

Plymouth State University

Graduate Academic Catalog 2013–2014

College of Graduate Studies

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Catalog Limitations

This catalog describes policies, programs, and procedures of Plymouth State University that are in effect at the time of its preparation, June 2013. Plymouth State University reserves the right to change any of its rules and regulations at any time, including those relating to admission, instruction, and graduation. The right to withdraw curricula and specific courses, alter course content, change the calendar, and impose or increase tuition or other fees similarly is reserved. All changes are effective at such times as the proper authorities determine and may apply not only to prospective students, but also to those who are already enrolled in the University. The provisions of the catalog are not, and should not be construed to be, a contract between students and the University.

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President's Message



I would like to extend my warmest welcome to you as either a new or continuing graduate student at Plymouth State University.

This is an exciting time for PSU. Our options in the College of Graduate Studies are growing. Whether you want to enjoy a course for personal or professional enrichment, enroll in one of our many exciting master's programs, or pursue a Certificate of Advanced Graduate Studies or Doctor of Education degree, we have options for you.

As a graduate student at PSU, you will work closely with faculty members who are dedicated mentors and researchers with a tradition of excellence, in locations on and off campus as well as online. Please know that all of us at Plymouth State University are committed to offering you a first-rate graduate experience and to helping you achieve your personal and professional goals.

All my best wishes,

Sara Jayne Steen President

The University

Plymouth State University has a long tradition of meeting the evolving educational needs of the people of New Hampshire and New England. Established in 1871 as Plymouth Normal School, the institution became Plymouth Teacher's College in 1939, Plymouth State College in 1963, and Plymouth State University in 2003. A founding member of the University System of New Hampshire, and accredited by the New England Association of Schools and Colleges (NEASC), Plymouth State now serves New Hampshire and the New England region as a comprehensive institution of higher education.

PSU has an enrollment of approximately 4,800 undergraduate and 2,500 graduate students. The University confers BA, BFA, and BS degrees as well as master's degrees, Certificates of Advanced Graduate Studies, and the Doctor of Education.

The University consists of the following colleges:

The College of Arts and Sciences upholds the rich values of the liberal studies tradition by providing breadth and depth of education crossing the humanities, social sciences, fine arts, mathematics, and sciences. The college consists of the following departments: Art, Atmospheric Science and Chemistry, Biological Sciences, Communication and Media Studies, Computer Science, English, Environmental Science and Policy, History and Philosophy, Languages and Linguistics, Mathematics, Music, Theatre, and Dance, Psychology, and Social Science.

The College of Business Administration provides professional programs for students seeking careers within business and non-profit organizations. The college offers programs at both the undergraduate and graduate degree levels, including the Master of Business Administration with certificates in eight business fields.

The College of Education, Health, and Human Services is dedicated to developing the knowledge, skills, and dispositions needed to effectively work with children, adults, families, and organizations across a variety of settings including educational, health, physical education, human services, and law enforcement. The college includes the Departments of Early Childhood Studies, Elementary Education and Childhood Studies,



Educational Leadership, Learning and Curriculum, Criminal Justice, Health and Human Performance, Nursing, Social Work, and Counselor Education and School Psychology. At the graduate level, the College offers a variety of programs, including MA, MEd, MS, Post-masters Certificates of Advanced Graduate Studies (CAGS), and an EdD, as well as educator and specialist certification programs.

In addition to outstanding programs in education, business, humanities, arts, and the natural and social sciences, the University houses centers and institutes for meteorology, the environment, New Hampshire studies, and rural partnerships, all of which are hallmark outreach programs. Professional outreach activities and graduate courses are offered at several satellite locations throughout the state, and articulation agreements with other campuses of the University System and the Community College System of New Hampshire offer a variety of program and transfer opportunities. The University also contributes directly to the ongoing academic and cultural life of the region by providing a variety of continuing education programs, concerts and theater performances, art exhibits, and the athletic events of 20 varsity sports.

PSU's attractive residential campus of wide greens, tree-lined walkways and traditional brick buildings with an array of towers is located in the White Mountains and Lakes Region of New Hampshire, a pristine rural setting of great natural beauty and multiple outdoor recreational opportunities within easy access of the New England region. The 170-acre campus incorporates modern facilities such as the Lamson Library and Learning Commons; the Boyd Science Center; Langdon Woods, a LEED

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certified residence hall; and PSU's Welcome Center and Ice Arena.

The College of Graduate Studies full-time faculty members teach in various graduate programs, and more than a third of them serve as graduate program coordinators. In addition, the College of Graduate Studies seeks out qualified experts to serve as adjunct instructors in programs that complement the offerings of full-time faculty. Currently, several hundred graduate faculty members, the majority of whom hold doctoral or other terminal degrees in their fields, teach in the various graduate programs at PSU. Each graduate student is assigned a faculty member as an advisor who assists the student in planning coursework to meet personal and professional goals.

ACCREDITATION

Plymouth State University is accredited by the New England Association of Schools and Colleges (NEASC). This accrediting body is a nationally recognized, non-governmental organization whose mission is to evaluate the quality and integrity of educational programs. Institutions earning this accreditation are judged to be providing educational experiences that can be transferred to any other accredited college or university in the nation.

The professional education programs at PSU are accredited by the National Council for Accreditation of Teacher Education (NCATE), an organization recognized by the U.S. Department of Education and the Council for Higher Education Accreditation to accredit programs for the preparation of teachers and other school personnel. This accreditation applies to initial teacher preparation and advanced educator preparation programs. Plymouth State University is also approved by the New Hampshire Board of Education. Program-specific accreditations include the following:

- Athletic Training program accredited by the Commission on Accreditation of Athletic Training Education (CAATE)
- Health Education program accredited by the Society for Public Health Education (SOPHE) and the American Association for Health Education (AAHE)
- Master of Business Administration and undergraduate degrees in business accredited by the Accreditation Council for Business Schools and Programs (ACBSP)
- Master of Education in School Counseling and Master of Science in Mental Health Counseling, accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP)
- Social Work program accredited by the Council on Social Work Education (CSWE).

MISSION

As a regional comprehensive university, PSU serves New Hampshire and New England by providing well-educated graduates, by offering ongoing opportunities for graduate education and professional development, and by extending to communities partnership opportunities for cultural enrichment and economic development. In each of these roles, PSU has a special commitment of service to the North Country and the Lakes Region of New Hampshire.

The College of Graduate Studies strives to prepare exceptional practitioners in a variety of disciplines through excellence in academic programs. Its commitment extends beyond New England to the rest of the nation and the world. Professionals develop the knowledge, skills, and dispositions they need to initiate change and provide visionary leadership within a framework that promotes individual dignity, respects diversity, and seeks distributive justice.

The purpose of graduate study is to:

- promote intellectual curiosity;
- investigate advanced subject matter in depth and breadth;
- master scholarly techniques and developmental research;
- cultivate an atmosphere of intellectual discipline that facilitates faculty and student scholarship and research;
- contribute to the knowledge base of professionals and improve society's understanding of the systems in which people, organizations, and communities thrive.

The College of Graduate Studies contributes directly to ongoing academic, cultural, and community life by providing a variety of professional development programs, theater collaboratives, art exhibitions, symposia, and service-based partnerships. It also provides multiple opportunities and support for research-based initiatives.

VALUES

The University motto, *Ut prosim* (That I may serve), underscores the values upon which Plymouth State University's mission is built. The College of Graduate Studies has a strong commitment to adult learners. This commitment is demonstrated by responding to students' needs; helping students meet their personal and professional goals; and collaborating in the development and delivery of flexible and accessible academic programs.

The College of Graduate Studies is dedicated to providing a learning environment that supports development of the mind, body, and spirit. By providing a solid foundation for continuous learning, students are encouraged to grow and serve as scholars and professionals. The College of Graduate Studies recognizes the contributions of faculty and students to disciplinary and interdisciplinary best practices.

Learners are encouraged to be active agents in their graduate programs through dynamic collaboration with our diverse faculty of scholars and practitioners. The graduate programs foster inquiry and critical thinking through a commitment to the following hallmarks:

- Leadership and advocacy
- Scholarship and action/application
- Reflection and innovation

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- Professionalism and service
- · Global awareness and social responsibility

Plymouth State is dedicated to providing learning experiences that promote understanding and respect for all people, and constructive discourse that includes a range of perspectives. The University strives to create an environment that embraces diversity, equity, and inclusiveness for the entire community.

VISION

The University's educational philosophy is based on the concepts of learner-centered teaching, experiential learning, and academic excellence. The PSU education features a complementary relationship between liberal arts and professional studies, between academic and personal development, between service and individual growth, and between the University campus and the larger community. Programs of study are designed to engage students and prepare them for gratifying and productive careers.

The College of Graduate Studies programs provide professional competency and leadership as well as the advancement of knowledge in specialized areas. In graduate programs, experiential learning in the world of career and professional practice such as internships, field experiences, service learning, study abroad programs, and other practical learning partnerships allow students to become directly involved in testing and applying academic theories and ongoing personal and professional development.

HISTORY

Founded in 1871 as a teacher training college, PSU has expanded to 170 acres and 47 buildings. Preserving the brick-and-ivy look of its New England small college heritage while integrating state-of-the-art technology and facilities, PSU combines an attractive, contemporary campus design and a dynamic educational environment.

Plymouth State is the only public graduate university located north of Concord, New Hampshire's capital city. However, the University is accessible to students throughout the state not only because of its central location, but because it offers classroom courses in many locations throughout New Hampshire as well as online courses.

The University has provided high-quality graduate education for students in education since 1948 and in business since 1974.

The Certificate of Advanced Graduate Studies in Educational Leadership program was first offered in 1997, the Master of Arts in Teaching degree was approved in 2004, and in 2005, the Master of Science degree program began. The Doctor of Education in Learning, Leadership, and Community was introduced in 2009. Two Master of Arts degrees (Historic Preservation and Personal and Organizational Wellness) and a new Certificate of Advanced Graduate Studies (CAGS) in

Higher Education were introduced in 2012. Plymouth State also offers educator and specialist certification programs.

PSU alumni look back on their education with pride and satisfaction. Faculty members, who have rich and varied backgrounds in field settings, are committed to maintaining a vigorous, stimulating, and action-oriented experience for students.

CAMPUS

Nestled between the Lakes Region and the foothills of the White Mountains, Plymouth's main campus is located in the picturesque town of Plymouth, NH, just minutes from Interstate 93. The University has five sites listed on the New Hampshire Heritage Trail, including its landmark Rounds Hall, home to the education and social science departments. Rounds Hall contains a bell in the clock tower cast by apprentices of Paul Revere. Robert Frost lived in Frost House from 1911 to 1912 while he taught education and psychology at Plymouth. Holmes Rock marks the site of Holmes Plymouth Academy, established in 1808 as the first training school for teachers in New Hampshire. Mary Lyon Hall was recently added to the New Hampshire State Registry of Historic Places.

The beautifully restored Draper & Maynard Building, home to the Art Department and the Health and Human Performance Department, was originally a factory for the country's largest sporting goods supplier. The World Champion Boston Red Sox visited the factory in 1916; this visit was memorialized by a nowclassic photo of Babe Ruth sewing a cover on a baseball.

The Silver Center for the Arts, which hosts world-class performers year-round in Plymouth, stands on the site of a house that was once a stop on the Underground Railroad. It is home to the University's Department of Music, Theatre, and Dance, and is equipped with a 665-seat main stage theatre, a 174-seat recital hall, and a multipurpose black-box studio theatre, as well as classrooms and practice facilities.

The Boyd Science Center houses the Judd Gregg Meteorology Center, the Mark Sylvestre Planetarium, the Center for the Environment, and state-of-the-art teaching and research laboratories. From the work of professors and their students to interaction with community members, environmental organizations, and researchers, Boyd is truly the center for scholarly dialogue, ongoing research, fieldwork and experimentation, and a gathering place where science is put into action.

The Hartman Union Building (known as the HUB), located in the center of campus, houses a snack bar and café, the PSU Bookstore, fitness and aerobics rooms, a gymnasium, meeting rooms, administrative offices, and offices for student government, media, and activities. Nearly 2,500 meetings, receptions, programs and conferences are held here annually.

The Herbert H. Lamson Library and Learning Commons houses a million print and non-print items, a rare books col-

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lection, online facilities for database searches, a public-access catalog, and an automated circulation system. Lamson Library, with its extensive electronic infrastructure, was built to serve generations of students well into the 21st century.

The Welcome Center and Ice Arena, opened in 2010, serves as a teaching facility for instruction and research in ice activities, a home for Panther varsity men's and women's ice hockey teams, and a site for student and community recreation. The Hanaway Rink accommodates 850 spectators and the Eugene and Joan Savage Welcome Center features an expansive lobby and facilities that provide an attractive meeting place for prospective students, parents, and visitors to the campus and towns of Plymouth and Holderness and the wider region. Among the highlights of its energy efficient design and construction, the welcome center and ice arena was built to meet the US Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver standards by installing a sophisticated geothermal heat/cooling design to maximize energy conservation opportunities.

The Museum of the White, which opened at 34 Highland Street in February 2013, is a transdisciplinary center for teaching and research about the art, science, history, and culture of the White Mountains. Now under construction and expected to open in mid 2013 is the Enterprise Center at Plymouth, a business incubator and accelerator that will support entrepreneurship, small businesses and economic development in central New Hampshire. The center at 149 N. Main Street is a partnership between PSU and the Grafton County Economic Development Council.

OFF-CAMPUS SITES

To meet the needs of working students, the College of Graduate Studies operates a site at 2 Pillsbury Street in Concord, NH. Additionally, courses are offered at the Seacoast Professional Development Center in Exeter, Silver Fox Inn at Waterville Valley, and other educational agencies and facilities throughout the state. The University has strong relationships with the Hubbard Brook Experimental Forest, Squam Lakes Association, and the Humboldt Field Research Institute in Maine, which provide students the opportunity for field-based research and education.

OUTREACH AND PARTNERSHIPS

Partnerships with online learning providers and professional organizations offer an alternative for students to fulfill graduate program requirements. Visit plymouth.edu/graduate/academics/partnership-courses for the latest online and collaborative partnership information.

During the summer, students come from American International Schools to complete degree programs. Graduate students include teachers from Australia, Austria, Canada, China, England, Germany, Greece, Kuwait, the Netherlands, Pakistan, Russia, Saudi Arabia, Spain, Turkey, and other countries.

Some graduate programs offer the opportunity for international study. Graduate students have traveled for a wide variety of educational experiences to Australia, England, China, France, Greece, Ireland, Israel, Italy, New Zealand, Scotland, and South Africa.

SCHOLARLY SOCIETIES

Delta Mu Delta is a national honor society that recognizes and rewards business administration students who have distinguished themselves scholastically, as well as members from the academic or business community who have demonstrated distinguished scholarship, business ability, or leadership. Delta Mu Delta candidates must be in the top 20 percent of their class and have a grade point average of 3.6 or higher.

There are currently more than 170 chapters of Delta Mu Delta at colleges and universities throughout the United States, and more than 85,000 members. Plymouth State University has been initiating undergraduate and graduate students as Delta Mu Delta members since 1998. For more information, contact Bonnie Bechard at bbechard@plymouth.edu or Richard Sparks at rsparks@plymouth.edu.

Eta Sigma Gamma is a national professional honor society that furthers the competence and dedication for the health education profession. Graduate students and professionals in the health education field are invited to join. For more information, contact Mardie Burckes-Miller at margaret@plymouth.edu.

Phi Delta Kappa is an international organization for graduate students in education who exhibit leadership characteristics and show high promise for and commitment to improving educational institutions in society. An initiation ceremony and reception are held annually in May. For more information, contact Kathleen Norris at knorris@plymouth.edu.

Phi Kappa Phi is the nation's oldest, largest, and most selective collegiate honor society for all academic disciplines. Its chapters are on more than 300 campuses in the United States, Puerto Rico, and the Philippines.

Upsilon Pi is a chapter of Chi Sigma Iota (CSI), which is an international counseling honor society. The mission of Upsilon Pi is to prepare counselors to seek personal excellence in their academic and professional roles. For more information, contact Hridaya Hall at khall18@plymouth.edu.



Graduate Academic Calendar 2013–2014

Fall Term 2013		Spring Term 2014	
Term Begins	September 1	Term Begins	March 1
Deadline to petition to graduate on 12/1/13	September 1	Deadline to petition to graduate on 6/30/14	. March 1
Labor Day holiday (no classes)	September 2	Spring Break (no classes)	March 14–23
Columbus Day holiday (no classes)	October 14	Classes Resume	March 24
Veterans Day holiday (no classes)	November 11	Commencement	Мау 17
Thanksgiving Recess November 21	–December 1	Memorial Day holiday (no classes)	May 26
Term Ends	November 30	Deadline to petition to graduate on $8/31/14$	June 1
		Term Ends	June 30
Winter Term 2013–2014			
Term Begins	December 1	Summer Term 2014	
Deadline to petition to graduate on 3/1/14	December 1	Term Begins	July 1
Classes Resume	January 2	Independence Day holiday (no classes)	July 4
Martin Luther King, Jr. holiday (no classes)	January 20	Term Ends	August 31
Deadline to petition to graduate on 5/17/14 February 1			
Term Ends	February 28	Please note that Athletic Training and Science cours predominately on the undergraduate semester sched	

Academic Policies and Procedures

UNIVERSITY SYSTEM OF NEW HAMPSHIRE POLICIES AND PROCEDURES

Every employee, faculty member, and student at PSU is subject to both the obligations and the protections of University System of New Hampshire policies. Some key policies are listed below. Refer to the PSU Student Handbook at plymouth.edu/stulife/handbook for additional information.

A FAIR AND SAFE LEARNING ENVIRONMENT

Plymouth State University takes seriously its responsibility to provide a safe and fair place in which to learn. As such, it is the responsibility of all faculty and staff members to deal honestly, fairly, and respectfully with students, coworkers, and all other individuals associated with the University. The University actively supports these policies. For more information or to discuss any of these policies, please contact the College of Graduate Studies.

ACADEMIC INTEGRITY

Academic integrity is the foundation of the pursuit of knowledge. All members of the academic community are expected to be dedicated to the pursuit of knowledge in an honest, responsible, respectful, and ethical manner. Every violation of academic integrity is an affront to the academic community. Violations of academic integrity make fair evaluation impossible and cast doubt upon the seriousness with which students accept the responsibility of acquiring an education.

Members of the academic community are expected to report all instances of those violations that come to their attention. Both faculty and administration consider it their duty, as guardians of academic standards and intellectual honesty, to enforce the following policy by prosecuting all cases of violation of academic integrity to the fullest extent. Students are urged to consider that it is the toleration of violations of academic integrity, and not the reporting of it, that is dishonorable. Visit plymouth.edu/office/registrar/academic-policies/academic-standing for more information on University policies and procedures regarding academic integrity.

Definitions

Violation of academic integrity includes any act that portrays a member of the academic community as having acquired knowledge through legitimate study or research which, in fact, has been stolen. Violation of academic integrity includes also any act that gains one member of the academic community an unfair advantage over another. This includes any act hindering the academic accomplishment of another.

Violations of academic integrity are classified by PSU into two categories: intentional and unintentional. Intentional violations



involve a deliberate attempt to deceive in order to gain unfair advantage. Unintentional violations are associated with poor academic practice stemming from ignorance or misunderstanding of requirements.

Examples of intentional violations of academic integrity include, but are not limited to, the following:

- Providing or using unauthorized books, notes, or other sources of information during an examination
- Submitting another person's work as one's own: plagiarism. This includes copying during examinations; purchasing papers or taking them from Internet/World Wide Web resources; copying papers, reports, laboratory results, or computer work; quoting or paraphrasing library or Internet/World Wide Web sources without proper citations.
- Doing work for which another person will receive credit.
 This includes allowing one's examination answers, reports, laboratory results, or computer work to be submitted by another person as his or her own work.
- Falsifying, through forgery or other alteration, academic documents such as transcripts, registration materials, withdrawal forms, or grade reports
- Reading, removing, copying without authorization, or stealing any academic document, exam, or academic record maintained by any member of the faculty or administration
- Using unauthorized assistance in the laboratory, at the computer terminal, or on field placement
- Stealing, copying, or destroying another person's computer program or file, deliberately preventing or depriving another's access to the University computer system or resources, or impeding the system's performance
- Stealing, or removing without authorization, books or periodicals from the library, or mutilating library materials
- Falsifying or fabricating data or results of research or field work
- · Lying in connection with an academic integrity hearing

Unintentional violations are often associated with plagiarism. Examples of unintentional violations include, but are not limited to: paraphrasing, citing, or quoting poorly or incorrectly.

Procedure

In cases where a violation of academic integrity is suspected, the individual making the discovery must initiate proceedings with the department chair or dean, and the associate vice president for the College of Graduate Studies.

CLASS CANCELLATION

Notifications of University-wide cancellations due to inclement weather are advertised on WMUR-TV Channel 9, the PSU website at plymouth.edu, and the College of Graduate Studies website at plymouth.edu/graduate. Call the PSU Storm Line (603) 535-3535 for the latest updates on weather-related issues or register for PSU Alerts through myPlymouth. Individual class cancellations are determined by faculty. In the event of an individual class cancellation, students will be notified through their PSU e-mail address. It is important for students to check their PSU e-mail for these and other important University announcements.

Course charges, fees, and academic regulations are subject to change without advance notice. PSU reserves the right to cancel, postpone, or combine class sections, and to limit registrations or change instructors. Students in cancelled classes will be notified so they may enroll in an alternative class or receive a refund.

Please note: All room assignments and course offerings, dates, and times are subject to change. New classes are added on a regular basis. Please visit the graduate website at plymouth.edu/graduate for the latest updates.

DRUG-FREE ENVIRONMENT

Plymouth State University is committed to ensuring a drug-free environment. Students are required to comply with the drug-free policy, which prohibits the unlawful manufacture, distribution, dispensing, possession, or use of any controlled substance or alcohol in or around the campus or classroom.

NON-DISCRIMINATION

The University, in accordance with federal and state laws and regulations, does not discriminate on the basis of race, color, religion, national origin, gender, sexual orientation, gender identity or expression, age, veteran's status, or disability, in admission or access to, treatment of, or employment in its programs or activities. Inquiries regarding this policy should be made to:

Vice President for Student Affairs Plymouth State University 17 High Street, MSC 4 Plymouth NH 03264-1595 Further inquiries may also be addressed to the Director, Office of Civil Rights, United States Department of Education, Washington DC 20201.

