements: passed qualifying exams, registered for less than 6 graduate credits (including PPM 799), adequate progress certified by advisor and program chair, and approval from the Office of Graduate Studies. Cr 1.

GRS 702 Dissertation Continuation

A student who has passed his or her qualifying exams and is registered for less than 1 credit can fulfill the continuous enrollment requirement of the University by registering for GRS 702. *See the complete course description in the “Continuous Enrollment and Residency” section of the Academic Policies chapter.* Cr 1.