PRIVACY AND DISCLOSURE OF ACADEMIC RECORDS

A federal law, the Family Educational Rights and Privacy Act of 1974 (popularly known as the Buckley Amendment or FERPA), establishes certain rights for students with regard to their education records. In brief, the act provides students the right to inspect their personal education records (with some exceptions), the opportunity to contest the contents of their records, and protection from unauthorized disclosure of their education records to third parties outside the University. The University is not permitted to disclose personally identifiable information from the student's education record without the prior written consent of the student, or only under acceptable disclosure provisions in FERPA.

Access without prior approval of students is permitted to University faculty and staff with a need to have access to educational information, to appropriate federal and state officials with statutory authorization, to accrediting agencies and educational testing organizations, to the parents of dependent students and, in an emergency, to other appropriate persons acting to protect the health and safety of students and others.

At PSU, the education records of students are released to parents only upon written request by students or by the parents of dependent students with proof of dependency. Some educational records maintained by the University are not open to access by students; these include confidential letters of recommendation to which the student has waived access, the financial records that parents have submitted to the University, medical and counseling records used in providing treatment to the student, the records of University Police, records containing information on more than one student, and records in the possession of the maker that are not accessible to other individuals. This last exception includes, for instance, the grade books of instructors and the desk files of faculty and administrators.

The University is permitted to release the following "directory information" without the prior consent of the student: name, place and date of birth, enrollment status, most recent educational institution attended, campus address, e-mail address, phone number, degree, field of study, grade level, participation in recognized activities and sports, and height and weight of athletic team members. Grades are considered "directory information" to the extent of publishing honor rolls and in selecting students to honor societies or to receive academic scholarships. Students have the right to restrict disclosure or release of any or all "directory information." Requests must be submitted in writing to the dean of student affairs within 10 class days after the beginning of fall or spring term. See the current student handbook for further information: plymouth.edu/stulife/handbook.

SEXUAL HARASSMENT

All faculty, staff, and students have a right to work and learn in an environment that is free of discrimination and harassment, including freedom from inappropriate, offensive, or harassing behavior. Such behavior violates PSU's policy, as well as state and federal law. Any faculty member, staff member, or student who violates this policy is subject to disciplinary action.

Sexual harassment means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when:

- such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile, or offensive working or academic environment;
- submission to, or rejection of, such conduct by an individual is used as the basis for employment or academic decisions affecting the individual;
- submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic work.

It is not possible to list every type of behavior that could be considered sexual harassment. The circumstances under which the behavior occurs have an impact on whether or not it is considered or perceived to be sexual harassment.

The following are examples:

- · Unwelcome sexual propositions
- · Graphic comments about a person's body
- Sexually suggestive objects or pictures in the workplace
- Derogatory or sexually explicit statements about an actual or supposed sexual relationship
- · Derogatory, gender-based humor

It is important to note that one cannot assume conduct is acceptable simply because an individual does not openly protest against it. In addition, some conduct may be considered sexual harassment even if it is not intended as such. In general, common sense is the best guide—treat other individuals fairly and with respect.

Any reported incident involving sexual harassment by a faculty or staff member of the University must be reported to the human resources director, a vice president, the dean of student affairs, or Public Safety/University Police. There is no right of confidentiality by any University faculty or staff member regarding this type of violation. Reporting is mandatory by law.

SMOKING

As required by law and in recognition of the health hazards of smoking and second-hand smoke, PSU prohibits smoking in all buildings and facilities, including offices, classrooms and laboratories, studios, libraries, theaters and auditoriums, gymnasiums and athletic areas, and public reception areas. Smoking

may be allowed in specifically designated outdoor areas. Smoking is not allowed within 20 feet of any PSU building or controlled premise, adjacent to air intake units, outside stairways, or on entrance ramps. Smoking may also be prohibited in areas reserved for events where the sponsor determines the interests of non-smokers need to be protected. Some examples are graduation ceremonies, University receptions and events, groundbreaking ceremonies, and outdoor concerts.

PROGRAM OF STUDY

All graduate students are required to have a written program of study on file at the College of Graduate Studies within the first term after acceptance. The program of study must be approved and signed by the student, his or her advisor, and the associate vice president for the College of Graduate Studies. The program of study specifies each course comprising a graduate program concentration and the term or year in which the course is likely to be taken. Changes to the program of study may be made only with the advisor's and the associate vice president's approval. Program of study forms are available from the advisor and the College of Graduate Studies. The associate vice president for the College of Graduate Studies oversees all programs of study.

INDEPENDENT STUDY

An independent study is a special, individualized project of one to three graduate credits. The study must cover material not found in regularly offered courses. It requires a contract between the student and instructor specifying the project to be accomplished. Graduate Independent Study forms are available at plymouth.edu/graduate/forms or at the College of Graduate Studies Office. The completed Graduate Independent Study form must be submitted with the signed registration form. Independent studies are only available to admitted graduate students.

INDIVIDUAL ENROLLMENT

If extenuating circumstances exist, students may be permitted to register for an individual enrollment. This option only applies to required courses on the student's approved program of study. To register, an application for individual enrollment (available at plymouth.edu/graduate/forms or at the College of Graduate Studies Office) must be completed and submitted with the registration form.

CONTINUATION FEE

In some circumstances, a graduate student will have completed or will have been enrolled in the prescribed courses or credits listed in their program of study, but may not have completed their degree requirements, such as final completion of a thesis, dissertation, or project. In such cases, where the student's faculty advisor determines that it will take more than half of the next enrollment period for the student to complete the final degree requirements, the student will be required to pay a continuation fee equivalent to three credits for that period. This fee would also be required for subsequent enrollment periods, if additional time beyond more than half of the period would still

be needed. The student will be charged the current in-state or out-of-state per credit tuition rate based on residency.

GRADUATE COURSE SCHEDULING

All courses at PSU are identified by a discipline code and a four-digit course number. Graduate courses are identified by a number 5000 or above, (e.g., ED 5030). Mathematics courses numbered MG 3XXX or MG 4XXX may be taken for graduate credit.

Graduate courses are scheduled on a term structure with the exception of Athletic Training and Science courses, which follow the undergraduate semester schedule. Courses are offered during the following terms:

Summer July 1-August 31

Fall September 1–November 30 Winter December 1–February 28 (29)

Spring March 1–June 30

The term structure allows students to register for multiple courses in a year. The majority of graduate courses are scheduled during evenings, weekends, weeklong institutes, or online. Some degree programs, such as counseling and athletic training, and educator certification options, have specific residency and undergraduate course requirements unique to these areas of study.

Course schedules are released online at plymouth.edu/graduate/courses prior to the term start date.

GRADING SYSTEM

All graduate students must maintain at least a 3.0 (B) grade point average. The graduate grade range is A through C- and F. There are no D grades as the College of Graduate Studies recognizes C- as the lowest passing grade.

Letter grades, with pluses and minuses noted, are used to assess the relative extent to which students achieve course objectives in the vast majority of PSU courses. Grade point average is calculated on a term and a cumulative basis that takes into account all grades earned by a student during their academic career at PSU, including those earned prior to starting coursework toward a degree or certification program.

Grade Point Average: The following grade point system is used to determine grade point average:

Grade	Points per Credit
A	4.00
A-	3.67
B+	3.33
В	3.00
B-	2.67
C+	2.33
C	2.00
C-	1.67
F	0.00

Administrative Failure

An Administrative Failure (AF) notation is placed on a student's transcript when an instructor does not have sufficient information to assign a letter grade in a graded course. Frequently, administrative failure stems from failure to formally drop a course. An AF counts as an F grade in grade point average calculation and is not a reason for a course withdrawal.

Academic Standing

An admitted graduate student is in good academic standing when the following conditions are present:

- The students has a cumulative grade point average (GPA) of 3.0 or higher
- The student has no more than one grade of incomplete (IC)

An admitted graduate student is not in good academic standing if either of these conditions is present:

- The student has a cumulative grade point average (GPA) below 3.0
- · The student has two or more incompletes (IC)

Students are notified in writing if they are not in good academic standing, and must develop a corrective plan with their advisor. Students have three terms to raise their cumulative GPA to at least 3.0. Students with two or more incompletes will be prevented from registering for additional classes until all incompletes are resolved.

If the student does not follow this plan within the time frame, dismissal from the degree program will occur. If the student wishes to appeal the dismissal, he or she should do so by submitting a Student Request form to the College of Graduate Studies associate registrar. After dismissal, should the student want to continue, he or she must reapply and be accepted into the program.

Please note that academic standing may impact financial aid status and veterans' and eligible dependents' receipt of GI Bill benefits.

Inactivity or Withdrawal from the College of Graduate Studies

Admitted graduate students have an obligation to show progress toward earning a degree. Students who do not take at least one course during any two-year period will be considered inactive and informed of this status in writing. Once notified of their inactive status, students must request reactivation in writing within 10 business days. The student's program of study must still be completed within the original six-year program period. An inactive student will lose access to myPlymouth, and his or her student ID will be deactivated.

After three years of inactivity, a student will be automatically withdrawn from the graduate program and will receive written notification of the withdrawal. At that time, the student's enrollment documents will be destroyed, unless the student immediately submits a written request for continuation. If, at a later date, the student decides to reenroll in the graduate program,

new application materials and application fee must be submitted for the admissions board to review for readmission. Any student who chooses to withdraw from the program must notify the College of Graduate Studies in writing.

Repeat Policy

Students are allowed to retake any course. Credits and grade points for the first grade will be deleted from the cumulative record, while the grade itself will remain on the transcript and the repeat noted with an E (Exclude) next to the grade. The course information will be listed in the usual manner the second time it appears on the transcript. The most recent grade counts even if lower than an earlier grade. This policy does not apply to courses that are repeatable, such as independent studies or special topics offerings.

Attendance Policy

Students are urged to recognize the importance of participation in class activities and to be aware that grades may be affected by absences or lack of participation during online coursework. Instructors shall determine the class attendance policies.

Instructors outline attendance policies and the effect multiple absences have on final grades in the course syllabus. Course syllabi are distributed during the first class meeting, posted online, or can be requested from the instructor in advance. In classes that use online classroom management software (such as Blackboard or Moodle), online student activity is recorded and may be used to determine participation. Instructors maintain records to show the attendance policy is being followed.

Fair Grading Policy

Fair and equitable grading reflects values to which all members of the PSU community commit themselves. Grades are used to assess the relative extent to which students achieve course objectives in all for-credit courses at PSU.

Academic freedom allows instructors to determine course objectives within the bounds of established curricula, and the means by which a student's mastery of those objectives will be evaluated; and evaluate the quality of work on individual exams or assignments.

Standards for Fair Grading

To achieve fair and equitable grading, instructors shall inform students, in writing, (i.e., via a syllabus) of the course objectives and the means by which student mastery of those objectives will be determined. Instructors are expected to share this information with students during the first class meeting and to provide this information, in writing, no later than the second class meeting. These arrangements cannot be altered after the class has met for one-quarter of its scheduled class meeting time if the changes negatively impact the student. The student's grade shall be based solely on the criteria known to all students in the class and all such criteria shall apply to mastery of stated course objectives.

Examples of violations of the fair grading policy include, but are not limited to, the following:

- Allowing alternate work to substitute for coursework assignments for a particular student or group of students when
 that option has not been stated in the syllabus as available to
 all students
- Allowing a student to perform extra work, over and above that described in the syllabus, to influence her or his grade, when that same opportunity has not been made available to all students
- Allowing students to perform extra work after final grades have been submitted to improve their grade

Exceptions to the above violations may be allowed in cases related to documented learning disabilities when alternative testing arrangements have been made through Plymouth Academic Support Services (PASS) and in cases where there are documented serious extenuating circumstances.

Incompletes and Extensions

An instructor may decide to enter a grade of incomplete (IC) on a student's record if unusual circumstances prevent completion of the course on time, and a minimal portion of the total class work needs to be completed. The course must be completed by the date specified by the instructor which cannot exceed one year beyond the original term of course completion. If the course is not completed by this date, the grade specified by the instructor will be recorded. If no grade is specified, a default grade of F will be recorded. The instructor is responsible for documenting and notifying the student of the work to be completed and the deadline. A student may not graduate with an incomplete on his or her transcript. Note: A student with an outstanding incomplete in a course may not register again for that course.

The extension (E) grade is reserved for courses that are designed with requirements that may extend beyond one term. The course must be completed by the date specified by the instructor which cannot exceed two years beyond the original term of course completion. If the course is not completed by this date, a default grade of F will be recorded. A student may not graduate with an E on his or her transcript.

Pass/No Pass Courses

Some courses at PSU are designated as being Pass/No Pass. Credits earned by passing these courses are added to the total credits earned. Pass/No Pass credits are also included in credits attempted. Credits earned in Pass/No Pass courses do not affect grade point average.

TRANSFER CREDITS

Grades for transfer courses must be a B or higher, and appropriate to the program attempted at PSU. Only credits may be transferred, not grades; therefore, the grade for transfer courses does not count toward the required 3.0 grade point average for

program completion. Courses completed more than six years prior to the time of acceptance may not be transferred to a graduate program. Generally, up to 9 graduate-level credits from other accredited institutions may be accepted in degree or certification programs, but not certificate programs. Courses cannot be transferred for credit if used in earning another degree. MBA and EdD students should refer to the specific transfer credit policy in the respective catalog sections.

An official transcript must be on file at the College of Graduate Studies Office before credits can be considered for transfer to a PSU program. Course descriptions or course outlines or both may be requested in order to determine credit consideration.

Students should be aware that decisions about acceptance of credit in transfer are up to the receiving institution. There is no guarantee that credits earned while enrolled at Plymouth State University will be accepted by another educational institution.

COURSE AUDITS

Students who want to take a course for their own interest or development, but not for credit, may register to audit most courses. Auditors are usually not required to complete normal class requirements. No grades will be issued to students who have registered as auditors. An AU will be entered on the transcript for the audited course. Full fees and half tuition are charged for auditing a class, with some exceptions determined by the offering department. Permission of the instructor is required for all course audits. A status of audit must be clearly indicated on the course registration form for accurate processing. Auditing is not permitted in MBA, CAGS, or doctoral-level courses.

GRADUATE COURSE ENROLLMENT AND COURSE LOAD

Students who are registered for at least three (3) credits in Fall, Winter, Spring or Summer term are considered to be enrolled as part-time graduate students. Those who are registered for at least six (6) credits in a term are considered to be enrolled as full-time graduate students.

Course Overload

Graduate students are in overload when they register for more than 12 credits in one term. Permission of the associate vice president for the College of Graduate Studies is required for overload registration.

Course Add, Drop, and Withdrawal Policy

It is the student's responsibility to initiate the add, drop, or with-drawal process. Course changes are not official until processed by the College of Graduate Studies or accepted in our online registration system. All paper forms must be filled in completely and include the student's signature to be processed. Forms can be faxed, mailed, or delivered in person to the College of Graduate Studies. A \$30 registration fee will be assessed each term when registering for courses.

Course Adds

Attendance in a class does not constitute an official add. Courses may be added up until the start of the class, pending availability. Students may add a course with the permission of the instructor after the course has started.

Dropping or Withdrawing from a Course

Students are able to drop courses online through my.plymouth. edu for a full tuition refund and without incurring a drop fee, up until the start of the term.

After the term has started, please refer to the course schedule information below to determine drop or withdrawal eligibility. A drop or withdrawal form must be received at the College of Graduate Studies by the indicated deadline in order to be eligible for the specific drop or withdrawal. A \$25 drop fee will be assessed for each drop or withdrawal. Students who drop or withdraw from multiple courses simultaneously do not incur additional charges. All paper forms must be filled in completely and include the student's signature to be processed. Forms can be faxed, mailed, or delivered in person to the College of Graduate Studies.

It is the student's responsibility to initiate the drop or with-drawal process. Failure to attend class, complete coursework, notify the instructor, or make complete payment does not constitute an official drop or withdrawal. Courses withdrawn will remain on the academic transcript with a withdrawn code of W for the grade. Grades of W do not impact grade point average.

Course Drop/Withdrawal Schedule

 10–16 week face-to-face courses, fully online courses, or blended/ hybrid courses with three or fewer face-to-face meetings

Drop Period	Withdrawal Period	No Withdrawal Permitted
Last business day	First business day of	After last business
of week two of the course	week three of the course through last business day	day of week seven of the course
course	of week seven of the	the course
	course	

 Blended/hybrid courses with four or more face-to-face meetings, or block and intensive courses

Drop Period	Withdrawal Period	No Withdrawal Permitted
Prior to second	On second class	Fourth class meeting
class meeting	meeting but before	or later
	fourth class meeting	

• Weekend/Weeklong Residential and Commuter Package Courses

Drop Period	Withdrawal Period	No Withdrawal Permitted
Before the first	Any part of course	After residential/
class meeting	is attended (but not	commuter portion
	entire course)	of course

LATE WITHDRAWAL

After the appropriate withdrawal period has ended, students may appeal for withdrawal from a course only under extenuating circumstances. The appeal should be presented to the associate vice president for the College of Graduate Studies on a graduate student request form, and must include a letter explaining the extenuating circumstances, any requested documentation, and a course withdrawal form signed by the instructor.

Course Refund Schedule

 10–16 week face-to-face courses, fully online courses, or blended/ hybrid courses with three or fewer face-to-face meetings

Full Tuition Refund	75% Tuition Refund	50% Tuition Refund	No Tuition Refund
Last business	Last business	Last business	After last
day of week	day of week	day of week	business day
two of the	three of	four of	of week four
course	the course	the course	of the course

 Blended/hybrid courses with four or more face-to-face meetings or block and intensive courses

Full Tuition Refund	75% Tuition Refund	50% Tuition Refund	No Tuition Refund
Prior to second	On or after	On or after	Fourth class
class meeting	second class	third class	meeting or later
	meeting but	meeting but	
	prior to third	prior to fourth	
	meeting	meeting	

Weekend/Weeklong Residential and Commuter Package Courses
 Refunds can only be processed up to two business days prior
 to the start of the course. After that date, no refund (partial or
 otherwise) will be granted.

Important Refund Information: Withdrawn or dropped courses in any given term that were paid for (all or in part) with federal aid, by a third-party agency via a scholarship or purchase order, or with a tuition waiver, require the following:

If paid by federal financial aid: Federal aid that pays to the student's account must be earned. Federal regulations require that PSU determine how much of the federal aid has been earned and return all unearned amounts to the lender for withdrawals prior to 60 percent of enrollment period. This may result in a balance owed to PSU. Note: This calculation of unearned aid generally occurs independently from the amount of tuition that is refunded based on the course refund schedule. Exception: Should a 100 percent refund be received for tuition charges, 100 percent of the federal aid will be returned to the lender, and the student will become responsible for paying the initial \$30 non-refundable administration fee that was assessed at the time of registration.

If paid by third-party agency: Course drops or withdrawals require that PSU return any funds received from an outside

agency to that agency regardless of whether the student receives a full or partial refund of charges based on the course refund schedule. This may result in a balance owed to PSU.

If paid by tuition waiver: In general, if the student is no longer registered for the course(s) for which the waiver was directly applied, the tuition waivers will be removed from the student's account. This may result in a balance owed to PSU. However, some types of tuition waivers may have different restrictions. Please contact the Student Account Services Office for additional information.

GRADUATE CAPSTONE

Students may elect to complete a culminating one- to 12-credit supervised project or practicum experience in a work environment, cooperating institution, or agency. Graduate students may participate in a variety of learning experiences arranged in conjunction with their program of study and with the approval of the associate vice president for the College of Graduate Studies and their advisor. Field and university supervisors work with graduate students to determine specific learning outcomes that will result from this experience, as well as procedures to meet those outcomes. Students will construct a learning portfolio to document specific outcomes of this experience and present this portfolio at the end of the term. A student self-evaluation and curriculum vitae detailing accomplishments to date should be included in the portfolio. Students in the Master of Science degree programs will present their research findings and may have other additional requirements.

PSU has limited funding for honoraria for supervisors, and therefore relies on professional partnerships with the community to assist graduate students in this apprenticeship learning model. Typically, students spend 40 hours per credit hour during a capstone experience, depending on the discipline.

GRADUATE INTERNSHIP OR PRACTICUM

PSU's teacher education programs are renowned in New Hampshire and throughout New England, and PSU's graduates are actively recruited for teaching positions. Beginning as early as the first year, teacher education candidates have many opportunities to teach and learn in public elementary, middle, and high school settings. The certification program culminates in an intensive internship or practicum. The field experience is typically 12 weeks for a single-level endorsement (K–8, 5–9, 7–12) and two eight-week experiences (one at the primary level and one at the secondary level) for K–12 certification.

A student is required to have a 3.0 GPA to enter his or her internship, practicum or final field experience. The student must achieve a B or better (or Pass in the case of Pass/No Pass courses) in his or her internship or practicum in order to be endorsed for NH educator or professional certification.

All teacher certification candidates who interact with students in public school settings through course-related field experience are subject to New Hampshire state legislation that requires all persons who regularly come into contact with pupils on a daily basis to undergo a full-disclosure criminal records check that may include fingerprinting. The criminal records check is conducted at the site school before the field experience begins. The fee for this processing is the responsibility of the teacher candidate and is paid directly to the school district. Inquiries should be directed to the graduate certification coordinator.

GRADUATE PROGRAM COMPLETION AND DEGREE CONFERRAL

Most PSU graduate students complete a degree program in one to three years; six years is the maximum time to complete a degree. Assuming all undergraduate competencies are met, MBA students can complete their program in just four terms. Courses in the Master of Science in Applied Meteorology, Biology, and Environmental Science and Policy programs are offered along the undergraduate semester schedule. Depending on the student's choice of thesis and non-thesis options, the time to completion can range from one to two years.

There are specific time frames assigned for processing completions and degree conferrals. Diplomas are issued five times per year: May Commencement, June 30, August 31, December 1, and March 1. All students who anticipate graduating are required to submit a Petition for Degree Conferral. Students must submit the completed petition before the corresponding conferral deadline in order to have their program audit completed and degree conferral processed for their anticipated completion date.

Anticipated Degree Petition and Fee Submitted by Conferral Date Student No Later than

August 31 June 1
December 1 September 1
March 1 December 1
May Commencement February 1
June 30 March 1

Students who do not meet the above deadlines may be eligible to submit a late petition for completion. The processing fee for a late petition is \$50.

Anticipated Degree Late Petition and Fee Submitted Conferral Date by Student No Later than

August 31 June 30
December 1 September 30
March 1 December 31
May Commencement February 28/29
June 30 March 31

Certification candidates must submit a Petition for Teacher Certification/Specialist Credential form. Educator and specialist certification candidates can petition for completion at any time, as these certifications and endorsements can be awarded or endorsed outside of the official degree conferral dates listed previously.

Specialist certification can also be awarded at any time as long as the candidate already holds a master's degree. Students seeking specialist certification along with a master's degree will have their certification endorsed at the same time their master's degree is conferred.

COMMENCEMENT CEREMONY

All graduates are encouraged to participate in the Commencement ceremony, which is held annually in May. Students who complete degree requirements in August and petition by April I have the option of walking in the May ceremony of that same year. After April I, all students who petition to graduate for the August conferral date will be eligible to participate in the May ceremony of the following year. Students who petition for December or March will be eligible to participate in the May ceremony of the following year. Please contact the graduate degree auditor with questions regarding the completion of a graduate program. Graduating students can visit plymouth.edu/commencement to access Commencement ceremony information.

Academic Support and Student Services

ADVISING

Admitted graduate students are assigned an academic advisor with whom they must meet to develop a program of study within the first term after admission. Students are responsible for maintaining contact with their advisor throughout their program, and may obtain advising assistance by mail, e-mail, online chat, phone, or in-person appointments. Students may request to change their program advisor through the College of Graduate Studies. Evening and weekend advising hours are offered on and off campus by appointment. Contact the College of Graduate Studies to schedule an off-campus advising session.

CENTER FOR RURAL PARTNERSHIPS

The Center for Rural Partnerships dedicates PSU's research, outreach, and educational capacities to advance collaborative projects that maintain and enhance the quality of life in rural New Hampshire. The center provides students, faculty, and staff with a host of opportunities to work with regional partner organizations and communities, and to participate in engaged research projects, writing, lectures, and workshops. The diversity of project types to date includes: sustainable development, historic preservation, workforce development, cultural arts events, regional technology infrastructure, tourism marketing, rural health and wellness, alternative heating, and fuel. For additional information, visit plymouth.edu/center-for-rural-partnerships.

CENTER FOR THE ENVIRONMENT

The Center for the Environment (plymouth.edu/center-for-the-environment) addresses environmental issues in northern New England through scientific research, education, and collaboration. We engage on- and off-campus partners to define, acquire, and provide science-based knowledge to assist in making informed decisions. Our work with PSU faculty, non-profit organizations, and government agencies prepares Plymouth State University students for lives and careers that demand a thorough understanding of the natural, human, and built environment; contributes to the solution of environmental problems in our region; and fosters collaboration between Plymouth State University, communities, environmental agencies, and organizations.

HOUSING

There are a variety of housing options available to graduate students, including on- and off-campus housing. On-campus housing is assigned through Residential Life. Off-campus housing is operated by individual landlords or property management companies. Housing is limited and subject to availability. For information and assistance, contact the Department of Residential Life at plymouth.edu/reslife or (603) 535-2260.

MARK SYLVESTRE PLANETARIUM

Located in the Boyd Science Center, the Mark Sylvestre Planetarium is a 31-seat facility with accessible seating for visitors with disabilities. Programs can be conducted using the Digitarium Alpha LCD full-sky projector or the Starlab Sky Projector and an LCD projector with VHS, DVD, and computer (including Internet) inputs. Programs in astronomy designed for the general public, elementary and secondary students, college students, scout groups, and others are regularly given. The planetarium has been used for art classes, opera classes, summer programs for grade school children, student presentations, and a variety of other programs. In addition to the planetarium facility, there is also a portable planetarium that is used to give astronomy presentations at schools and other organizations throughout New England. For more information, visit plymouth.edu/department/asc/resources/planetarium.

myPLYMOUTH

The myPlymouth portal is the electronic gateway to nearly all of PSU's online services. All active, registered, or admitted graduate students have access to myPlymouth, which contains academic, personal, administrative, and recreational information about PSU. Self Service (under the portal's Services tab) includes academic information, such as unofficial transcripts, grades, online registration access, and tuition statements.

With a user name and password, myPlymouth is accessible from any computer with internet access. To obtain a user name and password, go to my.plymouth.edu and follow the instructions. Students must regularly access their PSU e-mail account to receive important graduate-specific information from the administration and faculty.

PARKING PERMITS

All students must obtain a valid parking permit to park on campus. To obtain a parking permit visit thepermitstore.com and enter Plymouth State University as the parking destination.

PASS OFFICE

PASS is a federally funded program designed to provide individualized academic assistance to students enrolled at PSU. Assistance is available for students in time management, exam preparation, note taking, and other study techniques. Academic tutors are available in most introductory-level courses. PASS professional staff members are available to work with students with documented disabilities. PASS is located in the lower level of Lamson Library and Learning Commons and is open during the academic year. For additional information, visit plymouth. edu/services/pass.

PLYMOUTH WRITING PROJECT

The mission of the Plymouth Writing Project (PWP) is to improve the teaching of writing in New Hampshire's schools. Through its professional development model, the PWP recognizes the primary importance of developing and extending teacher knowledge, expertise, and leadership.

The PWP believes that access to high-quality educational experiences is a basic right of all learners and a cornerstone of equity. Through building an extensive network of teacher leaders, the PWP seeks to promote exemplary instruction of writing in every classroom in the state.

These teachers, together with University instructors, collaborate to provide staff development programs in New Hampshire schools. Plymouth Writing Project programs include summer institutes for teachers, graduate-level courses, workshops, classroom and program consultations, and reflective practice, inquiry, study, and writing groups.

Students may choose to incorporate the PWP coursework into a MEd program or a certificate program. Visit plymouth.edu/pwp for additional information.

SMALL BUSINESS INSTITUTE®

The Small Business Institute at Plymouth State University gives MBA students and top seniors a chance to serve local small businesses as members of consulting teams, earning elective course credits in the process. Working with a business faculty member, SBI teams visit their client companies, define the scope of their projects, execute the tasks they agree to do for their clients, then prepare and present a formal report. These reports are required to be comprehensive and professional, enabling students to ground their studies in a real-world experience. Over the past 38 years, PSU student reports have won dozens of statewide, regional, and national awards in Small Business Institute competitions. Each consecutive year from 1999 through 2012, SBI student consulting teams have won national awards in the SBI Project of the Year Competition. This record of accomplishment is unparalleled by any graduate school participating in the Small Business Institute. For more information, visit plymouth.edu/graduate/academics/degrees/ masters/mba/small-business-and-entrepreneurship/smallbusiness-institute.

STATISTICAL CONSULTING CENTER

The Statistical Consulting Center, located in the Mathematics Department, offers statistical consulting on the design and analysis of research projects to the faculty and students of PSU and its partners. This professional service is available at any stage of research including planning, proposal writing, design, analysis, or the final written presentation of the results. This is not a tutoring service, but rather a resource for faculty and students engaged in research. For more information, visit plymouth.edu/outreach/statistical-consulting.

Math Activity Center

Whether you want some help with your algebra class or a quiet place to finish your math homework, the Math Activity Center has the resources you need to be a successful math student. This student-run organization provides peer-tutoring services for most 1000- and 2000-level math courses and some 3000-level courses. Tutors are typically math majors interested in teaching math and practicing their instructional skills. The Math Activity Center is located in Hyde Hall, room 351. For more information, visit plymouth.edu/services/math-center.

STUDENT HANDBOOK

The Division of Student Affairs maintains the student hand-book. The handbook is available online at plymouth.edu/stulife/handbook and contains information regarding student rights, policies and expectations, the judicial system, services, and the annual security report.

WHITE MOUNTAINS INSTITUTE

The White Mountains Institute (WMI) at Plymouth State University celebrates the significant heritage of our region and creates a premier center for educational programming and research on the White Mountains. Through the institute, PSU takes advantage of the spectacular outdoor laboratory around us and builds on our strengths in environmental studies and sustainability, eco-tourism, historic preservation, the arts, adventure education, and the advancement of culture and economic development in rural communities.

To achieve this, the White Mountains Institute offers programming that utilizes PSU resources to expose students and members of the surrounding communities to the environmental and cultural aspects of the White Mountains. Programs include:

- undergraduate and graduate-level coursework throughout the year
- professional development opportunities for K-12 educators
- summer enrichment experiences for learners of all ages
- community-oriented education through public workshops, lecture series, and exhibitions.

For more information, visit plymouth.edu/white-mountains-institute.

THE WRITING CENTER

The Writing Center offers versatile consultants, as well as writing guides, model papers, and lists of useful websites on writing, to assist graduate students in their studies. For more information, visit the writing center in Lamson Library or visit plymouth.edu/office/writing-center.

UNIVERSITY IDENTIFICATION CARDS

A valid PSU picture ID card is needed to access services throughout the campus. The magnetic strip on the back of the card is used in the library, PE Center, and other campus locations where validation of student status is necessary. It also enables the use of a cash-to-card machine to maintain a mon-

etary balance on the card. This allows for purchases in vending machines, the snack bar, copier machines, and the bookstore. The fee for an ID card is \$15. The cost to replace a damaged card is \$5 under the condition that the damaged card is turned in when a new card is issued. The ID Center is located on the second floor of the Hartman Union Building (HUB). Once a card is obtained, it is automatically activated each semester the holder is enrolled in courses. Visit plymouth.edu/services/ids for additional information.

GRADUATE STUDY OPPORTUNITIES FOR UNDERGRADUATE STUDENTS

Plymouth State University seniors with a cumulative grade point average of 3.0 or better may take up to six graduate credits with prior permission. Proper selection of the graduate courses may allow for double counting the graduate credits as undergraduate credits.

The College of Graduate Studies offers undergraduate students the opportunity to earn a master's degree by successfully completing one year of graduate study after obtaining a baccalaureate degree. Currently four degree options exist:

Master of Arts in Teaching in Art Education

- Students who hold a baccalaureate degree with a GPA of 3.0
 or higher may apply to the MAT program.
- Art Education: For PSU BFA students who fulfilled 12
 credits of art education within their BFA degree. Successful
 graduates will be certified as K-12 Art Educators by the state
 of New Hampshire.

Master of Business Administration, General Management

- Students who hold a baccalaureate degree in business with a GPA of 2.5 or higher may apply to the MBA program.
- General Management: For full-time graduate students, the 10-course program can be completed in as few as 12 months.
- Graduate students may also pursue a certificate in Accounting, Health Care Administration, The Human Side of Enterprise, International Business, Investment and Finance, Organizational Communication, Small Business and Entrepreneurship, or Strategic Marketing Management.

Master of Education, Curriculum and Instruction

- Students who hold a baccalaureate degree with a GPA of 3.0 or higher may apply to the MEd program.
- The 33-credit requirement may be completed within one year.
- Students may pursue a wide range of disciplines.
- Students who have taken advantage of the six graduate credits opportunity in their senior year will need only 27 additional credits to obtain their master's degree.

Master of Education, General Special Education

- Students who hold a baccalaureate degree with a GPA of 3.0
 or higher may apply to the MEd program.
- Students in this full-time program have completed their undergraduate degree in a teacher certification program and have not yet begun their teaching career.
- Please see page 69 for more details.

General Financial Information

TUITION AND MANDATORY FEES

Tuition and mandatory fees are set by the University System of New Hampshire and are subject to change. The 2013–2014 graduate tuition and mandatory fee rates listed below are charged on a per-credit basis for in-state and out-of-state students.

Course Number	In-State	Out-of-State	Mandatory Fees
5000-6999	\$496	\$553	\$27
7000-7999	\$523	\$585	\$27
8000-8999	\$ 580	\$649	\$27

All students are required to pay the mandatory fees that cover such items as health services, student activities and organizations, the student union and recreation facilities, building maintenance and upkeep, and technical equipment in computer clusters, language labs, art facilities and labs.

COURSE REGISTRATION AND PAYMENT

There are a variety of options available for students to register for a graduate course. All registrations require full payment at the time of registration. Students are to register and pay for all courses, including independent studies, individual enrollments, practica, theses or master's research projects, and internships, prior to the beginning of studies. Students who have a financial hold on their account are not permitted to register for courses.

Students who have not been admitted into a graduate degree program may take up to 12 graduate credits. Once students have reached the 12-credit maximum, additional coursework cannot be pursued until admission has been granted. CAGS candidates may take one three-credit course before applying.

Term	Registration Begins (approximately)
Summer	April 15
Fall	July 15
Winter	September 15

Spring January 15

Registration forms can be mailed, faxed, or delivered in person to the College of Graduate Studies. Students who have an active myPlymouth account may register for courses online through the myPlymouth portal. Online registration is available during specific time frames. Registration forms outside of these time frames must be submitted to the College of Graduate Studies for processing.



Term Online Registration Availability (approximately)

Summer April 15–June 30 Fall July 15–August 31

Winter September 15–November 30 Spring January 15–February 28 (29)

METHODS OF PAYMENT

Payments must be made or guaranteed at the time of registration.

Out-of-Pocket Payments

Credit Card: Payments may be made using American Express, Discover, MasterCard, or Visa. Please Note: A non-refundable 2.75 percent service charge will be assessed on all credit/debit card transactions. Payments made via e-check will not be assessed a service charge. Contact Student Account Services for more information at (603) 535-2215 or e-mail: psu-studentaccount@plymouth.edu.

Check: Payment may be made with a personal check, cashier's check, or money order. A student ID number must be noted on the check or money order and attached to the registration form. Checks should be made payable to Plymouth State University.

Online Payments: Students can pay their bill online via e-check or credit card by clicking the "Pay Now" button located on their online bill in the myPlymouth portal.

Guaranteed Anticipated Payments

Financial Aid: Students must be matriculated (degree-seeking) and taking at least three credits of degree-required coursework to be eligible for financial aid. For more information, contact the Financial Aid Office at (603) 535-2338, (877) 846-5755, or visit plymouth.edu/finaid.

External (non-PSU) Scholarships and Awards: If students have received an external scholarship or award, a copy of the award letter must be submitted to the Student Account Services Office. The award letter must include the student ID number, the award amount to be paid and for which term, and the awarding organization's name and address. In order for the award to be considered as an authorized payment on the tuition bill account, the award must NOT be contingent upon grades, grade point average, course completion, or any other criteria prior to it being paid to PSU. If contingencies on the award exist, it cannot count as an anticipated payment toward the student's bill and the student will need to pay this award amount through some other means. If, later on, the student meets the required criteria and the award payment comes in, the student can be reimbursed for the overpayment.

Purchase Orders and Government Authorizations: If tuition is to be paid by an employer, a government agency, or any such third-party company, the student must submit a letter of authorization or a purchase order to the Student Account Services Office from their third-party payer. In order for this type of payment agreement to be considered an authorized payment on the tuition bill account, payment must NOT be contingent upon grades, grade point average, course completion, or any other criteria. Students must make sure their third-party authorization or purchase order (PO) includes their name, student ID number, the maximum billing amount, and the third-party company's name and address. If students fail to include any of this information, the authorization or PO will not be accepted and they will be required to pay their bill out-of-pocket. If all the necessary information is provided, the Student Account Services Office will invoice the third-party company for the authorized amount. Please note that if the company or agency has a policy to reimburse students for their course(s), students will be responsible for making the tuition payment themselves.

Internal Scholarships and Awards: If students receive internal assistance (e.g., graduate assistantship or mentor teacher waiver), the award letter or waiver form must be submitted to the College of Graduate Studies at the time of registration. If students are eligible for a staff tuition waiver, the USNH Tuition Benefit form must be submitted online through WISE at the time of registration.

NOTE: Federal financial aid regulations require that all resources that help fund educational expenses be reported. Receipt of educational resources, including those listed above and others such as GI Bill benefits, may impact financial aid award amounts.

Visit plymouth.edu/office/student-account-services for additional information about payment options.

Graduate Student Overdue Account and Collection Policy

Tuition and fees for graduate courses are to be paid at the time of course registration. Miscellaneous charges (e.g., library overdue fees, parking citation fees) are to be paid within 30 days from the date on which they were billed. If they are not paid in 30 days, a financial hold is placed on the account and the student will not be allowed to register for courses until the amount has been paid in full. This hold also prohibits students from receiving official transcripts, certification awards and statements, and degree conferral.

A monthly e-mail message is sent to students' PSU e-mail account with a reminder to check their myPlymouth account for new charges. Financial balances that are outstanding for more than 30 days will be assessed a 1.5 percent interest late fee until they are paid in full. Accounts that have outstanding balances from a previous term will be turned over for collection.

Statement of Financial Responsibility

By enrolling in classes at PSU, students accept full responsibility for tuition bill accounts and agree to pay all charges incurred as a result of their student status. Students also acknowledge that late fees will be assessed monthly for overdue balances and collection costs may be added to a student's account if the services of a collection agency are employed.

RESIDENCY STATUS

For the purpose of assessing tuition and fees, each student shall be classified as a New Hampshire resident or a Non-New Hampshire resident. A person shall be classified as a New Hampshire resident if he or she has resided in the state of New Hampshire for purposes other than attending an educational institution for 12 months immediately preceding the student's entry or re-entry. Physical presence for this entire 12-month period need not be required as long as the conduct of the individual, taken in total, manifests an intention to make New Hampshire the permanent dwelling place. Reside, residency, or resident shall refer to the domicile (i.e., a person's true, fixed, and permanent home, or place of habitation) where he or she intends to remain permanently.

The burden of proof rests on the student seeking classification as a New Hampshire resident. Any student who previously attended PSU, paid out-of-state tuition, and now claims New Hampshire residency should contact the Office of the Registrar to apply for resident status prior to registering for any coursework. Misrepresentation in, or omission from, any evidence submitted with respect to any fact, which if correctly or completely stated would be grounds to deny classification as a New Hampshire resident, shall be cause for exclusion or expulsion from, or other disciplinary action by, PSU.

Residency decisions made by the Office of the Registrar are based on information furnished on the student's application

and other supporting data. PSU reserves the right to make the final decision concerning residency status for tuition purposes.

In-State Residency

To qualify for in-state status, students must have been legally domiciled in New Hampshire continuously for a period of at least 12 months prior to registering for the term for which instate status is claimed.

Out-of-State Residency

Students admitted from states other than New Hampshire or from foreign countries are considered non-resident throughout their attendance at PSU, unless they have acquired a bona fide domicile in New Hampshire. The burden of proof in all cases concerning residency is on the applicant.

Establishing or Changing Residency

Graduate student residency status is determined at the time of admission to PSU and may be changed only by applying for reclassification. If the student is successful in his or her application for reclassification, the change will be effective at the beginning of the next term. Reclassifications do not occur mid-term and are not retroactive. Please contact the College of Graduate Studies for more information on establishing or changing your residency status.

FINANCIAL AID

Financial aid in the form of loans is intended to assist qualified students who are unable to meet their entire educational expenses from their own resources. Specific steps to apply for federal student loans are available at plymouth.edu/office/financial-aid/graduate-financial-aid/2012-2013-aid. Students must be degree-seeking to access federal loan programs. Nondegree certificate program students may be eligible to access non-federal loan programs.

Due to the Budget Control Act of 2011, beginning with the 2012–2013 aid year, graduate students are eligible only for Title IV Unsubsidized Federal Direct loan funds. The annual eligibility for a graduate student is based on the average cost of attendance and the actual number of enrollment periods a student plans to attend for that year. The cost of attendance is based on the number of credits taken and number of enrollment periods. The maximum annual Federal Direct loan amount available for a graduate student is \$20,500 (effective July 1, 2007). Limits apply based on eligible *program*. More information on eligible programs is available at plymouth.edu/graduate/admissions/financial-aid.

You will be charged interest from the time the loan is disbursed until it is paid in full. If you allow the interest to accrue (accumulate) while you're in school, or during other periods of nonpayment, it will be capitalized. This means the interest will be added to the principal amount of your loan at the time of repayment, and additional interest will be based on that higher amount.

DISBURSEMENTS: Graduate loan proceeds are disbursed by Student Account Services at the beginning of each enrollment period *AFTER* confirmation of course registration, number of credits and course start date.

More information on registration, cost per credit, refunds and billing may be found at the College of Graduate Studies website.

Graduate aggregate maximum Direct Loan limit is \$138,500. This aggregate graduate debt limit *also* includes federal student

This aggregate graduate debt limit *also* includes federal student loans received for undergraduate study.

ACCESS TO GRADUATE LOAN PROGRAMS BEGINS THE ENROLLMENT PERIOD AFTER A STUDENT'S ACCEPTANCE INTO THE COLLEGE OF GRADUATE

STUDIES. The following Steps provide guidance for processes required to access financial aid programs. Details for each step are provided below. Be sure to contact our Financial Aid Team should you have questions.

Federal Direct PLUS Loans

Graduate students may also be eligible to borrow under the Federal Direct PLUS Loan program up to PSU's cost of attendance (COA) minus other estimated financial assistance. A Graduate PLUS Loan Request form will need to be completed to request this loan. The request form and additional information about the process is available at plymouth.edu/office/financial-aid/graduate-financial-aid/2012-2013-aid.

All Direct PLUS applicants are required to complete the FAFSA at fafsa.ed.gov and must have applied for the maximum annual Federal Direct Loan eligibility before applying for a graduate Federal Direct PLUS Loan. There is a loan fee of 4+ percent of the principal amount charged for each Direct PLUS Loan. This fee helps reduce the cost of making these low-interest loans. The fee will be applied before students receive any loan money.

Repayment on the PLUS Loan begins 60 days after the loan is fully disbursed for an academic year. To request an in-school deferment, after the initial PLUS Loan disbursement, please contact Direct Loan Borrower Services at (800) 848-0947.

Deferment needs to be requested on an annual basis. An in-school deferment will delay payments on the PLUS Loan until six months after a student ceases to be enrolled at least half-time. Interest will continue to accrue on this loan during the deferment period. Therefore, it is recommended that interest payments are made during this deferment period if at all possible.

Financial aid eligibility begins the enrollment period immediately following acceptance into the College of Graduate Studies.

Students applying for federal loans must visit the PSU Financial Aid website at plymouth.edu/office/financial-aid/graduate-financial-aid/2012-2013-aid.

Two required steps are:

- I. A Free Application for Federal Student Aid (FAFSA) must be completed annually at fafsa.ed.gov. Students will need to file their FAFSA at least one month prior to the term for which financial aid is needed. Students will also need to be admitted to a degree or eligible certificate program before a financial aid application will be processed.
- 2. A Graduate Student Enrollment Status form must be completed annually to provide the number of credits being taken during each enrollment period. If this enrollment information changes during the academic year, written communications of these changes must be submitted to the Financial Aid Team so the student's Federal Direct Loan eligibility can be reviewed and adjusted, if necessary.

PSU will identify Federal Direct Loan eligibility upon receipt of the FAFSA (received from the federal processor) and the Graduate Student Enrollment Status form.

Once Federal Direct Loan eligibility is identified, two additional steps will be required:

- Entrance Loan Counseling session as required by the Department of Education. This requirement is only needed once; therefore, if the form has been previously completed, an additional one is not necessary.
- 2. Master Promissory Note (MPN). This requirement is only needed once if an MPN has been completed and loans have been received on a continuous basis. If there has been a break in enrollment, another MPN may be required and will be identified on your BANNER Requirements screen if needed.

Once term charges are billed by Student Account Services, loan proceeds will be credited to the student's account at the beginning of each enrollment period *AFTER* confirmation of course registration, number of credits and course start date.

All refunds are disbursed by Student Account Services.

The federal government's academic year for aid eligibility begins July 1 and ends June 30.

Course Begins Suggested FAFSA Filing Date

Summer (July or August)
Fall (September through November)
Winter (December through February)
Spring (March through June)
June 1
August 1
November 1
February 1

The Financial Aid Team determines eligibility annually based upon cost of attendance for that year (July I through June 30).

The cost of attendance is determined, in part, by the number of credits applicants have projected for each graduate term and includes average tuition, fees, books, supplies, and living expenses for periods of enrollment. Federal Direct Loan eligibility may increase or decrease depending on any credit load

changes. In an attempt to avoid potential reductions, please provide conservative projections for credits and courses per graduate term and notify the Financial Aid Team of any enrollment changes.

Other Financial Aid Recipient Responsibilities

- Notification of Withdrawal: Students must inform the Financial Aid Team, their instructors, and their graduate program advisors of any course or program withdrawals or changes.
- Loan Disbursements: Loans are held and disbursed by graduate term. The release of a loan for disbursement will be the latter of the official start of the semester or the actual start date of a three-credit course.

Loan disbursement is contingent upon registration, having the proper number of credits, and contacting the graduate program advisor at the beginning of each term. To avoid holdups with loan disbursements, students must notify the Financial Aid Team of any enrollment changes after submitting their Graduate Student Enrollment Status Form.

Standards of Satisfactory Academic Progress (SAP) for Graduate and Post-Graduate Degree Seeking Students

The Education Amendments of 1976 require that institutions limit federal financial assistance to those students who, according to institutional standards, are in good standing and making satisfactory progress (qualitative). At PSU, students must be in good academic standing and be making satisfactory academic progress in order to be eligible for financial assistance.

All graduate degree candidates must maintain academic standing consistent with the College of Graduate Studies program requirements of a 3.0 cumulative grade point average required for graduation. Continuing students' quantitative progress (earned credits) will be reviewed once per year prior to the award or disbursement of financial aid for the next academic year. Readmitted students' quantitative progress will be reviewed at the point of re-entry.

Satisfactory Academic Progress (SAP) for graduate students requires that graduate students progress by earning at least 75 percent of the credits for which they enroll each year (between July I and June 30), and that they earn these credits toward their degree or certification program. The number of enrolled credits also includes withdrawn courses.

Students who are not successfully completing courses at the minimum levels are not considered to be making satisfactory academic progress, and will not receive further financial aid until satisfactory progress status is achieved. Students will be informed by a letter from the Financial Aid Office regarding non-eligibility status for financial aid. If the ineligible student does not appeal, reinstatement for financial aid consideration will occur when the student attains the necessary credits.

Special Note: Due to timing, some students may be identified as NOT making satisfactory academic progress as a result of grades being unavailable by the start of a new term. Students may submit their grades directly to the Financial Aid Team; however, until these grades are received and SAP is reviewed, federal aid cannot be processed.

If a student feels there have been mitigating circumstances that have prevented satisfactory progress, a letter of appeal can be presented to the financial aid committee for review. At the time of review, the student will either be allowed to continue federal financial aid eligibility (normally based on mitigating circumstances) or notified that they are ineligible for additional federal assistance. If the student's appeal is denied, the associate director of Financial Aid will explain how eligibility may be restored. Failure to regain satisfactory progress status will result in the loss of all federal, state, and University aid, including grants, scholarships, and loans.

Return of Federal Title IV Financial Aid

If a student receives federal financial aid and withdraws or stops participating in their coursework within 60 percent of the enrollment period, a portion of the awarded federal aid must be returned. The amount to be returned is calculated by the Student Account Services Office and Financial Aid Team, normally within 30 days of the withdrawal date determination. The calculation may result in the student owing a balance to PSU or the Federal Direct Loan Program or both. Sample Return of Title IV Fund worksheets are available at the Financial Aid Office.

Other Assistance

Many students in the Master of Science degree programs have the option of receiving grant funding to support their studies. The student's program advisor will provide the details of grant funding for stipends and tuition payment.

SCHOLARSHIPS

The College of Graduate Studies annually awards a limited number of graduate scholarships. Applicants should complete a Graduate Scholarship Application, available at plymouth.edu/graduate/academics/forms.

Applications for graduate scholarships should be returned to the College of Graduate Studies by April 1 for the upcoming academic year. Each recipient is asked to confirm acceptance of an award in writing. Awards are made as soon as possible after June 1. It is beneficial to submit applications early.

General Scholarships: Please visit plymouth.edu/graduate /admissions/scholarships for more information on graduate scholarships.

Dennise Maslakowski Graduate Education Scholarship Fund

The purpose of the Dennise Maslakowski Graduate Education Scholarship Fund is to honor Dr. Maslakowski's commitment to teaching and to the development of talented and motivated teachers by providing a scholarship to a deserving New Hampshire resident enrolled in a graduate program in education. The recipient should be striving to reach his or her full potential as a teacher, and should demonstrate exceptional character in pursuing this goal. The recipient will be selected by faculty and staff of PSU's College of Graduate Studies.

The Artelia and Olan Ray Historic Preservation Graduate Scholarship Fund

The fund was established to provide financial assistance to a returning student who may be re-training or entering the Historic Preservation Certificate Program to augment or redirect his or her career path. Scholarship applicants should be post-baccalaureate, currently enrolled in a master's program or already have a master's degree, and seeking a Certificate in Historic Preservation.

GRADUATE ASSISTANTSHIPS

Graduate assistants are an important part of Plymouth State's collaborative learning community. They work alongside faculty, staff, and students to help achieve the University's goals, while gaining valuable experience as assistants, researchers, and teachers.

Graduate assistantships are available on a limited basis to highly qualified graduate students who have been fully accepted into a graduate program at Plymouth State. Applications for assistantships should be submitted to the College of Graduate Studies by April I for the upcoming year. The application is available online at plymouth.edu/graduate/academics/forms.

Students admitted to the advanced athletic training programs may be eligible for a limited number of athletic training graduate assistantships. Advanced Athletic Training students should review plymouth.edu/graduate/admissions/assistantships/athletic-training for athletic training assistantship and application information as the application and deadline are different than the general assistantship application.

The Master of Science programs (Biology, Applied Meteorology, and Environmental Science and Policy) award a limited number of research assistantships that are grant funded. Students who are awarded a research grant assist faculty members with research that often informs and complements student thesis and professional work. Students in the science programs should consult with their program advisor to learn about research assistantships.

Admission

The admissions review board carefully considers applicants' academic record, essay, recommendation letters, scores on appropriate standardized tests, and other factors that reflect students' academic potential and motivation, as well as their preparation for the specific program to which the candidates have applied.

In addition to having a baccalaureate degree from an accredited institution of higher education, graduate applicants must also meet appropriate academic department criteria to be eligible for admission. Students should consult with program coordinators or advisors about specific admissions requirements.

The College of Graduate Studies considers applications on a rolling admission basis.* Students may apply at any time of the year and may take up to 12 graduate credits before being officially admitted into a master's degree program.

* Exceptions include the master's programs in Athletic Training and Applied Meteorology and the doctoral program (EdD).

ADMISSION STATUS

Students who have applied to the program may be admitted, admitted pending completion of necessary requirements or denied admission. Students must meet all requirements associated with their offer of admission in order to be fully endorsed in the specific program to which they are applying. Successful applicants will receive a letter detailing the status of their admittance.

APPLICATION PROCESS

Completed applications and a non-refundable application fee must be submitted to the College of Graduate Studies. Applicants are strongly encouraged to apply online. A completed application includes the following:

- A completed, signed, and dated application for admission. Note: EdD candidates must submit the online application.
- Official transcripts verifying that a baccalaureate degree was completed. In addition, include transcripts from any other college(s) or universities attended. All transcripts must be sent directly from the institutions to the College of Graduate Studies.
- Official score report from the Graduate Record Examination (MA in Historic Preservation and MS candidates in Applied Meteorology, Biology, and Environmental Science and Policy). Educator certification candidates who do not already hold a master's degree or are not pursuing a master's degree at PSU must submit passing scores for the Praxis I exam.

Applicants who already hold a graduate-level degree do not need to submit test scores. Admissions tests are not required for MA in Personal and Organizational Wellness, MAT, MBA, MEd, MS in Athletic Training, MS in Clinical Mental Health Counseling, MS in Science Education, CAGS, and EdD applicants.

- A statement of interests and intent. CAGS and EdD applicants must also submit a professional writing sample.
- A professional résumé or curriculum vitae.
- Three recommendations from past or current supervisors, professors, or colleagues. All recommendations not completed online should be mailed directly to the College of Graduate Studies by the individuals providing the recommendation.
- A notarized New Hampshire Residency Confirmation Form (Non-NH residents do not need to complete this form).
- A nonrefundable application fee: CAGS and EdD applicants, \$100; master's and certification applicants, \$75.
- A photocopy of alien registration card, if applicable.
- Certain degrees have additional admissions requirements or program prerequisites. Please visit plymouth.edu/graduate /admissions/requirements for further information.
- Counselor Education, MA, CAGS, and EdD candidates must arrange an admissions interview with the respective program coordinator. Call (603) 535-2636 to schedule an interview.

Additional Requirements for International Students

International students who intend to study in the United States and who do not possess a permanent visa with an Alien Registration number must submit the following documents:

Verification of finances. Documents, including bank statements and other financial records dated within the past 30 days, that confirm that you have the financial resources to study for a year at Plymouth State, and/or an I-134 Affidavit of Financial Support form must be submitted to the College of Graduate Studies. Applicants must also complete and have notarized the Plymouth State University International Graduate Student Certification of Finances form. Plymouth State will issue a Certificate of Eligibility (I-20) based upon documented evidence that funds exist to cover your expenses for one academic year. Regulations limit the employment of non-immigrant international students and their families; therefore, employment cannot be considered as a means of support while you are enrolled at Plymouth State. Visit plymouth.edu/graduate/admissions/requirements/international-students for links to the forms mentioned above.

27 ADMISSION

Proof of English language proficiency. If you're from a
country where English is not the primary language, you
must provide evidence of English proficiency. The University
accepts the following methods of proving English language
proficiency: Test of English as a Foreign Language (TOEFL)
scores (minimum scores: 550 paper-based; 213 computerbased; 80 internet-based), International English Language
Testing System (IELTS) scores (minimum score: 6.5),
and ELS Level 112 scores. IELTS scores not accepted for
Language Education applicants.

- Educational documents. Official, notarized transcripts, translated into English and evaluated for institutional equivalency, verifying that a baccalaureate, master's degree, or both were completed.
- **Visa related documents.** A copy of most recent I-20, if applicable. A copy of most recent I-94, if applicable.
- Passport. A copy of a valid passport.

All applications for admission become part of PSU's permanent records and will not be returned. Access to this material is limited under the Family Educational Rights and Privacy Act (FERPA) of 1974. Materials received as part of the application process will not be duplicated for personal use by the applicant nor forwarded to a third party. Please note: PSU is not obligated to accept more than 12 credits taken at PSU prior to admittance into a degree program. Courses older than six years at the time of admittance may not be counted toward a degree.

Certification Programs, Educator and Specialist

Plymouth State University offers teacher certification endorsement in the areas of K-8, secondary (5–12 or 7–12), and K-12 through the educator and specialist certification programs.

- Educator certification programs require a minimum of a bachelor's degree and can be done separately or in conjunction with a master's degree.
- Specialist certification programs can be done separately
 or in conjunction with a master's degree or a Certificate of
 Advanced Graduate Studies (CAGS). The Specialist certification endorsement, however, requires a master's degree or
 higher at the time of completion.

Beginning as early as the first year, teacher education candidates have many opportunities to teach and learn in public elementary, middle, and high school settings. This experience culminates in an intensive internship or practicum in the area of certification.

PSU's educator and specialist certification programs are approved by the New Hampshire Department of Education and accredited by the National Council for Accreditation of Teacher Education (NCATE). The University is a member of the American Association of Colleges for Teacher Education (AACTE).

Educator and specialist certification program graduates are eligible for recommendation to become a New Hampshire Department of Education certified teacher. Since New Hampshire is a member of the Interstate Certification Compact, PSU graduates are also eligible to transfer their New Hampshire certification to most states by applying to the respective state's Department of Education.

Students typically complete certification requirements over a two- or three-year period; the requirements may be completed in less time depending on a student's previous academic preparation and the number of courses taken per term. Students meet with assigned advisors as they enter the program and on a regular basis to review progress toward their certification requirements. A program of study, which may consist of undergraduate as well as graduate courses, will be outlined by the advisor with the student. Students with degrees in areas other than education may be required to take additional courses to meet certification competencies, as described by the state of New Hampshire.

All teacher certification candidates who interact with students in public school settings through course-related field experience are subject to New Hampshire state legislation that requires them to undergo a full disclosure criminal records check which



may include fingerprinting. The processing of the criminal records check is conducted at the site school before the field experience begins. The fee for this processing is the responsibility of the teacher candidate and is paid directly to the school district. Questions regarding the criminal records check should be directed to the Graduate Certification Coordinator.

Diversity Goals for Certification Candidates

In order to teach effectively and ensure student learning in a democratic and pluralistic society, each teacher certification candidate at PSU, by the conclusion of his or her program, will have developed the ability to describe culture as a multifaceted and dynamic construct; critically examine his or her own sociocultural positions and understand the ways in which background and experiences shape one's view of the world; learn from and about students, families, and communities, and draw on this knowledge to inform instruction; view students and families of diverse backgrounds and abilities in respectful and affirming ways; acquire and extend his or her own multicultural awareness by exploring and learning about the history, experiences, beliefs, and values of others; recognize and challenge biases in him or herself and others, as well as institutional oppression in schools and throughout society; and implement inclusive, culturally responsive teaching practices.

Educator Certification Concentrations (Post-Baccalaureate)

Art Education, K-12

Education Technology Integrator, K-12 (also dual certification option, see MEd in Library Media chapter)

Elementary Education, K-8

English Education, 5–12

French Education, K-12

General Special Education, K-12

Health Education, K-12

Library Media Specialist, K-12 (also dual certification option, see MEd in Library Media chapter)

Life Sciences, 7–12
Mathematics, 5-8 and 7–12
Middle Level Science, 5–9
Physical Education, K–12
Reading and Writing Teacher, K–12 (see information below)
Social Studies Education, 5–12
Spanish Education, K–12
Teaching English to Speakers of Other Languages (TESOL), K–12

Specialist Certification Concentrations (Post-Master's)

Curriculum Administrator, K–12 Reading and Writing Specialist, K–12 School Counselor, K–12 School Principal, K–12 School Psychologist, K–12 Special Education Administrator, K–12 Superintendent (CAGS required), K–12

Certification Policies

For students interested in PSU's Educator Certification programs who do not possess a master's degree, acceptance into the educator certification program requires the submission of passing scores on the PRAXIS I basic skills test in reading, writing, and mathematics. The NH Board of Education determines passing scores. Additional testing for content knowledge (PRAXIS II) in most concentrations is required for New Hampshire certification as well.

Prior to their culminating experience, students must file paperwork to initiate the Internship or Practicum process, and to confirm their placement(s). Paperwork should be filed at least one term prior to the anticipated term of the experience. The criteria for admission and monitoring throughout the student's certification program will focus on academic achievement and dispositions. Continual assessment of a student's specific strengths and limitations in these areas will be used to determine continuation in, or removal from, the certification program and the readiness to enter the profession. (See the New Hampshire Department of Education regulations, Ed 604 Admission, Retention, and Evaluation Policies and Practices in Standards and Procedures for Approving Professional Preparation Programs in New Hampshire)

Those students interested in the educator certification concentration programs not seeking a master's degree must hold at least a baccalaureate degree in order to qualify for admission. A minimum of six credits in the content area must be taken with PSU faculty members to ensure that the University is satisfied with the content area achievement. Should the student not meet the competencies as set forth by the NH Department of Education they may be required to take additional course work. All students must complete a culminating experience in New Hampshire under the supervision of their PSU's faculty. The specific culminating experience will be discussed in advance with the student's advisor and the Graduate Certification Coordinator.

The culminating field experience for a single-level endorsement (K–8, 5–9, 7–12) is typically 12 weeks. The culminating field experience for K–12 certification is typically two eight-week experiences (one at the primary level and one at the secondary level).

As they near completion of their program, students must file a petition to graduate or a petition for certification. This initiates the audit and certification process. Upon a successful transcript audit a graduate is recommended to the NH DOE for endorsement in their certification concentration. An e-mail with NH DOE certification information is sent to the student once recommended with information on how to complete the certification with the NH DOE.

Road to Teacher Certification

The term "gate" is commonly used by NCATE accredited colleges and universities to describe their decision points in their candidate and unit assessment systems. A gate is a level of attainment that clearly communicates how far the candidate has progressed on the road to certification.

Gate 1:	Teacher certification candidacy
Gate 2:	Application to culminating experience
Gate 3:	Culminating experience and program completion
Gate 4:	Recommendation to the NH DOE for certification

Reading and Writing Teacher

The K–12 Reading and Writing Teacher certification is only available as an educator certification endorsement. Students in this program must be certified teachers.

Program of Study

REQUIRED COURSES		CREDITS
Learning Th	eory Component	
ED 5270	Foundations of Teaching	3
ED 5060	Theories of Learning and Cognitive Development	3
ED 5080	Instructional Strategies and Curriculum Design	3
SE 5400	Classroom Intervention and Special Ed Strategies	3
Specializatio	n Component	
RL 5110	Research in Reading and Writing	3
RL 5170	Content Area Literacy	3
RL 5770	Developing Language and Literacy for Diverse	
	Learners	3
RL 5014	Reading, Writing, and Literature	
RL 5710	Advanced Diagnostic Testing and the	
	Improvement of Reading and Writing	3
CE 5120	Integration of Digital Technology into the	
	Common Core Standards	3
or		
CE 5150	Inspiring Digital Media Fluency in the K–12	
	Classroom	3
LL 5004	Language and Linguistics	3
Capstone Ex	perience	
RL 5822	Reading and Writing Practicum	2

Total for Reading and Writing Teacher Certification, K-12

35

Master of Arts

MA in HISTORIC PRESERVATION

Program Coordinator: Stacey Yap, PhD (603) 535-2333, e-mail: staceyy@plymouth.edu

The MA in Historic Preservation is a 33-credit program that offers a thesis or graduate practicum option. The main program objectives are (1) To develop fundamental understanding of historic preservation issues and opportunities that promote the protection of historic and cultural resources; (2) To provide individuals with strong organizational, practical and administrative skills for careers in historic preservation, heritage tourism and/or heritage resource management; (3) To build skills in stewardship and leadership for individuals working in community preservation organizations and/or government agencies and commissions.

Admission Requirements

Qualified candidates must possess a baccalaureate degree with a 3.0 or higher grade point average; have applied and been accepted to Plymouth State University; submit GRE (Graduate Record Exam) scores, and complete an interview with the program coordinator.

Program of Study

REQUIRED COURSES		CREDITS
Historic Pres	servation Component	
HPR 5100	Principles of Historic Preservation	3
HPR 5120	American Architectural History	3
HPR 5200	Rural Cultural Environment: Architecture and	
	Landscape	3
or		
HI 5330	NH and New England Historic Sites	4
HPR 5300	Preservation Methods and Documentation	3
HPR 5310	Historic Methods and Materials of Construction	3
HPR 5320	Building Investigation and Evaluation	3
Elective Com	ponent	
For Thesis option, choose 9 credits from the list below.		
For Practicum ontion choose to credits from the list below		

For Practicum option, choose 12 credits from the list below.

HPR 5400	Preservation Planning and Management	3
HPR 5500	Cultural Property Law	3
HPR 5600	Archaeological Methods	3
HPR 5700	Sustainability and Historic Preservation	3
HPR 5560	Special Topics in Historic Preservation	1-3
HPR 5910	Independent Study in Historic Preservation	1-3
Capstone Ex	perience	
HPR 5950	Thesis Research	6
or		
HPR 5210	Graduate Practicum	3
Minimum Total for MA in Historic Preservation		33

GRADUATE CERTIFICATE

Historic Preservation Certificate

Program of Study

REQUIRED COURSES CRED		EDITS
Historic Pres	servation Component	
HPR 5100	Principles of Historic Preservation	3
or		
HS 5100	Heritage Studies: Foundations	3
HPR 5200	Rural Cultural Environment: Architecture and	3
	Landscape	
or		
HI 5330	New Hampshire and New England: Historical Sites	4
Elective Com	ponent (Choose two)	
HPR 5120	American Architectural History	3
HPR 5300	Historical Preservation Methods and	3
	Documentation	
HPR 5310	Historic Methods and Materials of Construction	3
HPR 5400	Historic Preservation Planning and Management	3
HPR 5500	Cultural Property Law	3
HPR 5600	Archaeological Methods	3
HPR 5700	Sustainability and Historic Preservation	3
Minimum Total for Historic Preservation Certificate		

MA in PERSONAL AND ORGANIZATIONAL WELLNESS

Program Coordinator: Nancy Puglisi, PhD (603) 535-3119, e-mail: npuglisi@plymouth.edu

The Master of Arts in Personal and Organizational Wellness provides adult learners with an opportunity for personal, intellectual, and professional growth and development through a program of study based in a holistic perspective of the human experience. The concepts and applications of good intention, open mind and compassionate heart provide the foundations for course work. Personal and/or organizational applications of transpersonal and global awareness will be explored and developed in a rigorous academic context. Learners are provided with intensive, community-based experiential learning opportunities and a contemplative approach for examining the paradigms of personal and organizational transformation and healing. This program is appropriate for growth-oriented individuals, professionals from business, government, and social services, allied health, education, science, and those in leadership roles.

The MA in Personal and Organizational Wellness has two concentrations, Organizational Approaches to Transformation and Healing (OATH) and Personal Approaches to Transformation and Healing (PATH).

Organizational Approaches to Transformation and Healing (OATH) Concentration

Program of Study

REQUIRED COURSES

Personal and	l Organizational Wellness Component	
OH 5180	Exploring Personal and Organizational Health	3
HH 5570	Mindfulness Meditation: Theory and Practice	3
HH 5590	Transpersonal Psychology	3
HH 5630	Transformational Inquiry and Research	3
OATH Com	ponent	
OH 5100	Full Spectrum Leadership	3
or		
OH 5820	Women as Leaders	3
OH 5400	Evolutionary Change for a Sustainable Future	3
OH 5200	Creating Socially Responsible Organizations	3
OH 5300	Work as a Personal Journey	3

Elective Component (6 credits, choose with advisor)

Capstone Exp	perience	
ED 6900	Graduate Capstone Project	3

Total for MA in Personal and Organizational Wellness, OATH Concentration

Personal Approaches to Transformation and Healing (PATH) Concentration

Program of Study

REQUIRED COURSES

Personal an	d Organizational Wellness Component	
HH 5180	Exploring Personal and Organizational Health	3
HH 5570	Mindfulness Meditation: Theory and Practice	3
HH 5590	Transpersonal Psychology	3
HH 5630	Transformational Inquiry and Research	3
PATH Com	•	
_	Spiritual Health	3
HH 5610	Circle of Life: Living and Dying Well	3
HH 5600	Energy, Body and Health	3
Elective Component (9 credits, choose with advisor)		
Capstone Ex	xperience	
ED 6900	Graduate Capstone Project	3
Total for MA in Personal and Organizational Wellness, PATH Concentration		33

GRADUATE CERTIFICATES

Organizational Approaches to Transformation and Healing (OATH) Certificate

This 18-credit graduate certificate program is offered by the PATH Institute at PSU. The program challenges traditional models and examines the implications of emerging paradigms for organizational health. Students will explore ways to transform the work environment through the integration of holistic approaches to leadership, interpersonal relationships, social responsibility, and self-reflection. Emphasis will be placed on cultivating the qualities of a compassionate heart, an open mind, and good intention. Through an examination of personal, organizational, and global contexts, students will develop as agents of change in work environments.

Program of Study

33

REQUIRED COURSES		CREDITS
OH 5180	Exploring Personal and Organizational Health	3
HH 5590	Transpersonal Psychology	3
HH 5570	Mindfulness Meditation: Theory and Practice	3
OH 5400	Evolutionary Change for a Sustainable Future	3
OH 5200	Creating socially Responsible Organizations	3
OH 5300	Work as a Personal Journey	3
Total for OATH Certificate		18

Personal Approaches to Transformation and Healing (PATH) Institute Certificate

The Personal Approaches to Transformation and Healing (PATH) Institute Certificate provides experiential, academic opportunities to study integrative health and healing concepts. Based on the growing awareness of mind, body, and spirit interactions in holistic healing and wellness, this program builds on the movement that influenced Congress in 1992 to establish what is now the Center for Complementary and Alternative Medicine within the National Institutes of Health.

The PATH Institute is an 18-credit graduate certificate program that focuses on alternative health and healing modalities. In three-day residential seminars, the PATH Institute allows students to examine concepts of health that consider the whole person—physical, environmental, emotional, mental, social, and spiritual; investigate the difference between healing and curing, and the interface of alternative and conventional approaches to health and healing; learn in a safe and healing environment surrounded by the natural world and supported by health promoting activities; participate in the dynamic exchange of student perspectives; and collaborate on individual and small group exercises and projects.

This instructional model invites strong interactive relationships between students and faculty, and encourages deep personal reflection and learning. Students will prepare before class sessions and complete individual assignments during and after the residential weekends.

Program of Study

REQUIRED COURSES		CREDITS
HH 5180	Exploring Personal and Organizational Health	3
HH 5570	Mindfulness Meditation: Theory and Practice	3
HH 5590	Transpersonal Psychology	3
HH 5600	Energy, Body and Health	3
HH 5610	Circle of Life: Living and Dying Well	3
HH 5620	Spiritual Health	3
Total for PATH Institute Certificate		18

Master of Arts in Teaching

MAT in ART EDUCATION

Program Coordinator: Jason Swift, EdD (603) 535-2201, e-mail: jaswift2@plymouth.edu

The MAT in Art Education has two concentrations. The fifth-year concentration is an extension of the PSU BFA degree. The certification concentration is for adult students who possess a baccalaureate degree in fine arts, visual arts, studio art, or graphic design, and want to gain K–12 Art Education Certification endorsement.

The fifth-year MAT consists of 36 graduate credits. The capstone experience integrates coursework, prior experience, and research. The 36 credits are based on students fulfilling nine credits of art education within their BFA degree: Foundations of Art Education, Methods and Materials in Art Education, Instructional Planning and Pedagogy in Arts Education, and Curriculum Assessment in Art Education. If not completed, additional coursework in art education will be required to fulfill these equivalencies.

The K–12 certification concentration requires the 36-credit core. Students in this concentration are required to take the equivalent of four professional art education courses: Foundations of Art Education, Methods and Materials in Art Education, Instructional Planning and Pedagogy in Arts Education, and Curriculum and Assessment in Art Education. Individual cases will be reviewed to determine studio and art history preparation relative to certification competencies. Additional coursework may be required.

Program Objectives

The MAT in Art Education addresses the following NCATE art education competencies, which ensure that as a result of successfully completing the program, students will:

- acquire knowledge, understanding, and appreciation of the visual arts in diverse contemporary and past cultures;
- have knowledge of and competence to teach a variety of studio art forms including drawing, painting, printmaking, ceramics, sculpture, and crafts:
- develop a portfolio of personal art work and exhibit selected art works in accordance with professional artistic and technical standards;
- complete a supervised observation and internship with pupils of both elementary and secondary levels;
- have a knowledge of comprehensive programs of visual arts education; procedures for organizing, promoting, and managing a comprehensive visual arts education program; and the selection and organization of visual arts learning experiences and curriculum development in visual arts education;
- have a knowledge of diverse technical and skill-related aspects of visual arts education including diverse mediums and the related techniques for working with them; the elements and principles of the visual arts; display and exhibition design; tool appropriateness, function, and use; and visual arts vocabulary;
- develop an appreciation of the other arts including dance, film, music, literature, theatre, and practical arts;

- have awareness, comprehension, and ability to describe, analyze, interpret, and evaluate works of visual art;
- have knowledge and understanding of the technical and safety aspects of methods and materials used in visual arts instruction.

These objectives meet all of the New Hampshire state-mandated competencies in art education that address dispositions, pedagogy, curriculum and assessment, and art content.

Admission Requirements

Qualified candidates must possess a baccalaureate degree with a 3.0 or higher grade point average; have applied and been accepted to the College of Graduate Studies; be subjected to a portfolio review by the art education program coordinator; and have achieved passing scores in the Praxis I exam (only if the student anticipates that certification will need to be awarded prior to being conferred the MAT in Art Education).

K-12 Art Education Certification

Program of Study

Education Certification

i logiulli o	j Study	
REQUIRED CO	DURSES	CREDITS
Master's Co	ore Component	
ED 5000 or	Social Behavior in a Diverse Society	3
ED 5005	Social Psychology and Mythology Across Culture	s 3
ED 5010	Philosophy, Ethics, and Education	3
ED 5180 or	Collaborative Action Research	3
ED 5030	Research Design	3
Learning T	heory Component	
ED 5060	Theories of Learning and Cognitive Developmen	t 3
ED 5270	Foundations of Teaching	3
SE 5400	Classroom Interventions and Special Education	
	Strategies	3
Content Ar	ea Component	
Choose 9 c	redits from the following	
AE 5560	Special Topics in Art Education	1-3
AR 5300	The Arts in Society	3
AR 5560	Special Topics: Arts in Education Summer Institu	
AR 5560	Special Topics: Studio Art	3
AR 5910	Independent Study: Studio	1-3
IN 5560	Special Topics in Integrated Arts	1-4
IN 5970	Integrating the Arts	3
Professiona	al Competencies (if not previously met)	
AE 5050	Elementary Methods and Materials in Art Educat	ion 3
AE 5060	Pedagogy and Planning in Secondary Level Art	3
	Education	
AE 5700 or	Curriculum Development and Assessment in the	Arts 3
AR 5560	Special Topics: Curriculum and Assessment in	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Art Education	3
Capstone E	xperience	
AE 5410	Art Education Student Teaching K-12	9
Minimum	Total for MAT in Art Education, K–12 Art	
F1	•	

36

MAT in SCIENCE EDUCATION

Program Coordinator: Mary Ann McGarry, EdD (603) 535-3209, e-mail: mmcgarry@plymouth.edu

The MAT in Science Education is designed to promote science learning for teachers through the use of innovative teaching methods in the classroom, laboratory, and field, and authentic assessment strategies that are applicable to the classroom. The program is based on the research, goals, vision, and best practices derived from the science education community.

Students may enroll in one of two concentrations: 5-9 Middle Level Science Certification and 7–12 Life Sciences Education Certification. The program provides the opportunity for a beginning teacher to gain the knowledge and skills necessary to make informed decisions about the development, implementation, and assessment of meaningful science programs in school districts. These efforts will ensure that science teachers will develop into effective classroom teachers and be prepared according to the National Science Education Standards and the National Science Teachers Association Standards for Science Teacher Preparation. This program is intended for individuals holding a degree in a science field, but not yet certified, or for individuals making a career change from a science-related field.

Program Objectives

The general objectives of the MAT in Science Education programs are to:

- · introduce and update the student's knowledge about current issues and best practices in science teaching, learning, and assessment in classroom and laboratory settings based on national and local school data;
- introduce and develop the student's understanding and application of national and state science education standards to classroom science teaching and learning;
- provide formal and informal educational experiences for the student with middle and high school students;
- provide a pathway for students to obtain certification as a science teacher.

5-9 Middle Level Science Education Certification

This certification requires the completion of approximately 43 credits of undergraduate coursework in various areas, such as mathematics, biology, chemistry, earth science, astronomy, oceanography, meteorology, physical science, laboratory safety, and the history and philosophy of science. The program coordinator will review transcripts and previous coursework to determine if there are any deficiencies that need to be satisfied.

Program of Study

REQUIRED CO	URSES	CREDITS
The Learner	and Learning Component	
ED 5060	Theories of Learning and Cognitive Development	3
SE 5400	Classroom Interventions and Special Education	
	Strategies	3
Content Knowledge Component (minimum of 9 credits required)		
NS 5200	Action Research in the Science Classroom	3
	Science Electives	6

Instructional	Practice Component	
ED 5270	Foundations of Teaching	3
NS 5700	Science Teaching in the Middle and High School	3
NS 5800	Seminar: Current Issues in Science Education	3
ED 5140 or	Assessment Principles and Practices	3
ED 6100	Curriculum Integration and Performance	
	Based Assessment	3
Professional	Responsibility Component	
ED 5010	Philosophy, Ethics, and Education	3
Capstone Exp	perience* (to be determined by advisor)	
ED 5960 or	Internship in Teacher Education	9
ED 5210	Graduate Practicum	6
*Passing PRA	XXIS II scores required before starting capstone experien	ce
Total for MA	T in Science Education, 5–9 Middle Level	
Science Educ	cation Certification Concentration	36-39

7-12 Life Sciences Education Certification

This certification requires the completion of approximately 45 credits of undergraduate coursework in various areas, such as biology, human anatomy and physiology, invertebrate or vertebrate zoology, plant morphology or botany of vascular plants, biochemistry, microbiology, genetics, evolution, ecology, and laboratory safety. The program coordinator will review transcripts and previous coursework to determine if there are any deficiencies that need to be satisfied.

Program of Study

rogram of Study			
REQUIRED CO	URSES CRI	EDITS	
The Learner	and Learning Component		
ED 5060	Theories of Learning and Cognitive Development	3	
SE 5400	Classroom Intervention & Special Education		
	Strategies	3	
Content Kno	owledge Component (minimum of 9 credits required)		
NS 5200	Action Research in the Science Classroom	3	
)=	Science Electives	6	
Instructiona	l Practice Component		
ED 5270	Foundations of Teaching	3	
NS 5700	Science Teaching in the Middle and High School	3	
NS 5800	Seminar: Current Issues in Science Education	3	
ED 5140	Assessment Principles and Practices	3	
or			
ED 6100	Curriculum Integration and Performance		
	Based Assessment	3	
Professional	Responsibility Component		
ED 5010	Philosophy, Ethics and Education	3	
Capstone Experience* (to be determined by advisor)			
ED 5960 or	Internship in Teacher Education	9	
ED 5210	Graduate Practicum	6	
*Passing PRAXIS II scores required before starting capstone experience			

Total for MAT in Science Education, 7-12 Life Sciences

Certification Concentration

36-39

Master of Business Administration

MBA in GENERAL MANAGEMENT

Director of Graduate Business Programs: Jennifer Pinckney, MBA (603) 535-3020, e-mail: jmpinckney@plymouth.edu

Program Objectives

Plymouth State University offers MBA program sequences for students who hold a baccalaureate degree and would like to gain an in-depth understanding of business concepts from different areas of the business world. The MBA program is a stepping stone to higher levels of personal and intellectual growth. Building on a firm base of business knowledge, the program extends and refines a student's business proficiency through a series of theoretical and substantive courses. Working with faculty members who have real-world experience in business, industry, and government, students can tailor their program by selecting courses from a wide variety of business and business-related electives.

The MBA program offers custom-designed course sequences to meet career objectives. Degree candidates also have the opportunity to participate in hands-on learning experiences such as those offered by the award-winning Small Business Institute®, a partnership between the University and local businesses. The program is accredited by NEASC (New England Association of Schools and Colleges) and ACBSP (Accreditation Council for Business Schools and Programs). Eight functional courses (24 credits) form the core of the MBA program, focusing on a common body of business knowledge required of all MBA students.

The MBA program has been in existence for more than 35 years, and is the longest running evening program in the state. The program is designed to be affordable, convenient, and flexible to meet the needs of part-time students. Courses are delivered in a variety of formats (online, evening, weekend intensive) and at locations both on- and off-campus, including Plymouth, Concord and Waterville Valley. Program requirements (30 credits or 10 courses) can be completed in as few as 12 months. A rolling admissions system allows candidates to start their program during any of the four annual terms.

Eight professional certificates can be pursued independently or in addition to the MBA degree:

- Accounting
- Health Care Administration
- The Human Side of Enterprise
- International Business
- Investment and Finance
- Organizational Communication
- Small Business and Entrepreneurship
- Strategic Marketing Management

Admissions Requirements

A baccalaureate degree with a 2.5 or higher grade point average in the undergraduate academic major, strong recommendations, a well-written Statement of Interests and Intent, and a résumé are required for

admittance. When admission documents have been received, the application is then screened by the Admissions Review Board. All applicants are informed in writing of their admission status. Full admittance may be granted to students meeting all admissions criteria.

Common Professional Component (CPC)

Eleven CPC competencies are required for admittance into the MBA degree program: accounting, business ethics, business finance, business policies, economics, global dimensions, information systems, legal environment, management, marketing, and quantitative/statistics.

Common Professional Components may be satisfied using coursework, work experience, non-credit workshops, College Level Examination Program (CLEP) or DANTES tests, or a departmental competency exam. There is a fee for each competency examination, ranging from \$50 to \$75. Any competencies not satisfied are listed in the admittance letter and result in a conditional or provisional admittance until they are completed.

Grades of C or better for CPC-related courses will be accepted for entry in the graduate program. Grades below a C will be reviewed and may be considered satisfactory. A score equivalent to the grade of C or better will be required if CLEP, DANTES, or PSU competency examinations are used as an alternative for satisfying the MBA prerequisite competencies. All competencies must be completed before being fully accepted into the MBA program and prior to enrolling in the fifth MBA course.

Graduate Study by Undergraduate Seniors

Plymouth State University or Keene State College seniors with a cumulative grade point average of 3.0 or better may take up to six graduate credits with the prior permission of the instructor, advisor, dean, and the associate vice president for the College of Graduate Studies as outlined on the Student Request form available at the Registrar's Office or College of Graduate Studies Office.

MBA Course Policies

Transfer Credits

Normally, graduate credit transfers from other accredited institutions are limited to nine credit hours. However, for students who have earned graduate credits from another nationally accredited program prior to enrolling at PSU, up to 15 credit hours of business or business-related courses may be considered for transfer.

Once enrolled in an MBA program, only courses completed at other ACBSP or AACSB accredited institutions may be transferred into PSU'S MBA program. All courses considered for transfer must have the approval of the MBA program coordinator. Approval prior to taking a course for transfer credit is recommended.

Grades for transfer courses must be at the B level or higher and appropriate to the MBA program. Only credits are transferred, not grades; therefore, the grades for transfer courses do not count toward the required 3.0 grade point average (on an A = 4.0 scale) for program completion. No course more than six years old at the time of admittance will count toward or transfer to the PSU MBA degree.

No graduate credit will be given for correspondence courses, curriculum workshops (unless designed for graduate credit), or Pass/No Pass courses. An official transcript must be on file in the College of Graduate Studies Office before credits can be transferred into the MBA program. Exceptions to this policy must be approved by a MBA program coordinator.

ACBSP (Accreditation Council for Business Schools and Programs)

In accordance with ACBSP accreditation requirements, program assessment procedures will be implemented as a part of the three alternative MBA capstone courses: Seminar in Executive Management, New Ventures and Entrepreneurship, and Capstone: Health Care Topics. A random sample of 20 percent of student final project reports will be selected prior to grading by the instructor for the purposes of MBA program assessment only. The reports will be anonymously (student names eliminated) evaluated by the business department advisory board for MBA program evaluation and improvement. Student evaluations and grades will not be impacted by this process.

Degree Requirements

The graduate faculty sets degree requirements that include completion of all required courses (30 graduate credits minimum) with a cumulative grade point average of 3.0 or higher.

Completion Deadlines

All graduate degree requirements must be completed within six years from the date of admittance. The MBA program can be completed by either full- or part-time study.

Program of Study

REOUIRED COURSES	CREDITS

Functional Core Courses

Eight functional courses form the core of the MBA program for a total of 24 credits. These courses cover a common body of knowledge required of all PSU MBA students.

BU 5110	Managing Organizational Behavior	3
BU 5120	Financial Analysis	3
BU 5190	Accounting for Managers	3
BU 5210	Economic Analysis	3
BU 5220	The Legal Environment of Business	3
BU 5510	Operations Management	3
BU 5700	Marketing Techniques	3
BU 5720	Seminar in Executive Management	3

Elective Areas

Students are required to complete six credits of electives. This requirement may be satisfied using traditional coursework, independent studies, Master's Research Projects or Small Business Institute® credits.

Master's Research Project Option: Candidates may complete a six-credit Master's Research Project by working closely with a professor to conduct an investigation on either a theoretical or applied problem relating to a major interest. To register for the Master's Research Project (BU 5750), students must complete an Application for Individual Enrollment that must be signed by the student, professor, and program coordinator. Additionally, three copies of the Master's Research Project must be submitted to the faculty advisor and an oral presentation given to a committee no later than April 1 of the intended year of graduation.

Small Business Institute® (SBI): The Small Business Institute® (SBI) gives MBA students the opportunity to earn three to six credits

while serving local small businesses as members of consulting teams. Working with a business faculty member, SBI teams visit client companies, define the project scope, execute agreed-upon tasks, and then prepare and present a formal, professional-quality report. Over the past 35 years, PSU SBI students have won dozens of statewide, regional, and national awards in SBI competitions. The SBI experience allows qualifying students to ground their studies in a real-world experience. A six-credit SBI project is a requirement of the Small Business and Entrepreneurship certificate.

Students who want to satisfy elective credits by taking traditional coursework may select two electives from the following subject areas or certificate programs:

Accou	ıntınd	¥

BU 5550	Investment Management	3
BU 5580	Real Estate Entrepreneurship	3
BU 5590	Budgeting and Fund Accounting	3
BU 5600	Federal Taxes and Business Decisions	3
BU 5610	Contemporary Accounting and the Business	
	Environment	3
BU 5620	Auditing Perspectives	3

Economics

EC/BU 5460	Graduate Money and Banking	3
EC 5610	Economic Issues in International Finance	3
EC 5615	Global Economics	3

General Management

BU 5225	Current Issues in Employment Law	3
BU 5500	Small Business Problems and Strategy: SBI I	3
BU 5501	Small Business Analysis: SBI II	3
BU 5850	New Ventures and Entrepreneurship	3

Health Care Administration

BU 5400	Survey of Issues in Health Care Administration	3
BU 5410	Human Resources in Health Care Administration	3
BU 5420	Health Care Laws and Ethics	3
BU 5430	Health Care Administration and Financial	
	Management	3
BU 5440	Information Technology in Health Care	3
BU 5450	Comparative Health Systems	3
BU 5470	Issues in Career Management	3
BU 5480	Leadership in Health Care	3
BU 5490	Capstone: Health Care Topics	3

The Human Side of Enterprise

BU 5180	Exploring Personal and Organizational Health	3
BU 5160	Seminar in Managing Human Resources	3
BU 5165	Training and Development	3
BU 5230	Management of Organizational Changes	3
3 6 1 .*		

Marketing

BU 5240	Seminar in Organizational Communication	
BU 5360	Social Media Marketing	
BU 5530	Multinational Marketing	
BU 5630	Policy Topics: Strategic Communications	
BU 5680	Applications in Marketing Research	
BU 5690	Behavioral Perspectives in Marketing	

3

3

3

3

3

3

BU 5730 BU 5810	Current Issues in Marketing Seminar in Corporate Public Relations	3	BU 5420 BU 5430	Health Care Laws and Ethics Health Care Administration and Financial	3
				Management	3
Students accepted into the MBA program meet with an advisor to set up			BU 5490	Capstone: Health Care Topics	3
an individu	alized program of study based on a review of compete	ncies			
and previous coursework.			Total for H	ealth Care Administration Certificate	12

Minimum Total for MBA in General Management 30

GRADUATE CERTIFICATES

Eight graduate certificate programs have been developed for students to focus their studies in a particular area of the business environment. The certificates consist of a minimum of 12 credits, and can be pursued as a post-baccalaureate certificate, or in addition to an MBA degree. The certificate subjects and requirements are as follows:

Accounting Certificate

The Accounting certificate prepares today's graduate student with a deeper understanding of practical accounting skills valued by management. If you have ever considered a career in accounting or want to supplement your current accounting knowledge or credits toward certification, this is an opportunity to explore this integral area of business. For students interested in earning an MBA, the four Accounting courses plus an additional six graduate business courses can be applied toward a full MBA degree.

Program of Study

REQUIRED COURSES				
BU 5120	Financial Analysis	3		
BU 5190	Accounting for Managers	3		
Choose two j	from:			
BU 5590	Budgeting and Fund Accounting	3		
BU 5600	Federal Taxes and Business Decisions	3		
BU 5610	Contemporary Accounting and the Business			
	Environment	3		
BU 5620	Auditing Perspectives	3		
Total for Accounting Certificate		12		

Health Care Administration Certificate

Plymouth State University's Health Care Administration certificate addresses issues that challenge today's health care professionals. The certificate program consists of four courses designed and taught by leaders in the health care industry. For students interested in earning an MBA, the four Health Care Administration courses plus an additional six graduate business courses can be applied toward a full MBA degree.

Program of Study

REQUIRED CO	URSES CRE	DITS
BU 5410	Human Resources in Health Care Administration	3

The Human Side of Enterprise certificate builds on two MBA core courses—Legal Environment of Business and Managing Organizational Behavior—while allowing students to choose two specialized courses in motivation, communication, leadership, conflict management, collective bargaining and industrial relations, or organizational change management. For students interested in earning an MBA degree, the four Human Side of Enterprise courses plus an additional six graduate courses can be applied toward a full MBA degree.

Program of Study

i iogiuili oj	Juny	
REQUIRED COL	URSES	CREDITS
BU 5110	Managing Organizational Behavior	3
BU 5220	The Legal Environment of Business	3
Choose two f	rom:	
BU 5180	Exploring Personal and Organizational Health	3
BU 5160	Seminar in Human Resources	3
BU 5165	Training and Development	3
BU 5230	Management of Organizational Changes	3
BU 5240	Seminar in Organizational Communication	3
BU 5520	Negotiating, Collaborating, and Leading in	
	Today's World	3
BU 5820	Women as Leaders	3
Total for The	e Human Side of Enterprise Certificate	12

International Business Certificate

The International Business certificate is available only in conjunction with the joint Plymouth State University and Babes-Bolyai University MBA program. This certificate delivers a rich, multicultural learning experience paired with a rigorous curriculum and diverse faculty.

REQUIRED COURSES		CREDITS
BU 5110	Managing Organizational Behavior	3
BU 5220	The Legal Environment of Business	3
BU 5630	Policy Topics: International Business	3
BU 5700	Marketing Techniques	3
EC 5615	Global Economics	3
Total for the International Business Certificate		15

Investment and Finance Certificate

The Investment and Finance certificate helps both individual and organizational financial managers meet the challenges posed by today's financial, economic, and accounting environments. Students learn best practices of financial analysis and decision making, and develop an in-depth understanding of international financial management. For students interested in earning an MBA, the four Investment and Finance courses plus an additional six graduate business courses can be applied toward a full MBA degree.

Program of Study

REQUIRED COURSES		CREDITS
BU 5120	Financial Analysis	3
BU 5190	Accounting for Managers	3
Choose two fr	om:	
BU 5550	Investment Management	3
BU 5580	Real Estate Entrepreneurship	3
EC/BU 5460	Graduate Money and Banking	3
BU 5590	Budgeting and Fund Accounting	3
Total for Inve	estment and Finance Certificate	12

Organizational Communication Certificate

The Organizational Communication certificate addresses the effective transmission of internal and external communication related to the organization. Particular emphasis is placed on developing critical skills such as speaking, listening, writing, and understanding nonverbal, visual, and mass communication. Public relations principles and practices are also stressed. Depth and scope are provided by the study of strategic communication involving issues management, media relations, and crisis planning. For students interested in earning an MBA, the four Organizational Communication courses and an additional six graduate business courses can be applied toward a full MBA degree.

Program of Study

REQUIRED COURSES		CREDITS
BU 5110	Managing Organizational Behavior	3
BU 5700	Marketing Techniques	3
Choose two f	rom:	
BU 5240	Seminar in Organizational Communication	3
BU 5630	Policy Topics: Strategic Communication: Issues	
	Management and Crisis Planning	3
BU 5810	Seminar in Corporate Public Relations	3
Total for Organizational Communication Certificate		12

Small Business and Entrepreneurship Certificate

The Small Business and Entrepreneurship certificate program is ideal for individuals planning to consult for small businesses or to open a small business. This intensive introduction to business planning includes defining the primary vision through market size assessment and strategic operations planning; how to finance, staff, and implement the new venture; and how to manage growth. The Small Business Institute® consistently wins national recognition in the annual Case of the Year competitions. The primary report, prepared by an MBA student consulting team for a client small business (under the direction of a faculty advisor), provides a unique, real-life learning experience for the students and a bankable business plan for the client. For students interested in earning an MBA, the four Small Business and Entrepreneurship courses plus an additional six graduate business courses can be applied toward a full MBA degree.

Program of Study

REQUIRED CO	DURSES	CREDITS
BU 5500	Small Business Problems and Strategy: SB I	3
BU 5501	Small Business Analysis: SB II	3
BU 5850	New Ventures and Entrepreneurship	3
Choose one	from:	
BU 5110	Managing Organizational Behavior	3
BU 5190	Accounting for Managers	3
BU 5220	The Legal Environment of Business	3
BU 5700	Marketing Techniques	3
Total for Sr	mall Business and Entrepreneurship Certificate	12

Strategic Marketing Management Certificate

Marketing professionals wanting to update their experience with contemporary issues in marketing or business generalists looking to focus on marketing and revenue generating strategies will benefit from the Strategic Marketing Management certificate. The certificate provides coverage of various aspects of strategic marketing in today's business world and introduces theoretical and practical application for current and future marketing professionals. For students interested in earning an MBA, the four Strategic Marketing Management courses and an additional six graduate business courses can be applied toward a full MBA degree.

Program of Study

URSES	CKEDIIS
The Legal Environment of Business	3
Marketing Techniques	3
from:	
Multinational Marketing	3
Applications in Marketing Research	3
Behavioral Perspectives in Marketing	3
Current Issues in Marketing	3
Seminar in Corporate Public Relations	3
rategic Marketing Management Certificate	12
	The Legal Environment of Business Marketing Techniques from: Multinational Marketing Applications in Marketing Research Behavioral Perspectives in Marketing Current Issues in Marketing Seminar in Corporate Public Relations

CDEDITS

Master of Education

MEd in CURRICULUM AND INSTRUCTION

Program Coordinator: Cheryl B. Baker, EdD (603) 535-2737, e-mail: cbaker@plymouth.edu

The MEd in Curriculum and Instruction offers students the opportunity to explore new and emerging research-based practices in teaching and learning. Those wishing to improve their teaching skills and content knowledge are encouraged to pursue this option. Designed with the flexibility to meet the individual needs and interests of the adult learner, this option allows students to pursue various specialization areas to meet their professional goals.

Students in the MEd in Curriculum and Instruction program may pursue the following concentrations: Adult Learning and Development; Arizona Community Colleges Partnership: Elementary or Secondary Education/Special Education; Education Technology Integrator K-12 Certification; Granite State College Partnership; K-12 Education, Neurodevelopmental Approach to Teaching; Online Teaching and Learning; and the Shanghai American School Partnership.

CREDITS

Program of Study REQUIRED COURSES

Master's Con	re Component	
ED 5000	Social Behavior in a Diverse Society	3
or		
ED 5005	Social Psychology and Mythology Across Cultures	3
ED 5010	Philosophy, Ethics, and Education	3
ED 5030	Research Design	3
ED 5060	Theories of Learning and Cognitive Development	3
ED 5140 or	Assessment Principles and Practices	3
ED 6100	Curriculum Integration and Performance-	
	Based Assessment	3
Specialization	on Component	
Electives to	be determined with advisor	15
Capstone Ex	perience	
ED 6900	Graduate Capstone Project	3
Minimum 7	Total for MEd in Curriculum and Instruction	33

Adult Learning and Development

The Adult Learning and Development concentration explores the frameworks for understanding and responding to the unique needs of adult learners. Emphasis is placed on developing, implementing and evaluating programs for adults.

Program of Study

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REQUIRED COL	JRSES	CREDITS
Master's Cor	e Component	
ED 5000	Social Behavior in a Diverse Society	3
or		
ED 5005	Social Psychology and Mythology Across Cultures	s 3
ED 5010	Philosophy, Ethics, and Education	3
ED 5030	Research Design	3
Adult Learni	ng and Development Component	
AL 5060	Psychology of Adulthood	3
AL 5070	Learning in Adulthood	3
AL 5080	Teaching Adults	3
AL 5090	Program Design and Evaluation	3
AL 5140 or	The Learning Workplace	3
OH 5300	Work as a Personal Journey	3
ED 5140	Assessment Principles and Practices	3
Specializatio	n Component	
Students sel	ect a 3-credit course with their advisor relevant to	
their profess	sional goals	
Capstone Ex	perience	
ED 6900 or	Graduate Capstone Project	3
ED 5430	Internship in College Teaching	3
Total for ME	d in Curriculum and Instruction, Adult	
Learning an	d Development Concentration	33

Arizona Community Colleges Partnership: Elementary or Secondary Education

Program Coordinator: James McGarry, PhD (603) 535-2365, e-mail: Jamesm@plymouth.edu

This program is designed to enable those who have completed a post-baccalaureate teacher certification program at Maricopa Community Colleges (Rio Salado College and Scottsdale Community College) or Pima Community College to earn a Master of Education (MEd) in Curriculum and Instruction. The 33-credit program consists of six Plymouth State graduate courses (18 credits) and a portfolio representing work that students completed during their post-baccalaureate program (15 credits).

Master's Core Component

ED 5005	Social Psychology & Mythology Across Cultures	3
ED 5010	Philosophy, Ethics, and Education	3
ED 5030	Research Design	3
ED 5500	ST: Graduate Seminar I	3
CE 5140	Electronic Portfolio Development and Assessment	3

Specialization Component (minimum of 15 credits in partnership with AZ-MCC)

ED 5270	Foundations of Teaching	3
ED 5060	Theories of Learning & Cognitive Development	3
SE 5400	Classroom Intervention and Special	
	Education Strategies	3
RL 5760	Linguistic Principles & Methods of Teaching ESL	3
ED 5080	Instructional Strategies and Curriculum Design	3

Capstone Experience

ED 6900 Graduate Capstone

Minimum Total for MEd in Curriculum and Instruction, Arizona Community Colleges Partnership, Elementary or Secondary Education Concentration

Arizona Community Colleges Partnership: Special Education

Program Coordinator: James McGarry, PhD (603) 535-2365, e-mail: Jamesm@plymouth.edu

Master's Core Component

ED 5005 ED 5010	Social Psychology & Mythology Across Cultures Philosophy, Ethics, and Education	3
or		
SE 5765	Working with Families and Children: Ethical	
	and Legal Issues	
ED 5030	Research Design	3
ED 5500	ST: Graduate Seminar I	3
CE 5140	Electronic Portfolio Development and Assessment	3

Specialization Component (minimum of 15 credits, in partnership with AZ-MCC)

	,	
SE 5300	Special Education Law	3
SE 5570	Autism and Spectrum Disorders	3
SE 5400	Classroom Intervention and Special	
	Education Strategies	3
SE 5600	Language and Learning Disabilities	3
SE 6040	Curriculum Development in Special Education	3

Capstone Experience

ED 6900 Graduate Capstone 3

Minimum Total for MEd in Curriculum and Instruction, Arizona Community Colleges Partnership, Special Education Concentration

Education Technology Integrator K-12 Certification

Program Coordinator: Fran Rancourt, EdD (603) 356-9276, e-mail: fgrancourt@plymouth.edu

NCATE and other professional organizations across the country have repeatedly emphasized the importance of technology in the classroom for both educators and students. As a result, the New Hampshire Department of Education has created standards for Education Technology Integrator certification. The Education Technology Integrator K–12 Certification concentration prepares educators to use computers and related technologies to improve their ability to integrate

technology into their curriculum and classroom, while simultaneously enhancing the educator's professional growth and productivity. This concentration is designed around International Society for Technology in Education (ISTE) basic competency standards in educational computing and technology literacy, as well as the competencies for New Hampshire certification for Technology Educator.

PSU also offers students a new dual certification option in this area. This program enables students to earn Education Technology Integrator K–12 Certification and Library Media Specialist K–12 Certification. See information about this program in the MEd in Library Media chapter of the catalog.

Program of Study

3

33

33

REQUIRED CO	DURSES	CREDITS
Master's Co	ore Component	
ED 5000 or	Social Behavior in a Diverse Society	3
ED 5005	Social Psychology and Mythology Across Cultures	3
ED 5010	Philosophy, Ethics and Education	3
ED 5030 or	Research Design	3
ED 5030	Research Design for the Professions	3
Education (Component	
ED 5060	Theories of Learning and Cognitive Development	3
ED 5270	Foundations of Teaching	3
SE 5581	Technology for Diverse Learners	3
Specializati	on Component	
LM/CE 501	o Learning Resources Centers and Services	3
LM/CE 504	o Integrating Technology in the School	3
CE 5120	The Integration of Digital Technology into	
	the Common Core Standards	3
CE 5140	Electronic Portfolio Development and Assessmen	t 3
Capstone E	xperience	
CE 5800 or	Practicum in Educational Computing	3
ED 5960	Internship in Teacher Education	9

Granite State College Partnership

Program Coordinator: Cheryl B. Baker, EdD (603) 535-2737, e-mail: cbaker@plymouth.edu

Plymouth State University partners with Granite State College to transfer up to 24 select post-baccalaureate credits into the Master of Education (MEd) in Curriculum and Instruction. Qualifying credits must be taken through Granite State College's post-baccalaureate programs in general special education, advanced special education or reading and writing.

Participants in this partnership program also are required to complete three core courses for nine additional credits, plus a 3-credit capstone experience.

3

33

3

33

Program of Study

REQUIRED COURSES

Master's Core Component

ED 5000	Social Behavior in a Diverse Society	3
or		
ED 5005	Social Psychology and Mythology Across Cultures	3
ED 5010	Philosophy, Ethics and Education	3
ED 5030	Research Design	3

Specialization Component

Minimum of 24 credits

Capstone Experience

ED 6900 Graduate Capstone Project

Minimum Total for MEd in Curriculum and Instruction, Granite State Partnership Concentration

K-12 Education

This concentration is designed for students interested in specializing in K–12 education. The program includes a specialization component in K–12 education, allowing students to develop a program of study to meet their professional goals and interests in education. The concentration is often multidisciplinary, and students may choose to incorporate courses from many active partnerships including the American Museum of Natural History, ASCD, PBS TeacherLine or e-Learning for Educators.

Program of Study

REQUIRED COURSES		CREDITS		
Master's Con	re Component			
ED 5000	Social Behavior in a Diverse Society	3		
or				
ED 5005	Social Psychology and Mythology Across Cultures	s 3		
ED 5010	Philosophy, Ethics, and Education	3		
ED 5030	Research Design	3		
ED 5060	Theories of Learning and Cognitive Development	t 3		
ED 5140	Assessment Principles and Practices	3		
or				
ED 6100	Curriculum Integration and			
	Performance-Based Assessment	3		
Elective Component				

Elective Component

15 credits in Education determined with advisor

Capstone Experience

ED 6900 Graduate Capstone Project

Minimum Total for MEd in Curriculum and Instruction,

K-12 Education Concentration

Neurodevelopmental Approach to Teaching

PSU has partnered with the Center for School Success (CSS) to create graduate programs focusing on the neurodevelopmental approach to teaching that incorporate practical field-based application—the only

programs of their kind in the country. CSS is a nonprofit education organization, located in West Lebanon, NH, that helps struggling students achieve measurable success in school and in life.

Candidates seeking the MEd in Curriculum and Instruction with a concentration in the Neurodevelopment Approach to Teaching will be able to use recent evidence-based research about the brain and learning to inform their teaching practice—in particular how to identify, respond to, and manage variations in student learning. Candidates will demonstrate an understanding of themselves as learners and how they can best capitalize on their own strengths, experiences, and expertise in order to become more effective teachers. Candidates will also use their understanding of the neurodevelopmental systems to provide specific instructional strategies to promote self-advocacy and school success.

The Neurodevelopmental Approach to Teaching rationale is based on research, best practices, and professional development standards outlined by PSU's College of Graduate Studies, the Council for Exceptional Children (CEC), Learning Forward, and the National Council for Accreditation of Teacher Education (NCATE).

Students also may be interested in learning more about the 14-credit Neurodevelopmental Approach to Teaching Certificate or the post-master's Certificate of Graduate Studies (CAGS) in Educational Leadership with a Neurodevelopmental Approach to Teaching concentration.

CREDITS

Program of Study REQUIRED COURSES

Master's Cor	re Component	
ED 5000	Social Behavior in a Diverse Society	3
or		
ED 5005	Social Psychology and Mythology Across Cultures	3
ED 5010	Philosophy, Ethics, and Education	3
ED 5030	Research Design	3
Specialization	on Component	
ND 5000	Foundations in Neurodevelopmental Approach	
	to Teaching	3
or		
ND 5005	Understanding the Mind of a Learner	2
ND 5010	Effective Classroom Practice	2
ND 5020	Instructional Practice	3
ND 5030	Collaborative Practices	2
ND 5040	Authentic Data to Engage Students' Minds	2
ND 5050	Attention and Memory in Learning	2
Specialized	Electives (choose one)	
ND 5100	Reconsidering Referrals to Support Teams	3
ND 5110	New Coaches Institute—Critical Friends	3
Capstone Ex	perience	
ND 5800	Practicum in Neurodevelopmental Approach	
	to Teaching	9
Total for MI	ed in Curriculum and Instruction,	
	opmental Approach to Teaching Concentration	25
reurodever	phileman Approach to reaching Concentration	35

Online Teaching and Learning

PSU has partnered with VHS Collaborative to offer a MEd in Curriculum and Instruction with an Online Teaching and Learning concentration. The Online Teaching and Learning program meets the needs of teachers who are new to integrating technology into the classroom. It also helps educators incorporate cutting-edge technology within their classrooms. Participants will learn to use the internet in instruction efficiently and effectively to develop student-centered, project-based learning that supports the development of 21st century skills. The capstone experience pairs students with an experienced online educator to help apply newly learned skills in the online education environment.

In addition to this concentration, there is an option for students to earn a 15-credit Online Teaching and Learning Certificate (see below).

Program of Study REQUIRED COURSES

Master's Core Component			
ED 5000 Sc	ocial Behavior in a Diverse Society	3	
or			
ED 5005 Sc	ocial Psychology and Mythology Across Cultures	3	
ED 5010 Ph	hilosophy, Ethics, and Education	3	
ED 5030 Re	esearch Design	3	
Online Teachin	ng and Learning Component		
CE 5310 21	st Century Teaching and Learning	3	
CE 5320 W	/eb-Enhanced Classroom	3	
CE 5330 Bl	lended Teaching and Learning	3	
CE 5340 W	leb 2.0, Collaborative Instruction	3	
Content Compo			
9 credits to be determined with advisor			
Canatana Evnas	viones		
Capstone Exper			
CE 5350 Be	ecoming an Online Teacher	3	
Minimum Total for MEd in Curriculum and Instruction,			
Online Teaching and Learning Concentration 33			

Shanghai American School Partnership

Program Coordinator: Cheryl B. Baker, EdD (603) 535-2737, e-mail: cbaker@plymouth.edu

Individuals teaching at Shanghai American School (SAS) in Shanghai, China, may take advantage of professional development completed during their work at SAS in combination with PSU courses to earn a Master of Education (MEd) in Curriculum and Instruction. Twice a year, Plymouth State University professors travel to Shanghai to provide face-to-face courses and advising to graduate students. The balance of the courses required for the MEd are facilitated by SAS personnel to provide a seamless integration of theory and practice while working in the SAS environment.

Program of Study

REQUIRED COURSES

CREDITS

Master's Core Component			
ED 5500	ST: Graduate Seminar 1	3	
ED 5005	Social Psychology and Mythology Across Cultures	3	
ED 5500	ST: Arts and Learning	3	
ED 5010	Philosophy, Ethics and Education	3	
ED 5030	Research Design	3	
Specialization Component Minimum of 15 credits			
Capstone Experience			
ED 6900	Graduate Capstone Project	3	
Minimum Total for MEd in Curriculum and Instruction,			

33

Shanghai American School Partnership Concentration

GRADUATE CERTIFICATES

American Museum of Natural History Certificate

Students interested in science teaching may earn a graduate certificate by taking online courses offered through American Museum of Natural History's Seminars on Science program. A total of 16 focused credits are needed to earn a certificate. Each course is four credits. In addition, courses taken through this partnership may be used as electives in the MEd in Curriculum and Instruction.

Courses include:

General Science Certificate

Water

The Link between Dinosaurs and Birds The Diversity of Fishes

Climate Change

Life Science Certificate

Genetics, Genomics, Genethics

Evolution

In the Field with Spiders

Sharks and Rays: Ecology, Classification and Evolution

Physical Science Certificate

Earth Inside and Out The Ocean System Space, Time and Motion The Solar System

Neurodevelopmental Approach to Teaching Certificate

Program of Study

REQUIRED COURSES		
ND 5000 Foundations in Neurodevelopmental		
	Approach to Teaching	3
or		
ND 5005	Understanding the Mind of a Learner	2
ND 5010	Effective Classroom Practice	2
ND 5020	Instructional Practice	3
ND 5030	Collaborative Practices	2
ND 5040	Authentic Data to Engage Students' Minds	2
ND 5050	Attention and Memory in Learning	2

Total for Neurodevelopmental Approach to Teaching Certificate

Online Teaching and Learning Certificate

PSU has partnered with VHS Collaborative to offer a 15-credit graduate certificate focused in Online Teaching and Learning. The certificate program meets the needs of teachers who are new to integrating technology into the classroom and those who want to incorporate cutting-edge technology. Additionally, the five-course certificate sequence may be incorporated into a MEd in Curriculum and Instruction.

All candidates earning the Online Teaching and Learning Certificate will be able to use the Internet in instruction efficiently and effectively to develop student-centered, project-based learning that supports the development of 21st century skills.

REQUIRED COURSES		CREDITS	
CE 5310	21st Century Teaching and Learning	3	
CE 5320	Web-Enhanced Classroom	3	
CE 5330	Blended Teaching and Learning	3	
CE 5340	Web 2.0, Collaborative Instruction	3	
CE 5350	Becoming an Online Teacher	3	
Total for Online Teaching and Learning Certificate		15	

MEd in EDUCATIONAL LEADERSHIP

Program Coordinator: Christie Sweeney, EdD (603) 535-3096, e-mail: clsweeney@plymouth.edu

The Master of Education in Educational Leadership prepares candidates for a variety of leadership roles (e.g. teacher leader, department chair, principal) at the elementary, middle, and secondary levels in both public and private school settings.

The program provides educators with the knowledge, skills, and understanding they need to successfully practice effective leadership in their learning organizations.

Courses of study are based on the realization that specific methods of shaping and operating educational organizations change, but sound theory related to management, decision making, human relations, and participatory leadership remains constant.

In general terms, the program provides candidates with an expanded awareness of the roles of school leaders; an ability to identify and prioritize steps that lead an educational institution toward continuous improvement; a wide variety of approaches to school leadership that reflect flexibility in methodology and outlook; opportunities to learn from, and share ideas with, colleagues and other practitioners; opportunities to build leadership experience; knowledge of current research concerning school reform and innovation; and support in developing the self-confidence necessary for providing leadership to others.

Specifically, there are three options for those interested in completing the MEd in Educational Leadership: a broad-based, non-certification program, a School Principal K–12 Certification concentration, and a Teacher Leadership concentration.

Program of Study

	, ,	
REQUIRED COURSES CREDITS		
Master's Co	ore Component	
ED 5000	Social Behavior in a Diverse Society	3
or		
ED 5005	Social Psychology and Mythology Across Culture	s 3
ED 5010	Philosophy, Ethics and Education	3
AD 5030	Research Design for the Professions	3
Leadership	Component	
AD 5010	Organizational Leadership in Schools	3
AD 5830	Educational Planning and Problem Solving	3
IN 5400	Imagination, Creativity and Innovation	3
Individual Elective Component		
18–21 credits to be approved by advisor		

Capstone Experience

- · · I	I	
ED 6900	Graduate Capstone Project	3
or		
ED 5580 or	Individual Research in Education	3
	Graduate Thesis	6

Minimum Total for MEd in Educational Leadership

School Principal K-12 Certification

Students must have at least three years of teaching experience in their area of certification to complete this concentration. Graduates of this program are eligible for certification as a school principal in New Hampshire. Reciprocity through interstate compacts extends this certification to many additional states.

Program of Study

REQUIRED COURSES C			
Master's Co	re Component		
AD 5030	Research Design for the Professions	3	
ED 5000	Social Behavior in a Diverse Society	3	
ED 5010	Philosophy, Ethics, and Education	3	
ED 5060	Theories of Learning and Cognitive Developmen	t 3	
SE 5400	Classroom Interventions and Special Education		
	Strategies	3	
-	ertification Component		
AD 5010*	Organizational Leadership in Schools	3	
AD 5020	Staff Development and Evaluation	3	
AD 5300	School Finance and Negotiation	3	
AD 5330	Leadership in Curriculum Development		
	and Assessment	3	
AD 5700	School Law	3	
AD 5830	Educational Planning and Problem Solving	3	
*Initial Coi	ırse in the Sequence		
G . F			
Capstone E	•		
AD 5800	Practicum in Educational Leadership:		
	The Principalship	3	
Total for MEd in Educational Leadership, School			
	–12 Certification Concentration	36	
7 melpar R 12 certification concentration			

Teacher Leadership

Program Coordinator: Cheryl Baker, EdD (603) 535-2737, e-mail: cbaker@plymouth.edu

The Teacher Leadership concentration is designed for experienced classroom teachers who are passionate about making a difference in education and who aspire to take leadership roles in their school and district. Teacher leaders work alongside school principals to assist in improvement and reform efforts at the school level. The program will explore leadership styles, leverage the latest research to guide decision-making, and provide educators with the knowledge and practical skills to lead in areas such as curriculum development, instructional improvement, professional development and peer coaching/mentoring. The program is built on the Teacher Leader Model Standards developed by the Teacher Leadership Exploratory Consortium (teacherleaderstandards.org).

Students may pursue the teacher leadership concentration in conjunction with a MEd in Educational Leadership or they may choose to take four courses (12 credits) to earn a graduate certificate in teacher leadership on its own.

33

Program of Study

REQUIRED COURSES CREE		
Master's Co	re Component	
ED 5000	Social Behavior in a Diverse Society	3
or		
SE 5581	Technology for Diverse Learners	3
or		
ED 5005	Social Psychology and Mythology Across Cultures	3
ED 5010	Philosophy, Ethics and Education	3
ED 5140	Assessment Principles and Practices	3
ED 5060	Theories of Learning and Cognitive Development	3
Teacher Lea	dership Component	
ED 5180	Collaborative Action Research	3
AD 6220	Dynamic Teacher Leadership	3
AD 6240	Staying Current as Teacher Leaders	3
AD 6230	Extending Leadership-Community Outreach	3
Elective Com	and and	
Elective Cor	•	
Choose two	courses (minimum 6 credits) with advisor approva	d

Capstone Experience

ED 6900	Graduate Capstone Project	3
or		
ED 5580	Individual Research in Education	3
or		
ED 5950	Graduate Thesis	6

Total for MEd in Educational Leadership, Teacher

Leadership Concentration 33–36

GRADUATE CERTIFICATE

Teacher Leadership Certificate

Total for Teacher Leadership Certificate

Program of Study

REQUIRED COURSES		CREDITS
ED 5180	Collaborative Action Research	3
AD 6220	Dynamic Teacher Leadership	3
AD 6240	Staying Current as Teacher Leaders	3
AD 6230	Extending Leadership Community Outreach	3

12

MEd in ELEMENTARY EDUCATION

Program Coordinator: Susan A. Shapiro, MEd (603) 535-2204, e-mail: sashapiro@plymouth.edu

The Master of Education in Elementary Education (non-certification) is designed for students who seek to deepen their understanding of teaching and learning, without preparing for K-8 teaching certification. The program of study anchors coursework in learning theory, instructional design, and the principles of assessment, as well as provides for elective coursework to support the student's unique professional goals. The MEd core requirements set the study of elementary education in the context of a diverse world with varied philosophical starting points, and considers the manner in which knowledge in the field is unearthed.

In addition to the non-certification program, MEd in Elementary Education students may pursue two concentrations: K–8 certification and Montessori.

Program of Study

REQUIRED COURSES CF		CREDITS
Master's Co	re Component	
ED 5000	Social Behavior in a Diverse Society	3
ED 5010	Philosophy Ethics and Education	3
ED 5030	Research Design	3
Learning Th	neory Component	
ED 5060	Theories of Learning and Cognitive Developmen	t 3
ED 5080	Instructional Strategies and Curriculum Design	3
ED 5410	Assessment Principles and Practices	3

Elective Component

3-18 credits to be determined with advisor

Capstone Experience

ED 6900	Graduate Capstone Project	3-12
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Minimum Total for MEd in Elementary Education

K-8 Certification

The Elementary Education certification program prepares candidates for K-8 teaching certification in New Hampshire. The program is designed to address both state and national standards for teachers, and integrates theory and practice in balanced coursework and field experiences. Students are required to demonstrate content area knowledge via required state exams, undergraduate coursework, and artifacts in their professional portfolio.

Program of Study

REQUIRED COURSES		CREDITS	
Elementary Education Component			
ED 5	270	Foundations of Teaching	3
EL 5	100	Assessing Children's Growth and Development	3
EL 5	200	Curriculum Design for Social Studies, Health	
		and Sciences	3

EL 5300	Differentiating Instruction, Assessment,	
T.D.	and Environment	3
ED 5000	Social Behavior in a Diverse Society	3
EL 5400	Inclusive Supports and Accommodations	3
EL 5600	Teaching Children Mathematics	3
EL 5700	Elementary Reading and Writing Instruction	3
IN 5970	Integrating the Arts in Education	3
Learning Te	echnology Course (choose one of the following)	
SE 5581	Technology for Diverse Learners	3
CE 5160	Teaching and Learning in a Networked Classroom	3
CE 5150	Inspiring Digital Media Fluency in the K-12	
	Classroom	3
CE 5120	Integrating Digital Technology into the	
	Common Core Standards	3
EN 5560	Exploring Writing and Technology	3
CE 5140	Electronic Portfolio Development and Assessment	3
Literacy cou	irse (choose one of the following)	
EN 5830	Teaching Literature for Cultural Understanding	3
RL 5014	Reading, Writing, and Literature	3
RL 5170	Content Area Literacy	3
EN 5720	Writing our Communities	3
RL 5770	Developing Language and Literacy for	
,,,	Diverse Learners	3
EN 5710	Writing and Thinking	3
EN 5380	Open Institute for Teachers of Writing	3
LL 5050	Mainstream Classroom Strategies for English	
	Language Learners	3
Capstone Ex	merience	
EL 5960	Student Teaching in Elementary Education	6
))	,	
Master's Co	ore Component (to be taken last)	
IN 5400	Imagination, Creativity, and Innovation	3
EN 5000	Teacher Action Research	3
Total for MEd in Elementary Education, K-8 Certification		
Concentrati	ion	45

Montessori

33

Program Coordinator: Cheryl B. Baker, EdD (603) 535-2737, e-mail: cbaker@plymouth.edu

Plymouth State University has a partnership with the Seacoast Center for Education in Stratham, NH. Through that partnership, students who have participated in an accredited Montessori preparation program may receive 15 graduate credits for their post-baccalaureate work once they are admitted to the MEd in Elementary Education program. The rest of the 33-credit program is completed through a combination of MEd core courses, electives, and a graduate capstone or practicum. All Montessori work must be evaluated by the Seacoast Center for Education prior to being accepted by Plymouth State University's College of Graduate Studies.

Program of Study

REQUIRED COURSES		CREDITS	
Master's Cor	re Component		
ED 5000	Social Behavior in a Diverse Society	3	
or			
ED 5005	Social Psychology and Mythology Across Culture	s 3	
ED 5010	Philosophy Ethics and Education	3	
ED 5030	Research Design	3	

Montessori Component

15 credits approved by Seacoast Center for Education

Elective Component

 ${\bf 3}$ or ${\bf 6}$ credits with advisor approval dependent upon capstone choice

Capstone Experience

ED 6900	Graduate Capstone Project	3
or		
ED 5120	Graduate Practicum	6

Total for MEd in Elementary Education, Montessori

Concentration 33

MEd in ENGLISH EDUCATION

Program Coordinator: Meg Petersen, PhD (603) 535-2684, e-mail: megp@plymouth.edu

PSU offers the Master of Education in English Education (non-certification) and two concentrations: 5–12 Certification and Teaching of Writing. These programs are designed to prepare students to teach English or language arts, to be a writing specialist in their chosen field, work with writing in all subject areas, or to be a writing teacher at any level.

Program of Study

REQUIRED COURSES		CREDITS		
Master's Co	Master's Core Component			
ED 5000	Social Behavior in a Diverse Society	3		
or				
ED 5005	Social Psychology and Mythology Across Cultur	res 3		
ED 5010	Philosophy, Ethics and Education	3		
EN 5000	Teacher Action Research	3		
Elective English/Writing Courses 18–21				
Capstone Ex	xperience			
ED 6900	Graduate Capstone	3-6		
or				
ED 5580	Individual Research in Education	3		
or				
ED 5950	Graduate Thesis	1–9		
Minimum Total for MEd in English Education 33				

5-12 Certification

Students interested in obtaining New Hampshire Teacher Certification in English (grades 5–12) should select this option. Graduates will be endorsed for certification in New Hampshire and fully qualified to teach English and language arts in grades 5–12. The program is designed to meet all New Hampshire, NCATE, and NCTE standards for the preparation of teachers of English and language arts as well as providing a background in the subject areas of literature, writing, and language at the graduate level.

Required college-level coursework or equivalent competencies (audit, portfolio, or exam): analyzing and interpreting literature and literary criticism; creative and non-fiction writing above composition level; study of language; study of grammar; completion of four upper-level literature courses; sign language, journalism, communications, or media; and completion of six credits in American literature, British literature, or humanities.

Program of Study

REQUIRED COURSES CREI		
Master's Cor	e Component	
ED 5000 or	Social Behavior in a Diverse Society	3
ED 5005	Social Psychology and Mythology across Cultures	3
ED 5010	Philosophy, Ethics, and Education	3
EN 5000	Teacher Action Research	3
Learning The	eory Component (if not met in undergraduate work)	ı
ED 5060	Theories of Learning and Cognitive Developmen	t 3
ED 5270	Foundations of Teaching	3
SE 5400	Classroom Interventions and Special Education	
	Strategies	3
English Meth	nods Component	
EN 5640	Theory and Practice: Teaching Writing at the	3
	Secondary Level	
EN 5870	Teaching Literature in Secondary School	3
English Com	ponent	
Literature/W	riting courses approved by advisor	6
Capstone Exp	perience	
ED 5960 or	Internship in Teacher Education*	9
ED 5210	Graduate Practicum*	6
,	AXIS II scores required before starting field experience	;
Total for ME	d in English Education, 5–12 Certification	
Concentration	· ·	36-39

Teaching of Writing

The Teaching of Writing concentration is designed for students who want to enhance their professional development through working with their own writing in various genres and becoming writing specialists in their fields. Students may become writing teachers at any level and in a variety of settings. The program is designed to help participants improve their own writing; improve teaching skills related to the teaching of writing; enhance their use of readings in the writing classroom, and work with teaching and promoting writing at a variety of levels and in different situations.

REQUIRED COURSES C		CREDITS	
Master's Core Component			
ED 5000	Social Behavior in a Diverse Society	3	
or			
ED 5005	Social Psychology and Mythology across Cultures	3	
ED 5010	Philosophy, Ethics, and Education	3	
EN 5000	Teacher Action Research	3	

English Com	English Component			
EN 5640	,	3		
	Secondary Level			
or				
EN 5050 or	Theory and Practice in the Teaching of Writing	6–9		
EN 5380	Open Institute for Teachers of Writing			
Two Literature or Content Area courses				
Elective English/Writing Courses				
Capstone Ex	perience			
	Graduate Practicum	1–6		
or				
ED 5580 or	Individual Research in Education	3		
ED 5950	Graduate Thesis	1–9		
Minimum to	otal for MEd in English Education, Teaching of			
Writing Con		33		

GRADUATE CERTIFICATE

49

National Writing Project Teacher Consultant Certificate

This certificate program is designed for writing project fellows who wish to assume leadership roles within the writing project. It provides an extensive background in pedagogy, research and theory in the teaching of writing, as well as in facilitation of professional development programming and the mentoring of other teachers.

Program of Study

REQUIRED COL	JRSES	CREDITS
EN 5050	Theory and Practice in the Teaching of Writing	6-9
EN 5330	Writing Project Practicum	3
EN 5450	Leadership in Writing	6

Total For National Writing Project Teacher Consultant Certificate 15

MEd in HEALTH EDUCATION

Program Coordinator: Irene Cucina, DPE (603) 535-2517, e-mail: icucina@plymouth.edu

The goal of the health education field is to promote, maintain, and improve individual and community health through the educational process in a wide variety of settings. Professional health educators are prepared to address 10 basic content areas:

- · Community health
- · Family life, growth, and development
- Nutrition
- · Personal health
- · Mental and emotional health
- · Prevention and control of disease and disorders
- · Safety and accident prevention
- · Environmental health
- · Consumer health
- · Substance use and abuse

Health educators are active in the development and delivery of educational services in schools, clinical and corporate settings, and in community service organizations. Activities of a health educator may involve teaching, counseling, consulting, and communication using all types of media.

Applicants for this degree must hold a baccalaureate degree in the biological sciences with a concentration in the sciences, health education, physical education, or nursing. Coursework in human anatomy, physiology, and psychology are necessary prerequisites for all content coursework.

In addition to the major, three additional concentrations are available: K–I2 Certification (leading to endorsement for New Hampshire certification as a K–I2 Health Education Teacher), Health Promotion, and Eating Disorders. The core education courses are offered year-round, and the required health education courses are offered primarily as weekend and hybrid courses. A limited number of courses will be offered during the fall terms. Content classes are offered on a rotating basis. This schedule allows students to complete their degree in two or three years on a part-time basis. Full-time students may be able to complete the requirements in less time.

Students in the K–12 Certification concentration may be required to take additional coursework at the undergraduate level to meet certification standards and should plan to meet with their advisor. All students should meet with the health education program coordinator to review their transcripts and develop a program of study.

Courses in the Health Education program prepare students to take the Certified Health Education Specialist (CHES) examination offered by the National Commission for Health Education Credentialing. Successful achievement of this certification assures employers that the individual has met the national standards for health education professionals.

Program of Study

REQUIRED COURSES CREE			
Master's Core Component			
ED 5000 or	Social Behavior in a Diverse Society	3	
ED 5005 ED 5010	Social Psychology and Mythology Across Culture Philosophy, Ethics, and Education Research Design	s 3 3 3	
Health Education Component Minimum 21 credits approved by advisor			
Capstone Ex	perience		
HL 5750 or	Individual Research: Health Education	3	
HL 5800 or	Practicum in Health Education	3	
ED 6900	Graduate Capstone Project	3	
Minimum T	Minimum Total for MEd in Health Education 33		

K-12 Certification

Students interested in obtaining endorsement for New Hampshire Health Education Teacher certification should select this concentration. Coursework also provides preparation for the Certified Health Education Specialist (CHES) examination.

Required college-level coursework or equivalent competencies (audit, portfolio, or exam) are the following: exercise theory and programming, CPR, environmental issues in health and disease, first aid or CPR instructor course, drug behavior, sex and family living education, and anatomy and physiology with labs I and II.

	REQUIRED COL	JRSES	CREDITS
Master's Core Component			
	ED 5000	Social Behavior in a Diverse Society	3
	ED 5010	Philosophy, Ethics, and Education	3
	ED 5030	Research Design	3
	Learning Th	eory Component	
	ED 5060	Theories of Learning and Cognitive Developmen	ıt 3
	ED 5270	Foundations of Teaching	3
	SE 5400	Classroom Interventions and Special Education	
		Strategies	3
	Health Educ	ation Component	
	HP 5010	Introduction to Health Education and Health	
		Promotion	3
	HP 5020	Designing and Implementing Health Promotion	
		Programs	3
	HP 5030	Evaluation of Health Promotion Programs	3
	HP 5090	Mind Body Techniques for Stress and Health	3
	HP 5110	Wellness Concepts for Educators	2
	HP 5200	Nutrition	I
	HP 5210	Fitness Principles	I

HP 5220	Disease and the Environment	I
HP 5230	Substance Abuse	I
HP 5240	First Aid and CPR	I
HP 5250	Consumer Health	I
HP 5260	Mental Health and Sexuality	2
Capstone E	xperience	
ED 5210 or	Graduate Practicum	6
ED 5960	Internship in Teacher Education	9
Total for M	Ed in Health Education, K–12 Certification	
Concentrat	ion	33-49

Health Promotion

Students interested in community, clinical, and corporate health promotion should choose this concentration. Coursework also provides preparation for the Certified Health Education Specialist (CHES) examination.

Program of StudyREQUIRED COURSES

Master's Core Component			
ED 5000	Social Behavior in a Diverse Society	3	
ED 5010	Philosophy, Ethics, and Education	3	
ED 5030	Research Design	3	
Health Educ	cation Component		
HP 5010	Introduction to Health Education and Health		
	Promotion	3	
HP 5020	Designing and Implementing Health Promotion		
	Programs	3	
HP 5030	Evaluation of Health Promotion Programs	3	
HP 5070	Community Health Promotion	3	
HP 5090	Mind Body Techniques for Stress and Health	3	
HP 5200	Nutrition	I	
HP 5210	Fitness Principles	I	
HP 5220	Disease and the Environment	I	
HP 5230	Substance Abuse	I	
HP 5240	First Aid and CPR	I	
HP 5250	Consumer Health	I	
HP 5260	Mental Health and Sexuality	2	
•	nt Component		
HH 5180	Exploring Personal and Organizational Health	3	
Elective Cor	•	2-3	
	continuing education courses for health educators:		
	offered periodically on a two- or three-year rotation	and	
	by any student qualified for graduate coursework.		
HH 5180	Exploring Personal and Organizational Health	3	
HH 5570	Mindfulness Meditation: Theory and Practice	3	
HL 5160	Eating Disorder Awareness and Prevention	3	
HL 5560	Special Topics in Health Education	1-3	
HL 5910	Independent Study Health Education	1-3	

Capstone Experience		
HL 5750	Individual Research: Health Education	3
or		
HL 5800	Practicum in Health Education	3
	Ed in Health Education, Health Concentration	40-41

Eating Disorders

Program Coordinator: Margaret Burckes-Miller, EdD (603) 535-2515, e-mail: margaret@plymouth.edu

This concentration is designed to offer students the knowledge and skills to understand eating disorders and disordered eating. This concentration is for health care professionals, counselors, social workers, nurses, and dietitians. and school professionals. The focus is on education and outreach for schools/communities and training health care and mental health professionals to treat and counsel those with eating disorders.

The courses specific to eating disorders are also offered as a graduate certificate program, the Eating Disorders Institute Certificate, for post-baccalaureate students.

Program of Study

CREDITS

REQUIRED CO	URSES	CREDITS	
Master's Con	re Component		
ED 5000 or	Social Behavior in a Diverse Society	3	
ED 5005	Social Psychology and Mythology Across Cultures	3	
ED 5010	Philosophy, Ethics and Education	3	
ED 5030	Research Design	3	
Eating Disor	ders Institute Component		
HL 5160	Eating Disorders Awareness, Prevention		
	and Education	3	
HL 5190	. 0 1		
	Disorders	3	
HL 5180	Nutrition: Education and Counseling	3	
HL 5170	Treatment Modalities for Eating Disorders	3	
Elective Con	nponent		
Choose 9 cr	edits		
Capstone Ex	-		
HL 5150	Eating Disorders Clinical	1-3	
Total for MEd in Health Education, Eating Disorders			
Concentrati	on	33	

GRADUATE CERTIFICATE

Eating Disorders Institute Certificate

Director: Margaret Burckes-Miller, EdD (603) 535-2515, e-mail: margaret@plymouth.edu

The Eating Disorders Institute is designed to provide knowledge and skills to a wide range of professionals seeking to further their expertise in the area of eating disorders. All health care professionals, mental health professionals, and educators (i.e., counselors, psychologists, dieticians, nurses, physicians, and dentists) who work with students and clients will benefit from this program. Coursework also may be incorporated into a MEd in Health Education or Human Relations.

REQUIRED COURSES		CREDITS	
CO/HL 5150	Eating Disorders Clinical	1-3	
CO/HL 5160	Eating Disorders: Awareness and Prevention	3	
CO/HL 5170	Treatment Modalities for Eating Disorders	3	
CO/HL 5180 Nutritional Fundamentals and Counseling			
	in the Recovery of Eating Disorders	3	
CO/HL 5190	Medical and Physiological Aspects of Eating		
	Disorders	3	
Total for Eating Disorders Institute Certificate			

MEd in HERITAGE STUDIES

Program Coordinator: Stacey Yap, PhD (603) 535-2333, e-mail: staceyy@plymouth.edu

Heritage Studies explores the intricate relationships and subjects of identity, memory, intangibility/tangibility, dissonance and place. It is a multidisciplinary program in understanding the construction of heritage within the social sciences. Using place-based methods, our accomplished faculty including folklorists and archivists will explore a number of heritage landscapes to uncover the meanings of what is a living heritage.

In this flexible master's degree program, students may design a program of study based on their personal or professional interests, using local, national, and global cultures as inspiration. The program consists of three core education courses, two Heritage Studies courses, a 15-credit elective component and a 3-4 credit internship or practicum. Students in this degree program could expect to complete coursework within two years.

Graduates of this program work in a variety of settings including museums, public and private schools, tourist destinations, and libraries and historical societies. Some teach, while others conduct research and manage heritage materials and sites.

Program of Study

REQUIRED COURSES CRE		
Master's Core Component		
ED 5000 Social Behavior in a Diverse Society	3	
or		
ED 5005 Social Psychology and Mythology across Cultures	3	
ED 5010 Philosophy, Ethics, and Education	3	
ED 5030 Research Design	3	
Professional Component		
HS 5100 Heritage Studies: Foundations	3	
HS 5200 World Heritage Studies	3	

Elective Component

Together with their advisor, students choose 15 credits from the following areas: heritage studies, anthropology, English, geography, history, political science, natural science, and sociology.

AN 5140	Special Topics in Anthropology	3
AN 5410	Native Americans: Past and Present	3
AN 5910	Independent Study in Anthropology	1-3
EN 5910	Independent Study in English	1-3
EN 5XXX	An approved English topics course	3
GE 5150	Topics in Geography	3
GE 5910	Independent Study in Geography	1-3
HI 5300	New Hampshire and New England History	3
HI 5330	New Hampshire and New England: Historical Sites	4
HI 5800	Topics in History	3
HI 5910	Independent Study in History	1-3
HS 5560	Special Topics in Heritage Studies	3
HS 5620	Archaeological Field Methods: Prehistory	2-9
HS 5630	Archaeological Field Methods: Historical	2-9

HS 5650	Archaeological Field Methods: Prehistoric	
	Materials Analysis	2-9
NS 5100	Revolution in Science	3
PO 5130	Topics in Political Science	3
PO 5910	Independent Study in Political Science	1-3
SO 5140	Special Topics in Sociology	3
SO 5910	Independent Study in Sociology	1-3
Capstone I	experience	
HS 5710	Internship in Heritage Studies	3-4
Minimum	Total for MEd in Heritage Studies	33

MEd in HUMAN RELATIONS

54

Program Coordinator: Stephen Flynn, PhD (603) 535-3119, e-mail: svflynn@plymouth.edu

The Master of Education in Human Relations offers students advanced study in the theoretical and pragmatic nuances of human relationships. Designed for students who do not wish to obtain counseling licensure or certification, this degree program is appropriate for a variety of helping professionals including, but not limited to, teachers, administrators, clergy members, and business professionals. The program is built on foundational core courses in human development, social behavior and diversity, research design, counseling or educational theories, and a practicum field experience. One of the major benefits of the program is its flexibility. Along with the foundational core courses, students are granted 18 credits of electives, which they tailor to their individual interests. Student may choose to focus on health and healing, parenting education, and leadership.

Admission Process

Professional organizations recommend that program admissions criteria include consideration of the applicant's openness to self-examination and personal and professional self-development. For this reason, students need to participate in the Counselor Education and School Psychology (CESP) Department Group Interview, as part of the admissions process. The Group Interview is a half-day event held quarterly, and involves an informational session along with a group interview. Participation in the interview process is open to any prospective student and is not dependent on students having completed the application process to PSU's College of Graduate Studies. An admissions decision will be made upon completion of both of the application and admissions interview.

While students are allowed to take up to 12 credits before completing the application process, it is important for students to understand that successful completion of coursework is not a guarantee of admission into CESP Department programs.

CESP Department Monitoring and Dismissal Process

The program faculty has the responsibility to monitor students' personal and professional characteristics that have the potential to interfere with their ability to perform in an ethically and professionally competent manner. Additionally, faculty monitor students' academic performance. Thus, all CESP Department students are continuously monitored while they are enrolled in CESP courses. This review is done at regularly scheduled faculty meetings by CESP faculty in consultation with adjunct faculty. All students' academic, personal, and professional progress is reviewed at the end of each academic term.

As part of the regular review of students' personal and professional performance, faculty members note personal and professional issues that significantly affect students' ability to function adequately as counselors, graduate students, and professionals. The CESP faculty delineates specific action steps for students as needed. The students' advisors (sometimes in conjunction with the Department Chair) meet with students to discuss remediation action steps. Depending upon the nature and severity of the concerns, appropriate action steps range from (a) collaborative strategies for personal and professional improvement to (b) a required leave of absence to (c) dismissal from the CESP Department programs.

For those continuing in their program, a schedule of follow-up meetings occurs as part of the process.

A review of all dismissal decisions can be requested from the Associate Vice President of the College of Graduate Studies and the Vice President for Academic Affairs.

Program of Study

REQUIRED CO	DURSES	CREDITS	
Master's Core Component			
CO 5050	Advanced Human Development	3	
CO 5040 or	Social Behavior and Diversity	3	
ED 5000	Social Behavior in a Diverse Society	3	
CO 5070 or	Research Design for the Professions	3	
ED 5030	Research Design	3	
CO 5260 or	Counseling Theories	3	
ED 5060	Theories of Learning and Cognitive Developmen	it 3	
Human Rel	ations Specialization Component		
To be deter	mined with an advisor	18	
Capstone E	xperience		
CO 5810 or	Human Relations Practicum	3	
ED 6900	Graduate Capstone Project	3	
Total for M	Ed in Human Relations	33	

GRADUATE CERTIFICATES

Students may also be interested in learning more about the following certificate programs:

- Addictions Treatment Certificate (see the MS in Clinical Mental Health Counseling),
- Eating Disorders Institute Certificate (see the MEd in Health Education),
- Parent Involvement and Education Certificate (see the MEd in School Counseling and MEd in School Psychology),
- Personal Approaches to Transformation and Healing (PATH)
 Institute Certificate (see the MA in Personal and Organizational
 Wellness),
- Play Therapy Certificate (see the MEd in School Counseling and MEd in School Psychology),
- Organizational Approaches to Transformation and Healing (OATH)
 Certificate (see the MA in Personal and Organizational Wellness).

MEd in INTEGRATED ARTS

Program Coordinator: Patricia Lindberg, PhD (603) 535-2647, e-mail: plindber@plymouth.edu

The MEd in Integrated Arts is designed for students who want to enhance their professional development by incorporating the arts into educational, cultural, human services, and recreational settings. Integrated Arts graduates are typically classroom teachers, visual and performing artists, and arts or resource or media specialists employed in schools, museums, libraries, hospitals, and other educational and cultural institutions. In addition to gaining general MEd competencies, students will develop a specialization in the integration of the arts through a series of workshop and practicum experiences with professionals in the field, including opportunities for international study.

This program is designed to reflect changes in the National Standards for Arts Education and the New Hampshire Arts Frameworks. The Integrated Arts program highlights the power of the arts in education by offering the following:

- Opportunities for international study in England, Ireland, South Africa, the Baltics, Russia, and New Zealand
- · Arts in Education institutes
- · Integrated arts conferences
- · Flexible scheduling of classes in a variety of settings
- Opportunities for participating in the award-winning Educational Theatre Collaborative and Theater Integrating Guidance Education and Responsibility (TIGER)
- State-of-the-art facilities, including the Silver Center for the Arts and the Draper & Maynard building

The Integrated Arts program addresses the following knowledge base tenets: knowledge of current standards of professional practice in the arts; the ability to express an aesthetic concept through a multiplicity of symbol systems; an understanding of the importance of the arts to human experience; an understanding of the interactive dynamics of the arts in creation and reflection of culture; an understanding of the historical perspectives and consciousness as it relates to the arts; the ability to act as an advocate for the arts; knowledge of curriculum development as it relates to the process of creative and critical thinking; knowledge of current trends and standards of practice in technology in the arts; the skills necessary to plan, implement, and manage an integrated arts project within a given setting; and an understanding of the consultant and supervisory skills necessary to effect programmatic and instructional change for the integration of the arts in various settings.

Curriculum

The Integrated Arts program curriculum is built around a professional core of courses designed to provide a foundation and framework in research, philosophy, and learning theories. The integrative component builds upon that foundation with a course sequence that explores the value and implications of the arts in society, as well as the arts integration process itself. Elective coursework enables participants to be introduced to new artistic disciplines, as well as to expand their areas of expertise and knowledge. A capstone experience provides an opportunity to demonstrate arts integration in a supervised professional or educational setting.

Students can participate in a variety of coursework tailored to their individual goals, including completing special arts integration projects in their schools and classrooms. Summer Arts and Culture Institutes in a variety of international locations, as well as the Arts in Education Summer Institute, provide innovative opportunities to focus on diversity, equity, and excellence through the arts.

REQUIRED COURSES		CREDITS
Master's Co	ore Component	
ED 5000 or	Social Behavior in a Diverse Society	3
ED 5005	Social Psychology and Mythology across Cultures	3
ED 5010	Philosophy, Ethics, and Education	3
ED 5030 or	Research Design	3
ED 5180	Collaborative Action Research	3
Learning Tl	neory Component	
ED 5060 IN 5700	Theories of Learning and Cognitive Developmen Integrated Arts Curriculum Development	t 3
111 3/00	and Assessment	3
Integration	Component	
AR 5300	The Arts in Society	3
IN 5400	Imagination, Creativity, and Innovation	3
IN 5970	Integrating the Arts	3
Elective Co	mponent	
Elementary	or Secondary Education focus	9
Students wil	l select from a variety of arts electives that are offered	
on a rotatinį and individi	g basis. Students self-select courses based on interest ual needs.	
Capstone E	xperience	
IN 5210	Graduate Practicum in Integrated Arts	3
	(45 contact hours per credit)	
Total for M	Ed in Integrated Arts	36

MEd in LANGUAGE EDUCATION

The MEd in Language Education is designed for students seeking K–12 certification in one of the following areas: French Education, Spanish Education or Teaching English to Speakers of Other Languages (TESOL) Education. The program brings students up to date on the latest practices, programs, and changes in education laws.

There is a growing need within New Hampshire and throughout the country for trained language teachers. The New Hampshire Department of Education lists French, Spanish and TESOL as critical shortage areas.

French Education K-12 Certification

Program Coordinator: Barbara Lopez-Mayhew, PhD (603) 535-2834, e-mail: blopezmayhew@plymouth.edu

The French Education K–12 Certification concentration brings students up to date on the latest practices, programs, and changes in education laws, and prepares students for state endorsement to teach French at the K–12 level in New Hampshire and throughout the United States. The program is ideal for anyone with a baccalaureate degree who would like to teach French at the elementary and secondary level, including those with baccalaureate degrees in French who would like to obtain their teaching certification; teachers already certified in another foreign language or another subject; and native French speakers with a college degree who would like to teach French.

Applicants must submit passing scores on the Praxis II test. Candidates also should demonstrate the following college-level coursework or equivalent competencies (by audit, portfolio, or exam): completion of four upper-division major courses in French (French history and civilization, French culture and conversation, advanced French, French grammar and composition), intensive and extensive advanced readings in French, completion or equivalent of at least six advanced French literature courses, intensive immersion experience at the advanced level (i.e., semester abroad, residence in the country or community of the target language), and K–12 foreign language methods.

Program of Study

•	•	
REQUIRED C	OURSES	CREDITS
Master's C	ore Component	
ED 5000	Social Behavior in a Diverse Society	3
ED 5010	Philosophy, Ethics, and Education	3
ED 5030	Research Design	3
Learning	Theory Component (if not met in undergraduate work	۸.
Learning 1	,	•
ED 5060	Theories of Learning and Cognitive Developmen	ıt 3
ED 5080	Instructional Strategies and Curriculum Design	3
ED 5270	Foundations of Teaching	3
ED 6100	Curriculum Integration and Performance-Based	
	Assessment	3
or		
ED 5140	Assessment: Principles and Practices	3
LL 5170	Foreign Language Methodology K–12	3
SE 5400	Classroom Interventions and Special Education	
	Strategies	3

French Content Component

In this content major, a minimum of six PSU graduate credits is required. Additional credits in this discipline may be necessary for certification.

Capstone Experience

K-12 Certification Concentration		39-42	
Total for MEd in Language Education, French Education			
LL 5210	Language Education Teaching Practicum	1–6	
or			
LL 5960	Language Education Teaching Internship	1-9	

Spanish Education K-12 Certification

Program Coordinator: Barbara Lopez-Mayhew, PhD (603) 535-2834, e-mail: blopezmayhew@plymouth.edu

The Spanish Education K–12 Certification concentration brings students up to date on the latest practices, programs, and changes in education laws, and qualifies recipients to teach Spanish at the K–12 level in New Hampshire and throughout the United States. The program is ideal for anyone with a baccalaureate degree who would like to teach Spanish at the elementary and secondary level, including those with baccalaureate degrees in Spanish who would like to obtain their teaching certification; teachers already certified in another foreign language or another subject; and native Spanish speakers with a college degree who would like to teach Spanish.

Applicants must submit passing scores on the Praxis II test. Candidates also should demonstrate college-level coursework or equivalent competencies (by audit, portfolio, or exam): completion of five upperdivision major courses in Spanish (Spanish history, culture, and civilization; Spanish-American history, culture, and civilization; and Spanish conversation, advanced Spanish, and Spanish grammar and composition), intensive and extensive advanced readings in Spanish, completion or equivalent of at least six advanced Spanish literature courses, intensive immersion experience at the advanced level (i.e., semester abroad, residence in the country or community of the target language), and K–12 foreign language methods.

REQUIRED COURSES		CREDITS
Master's Co	re Component	
ED 5000	Social Behavior in a Diverse Society	3
ED 5010	Philosophy, Ethics, and Education	3
ED 5030	Research Design	3
Learning Th	neory Component (if not met in undergraduate work)
ED 5060	Theories of Learning and Cognitive Developmen	t 3
ED 5080	Instructional Strategies and Curriculum Design	3
ED 5270	Foundations of Teaching	3
ED 6100	Curriculum Integration and Performance-Based	
	Assessment	3
or		
ED 5140	Assessment: Principles and Practices	3
LL 5170	Foreign Language Methodology K–12	3
SE 5400	Classroom Interventions and Special Education	
	Strategies	3

Instructional Component

39-42

Spanish Content Component

In this content major, a minimum of six PSU graduate credits is required. Additional credits in this discipline may be necessary for certification.

Capstone Experience

57

LL 5960	Language Education Teaching Internship	1-9
or		
LL 5210	Language Education Teaching Practicum	1–6

Total for MEd in Language Education, Spanish Education K–12 Certification Concentration

Teaching English to Speakers of Other Languages (TESOL) Education K–12 Certification

Program Coordinator: James Whiting, PhD (603) 535-2304, e-mail: jcwhiting@plymouth.edu

The Teaching English to Speakers of Other Languages (TESOL) Education K–12 Certification concentration prepares students to teach English language learners of all ages and abilities in the United States and overseas.

Students who complete the program meet the requirements for the New Hampshire Department of Education license to teach K–12 English language learners.

The program's focus is experiential and hands-on, with the emphasis on the application of what is learned in classes to the world at large. The program's classes blend theory and practice, and provide a complete foundation in language teaching methodologies, language assessment, literacy, language acquisition, and linguistics for language teachers. The goal is to promote alternative practices while training language teachers who foreground progressive, student-centered, communicative-language classrooms that value students' native languages and cultures.

The program's 10 classes are offered throughout the year in online and blended (online and in-person) formats. Students may also take classes on a part-time basis. In-person and blended classes are offered in the evenings and on weekends.

A 24 to 27-credit TESOL K–12 Certification-only option is also available. Contact the program coordinator for more information.

Program of Study

REQUIRED COURSES		CREDITS
Learner and	l Learning Component	
LL 5009	Intercultural Communication in	
	Multicultural Classrooms	3
LL 5050	Mainstream Classroom Strategies for	
	English Language Learners	3
Content Component		
LL 5003	Language Acquisition	3
LL 5004	Language and Linguistics	3

	ii Component	
ED 5270 or	Foundations of Teaching	3
ED 5060 or	Theories of Learning and Cognitive Development	3
Appropriate	undergraduate coursework and/or teaching experie	ence
LL 5005	Foundations of TESOL Methodology	3
LL 5007	ESOL Literacy	3
LL 5006 or	Language Evaluation and Assessment	3
ED 5140	Assessment Principles and Practices	3
Elective Cor	•	
	f the following:	
CE 5160	Teaching and Learning in a Networked Classroom	3
CE 5120	The Integration of Digital Technology into	
	the Common Core Standard	3
CE 5150	Inspiring Digital Media Fluency in the	
	K–12 Classroom	3
CE 5320	Web-Enhanced Classroom	3
CE 5310	21st Century Teaching and Learning	3
SE 5581	Technology for Diverse Learners	3
Choose one of	f the following:	
ED 6100	Curriculum Integration and Performance-	
	Based Assessment	3
SE 5600	Language and Learning Disabilities	3
SE 5400	Classroom Interventions and Special	
	Education Strategies	3
ED 5080	Instructional Strategies and Curriculum Design	3
RL 5170	Content Area Literacy	3
RL 5110	Research in Reading and Writing	3
RL 5770	Developing Language and Literacy for	
	Diverse Learners	3
EN 5000	Teacher Action Research	3
Professional Responsibility Component		
LL 5010	Practicum in TESOL	6–9
	ed in Language Education, TESOL Education,	
K-12 Certifi	cation Concentration	33-39

Teaching English to Speakers of Other Languages (TESOL) Education (non-certification)

The non-certification program, like the K–I2 certification option, is grounded in linguistics, language acquisition, TESOL methodology, multi-cultural learning, language assessment and literacy, as well as technology and foundations of teaching and curriculum design. The program enables students to focus additional time, depending on their area of interest, on adult education, technology, assessment, literacy, special needs, classroom practices or classroom-based research.

Program of Study

REQUIRED COURSES

Learner and Learning Component

LL 5009 Intercultural Communication in Multicultural Classrooms

3

	(Non-Certification) Concentration	33-36
	Ed in Language Education, TESOL	,
Professiona LL 5010	al Responsibility Component Practicum in TESOL	3
AL 5060	Psychology of Adulthood	3
	English Language Learners	3
LL 5050	Mainstream Classroom Strategies for	
EN 5000	Teacher Action Research	3
211	Diverse Learners	3
RL 5770	Developing Language and Literacy for	
RL 5110	Research in Reading and Writing	3
RL 5170	Content Area Literacy	3
ED 5080	Instructional Strategies and Curriculum Design	3
SE 5600	Language and Learning Disabilities	3
	Based Assessment	3
ED 6100	Curriculum Integration and Performance-	
they have r	not already taken	
	ents may also choose any CE or SE class listed above	that
	of the following:	
SE 5581	Technology for Diverse Learners	3
CE 5310	21st Century Teaching and Learning	3
CE 5320	Web-Enhanced Classroom	3
	K–12 Classroom	3
CE 5150	Inspiring Digital Media Fluency in the	
	the Common Core Standard	3
CE 5120	The Integration of Digital Technology into	
CE 5160	Teaching and Learning in a Networked Classroom	1 3
	of the following:	
Elective Co	-	
ED 5140	Assessment Principles and Practices	3
or		
LL 5006	Language Evaluation and Assessment	3
LL 5007	ESOL Literacy	3
LL 5005	Foundations of TESOL Methodology	3
Appropriat	e undergraduate coursework and/or teaching experi	ence
AL 5080 or	Teaching Adults	3
or	-	
ED 5270	Foundations of Teaching	3
Instruction	nal Practice Component	
LL 5004	Language and Linguistics	3
LL 5003	Language Acquisition	3
Content Co	-	
ED 5060	Theories of Learning and Cognitive Development	3
AL 5070 or	Learning in Adulthood	3
ΔI rozo	Learning in Adulthood	2

MEd in LIBRARY MEDIA

Program Coordinator: Fran Rancourt, EdD (603) 356-9276, e-mail: fgrancourt@plymouth.edu

Plymouth State University offers the only comprehensive program in New Hampshire for individuals interested in working in a school library setting or wanting to renew their New Hampshire state certification.

According to ED 507.21 Library Media Specialist requirements, candidates must possess a baccalaureate degree and complete a combination of academic and supervised practical experiences addressing the following areas: administration; ethical, legal, and responsible use of information; collection development; teaching and learning; and literature.

Candidates may obtain certification by completing the five classes in the library media specialist component and a graduate practicum experience.

K-12 Certification

Program of Study

REQUIRED COURSES CREDIT		
Master's Core	e Component	
ED 5000	Social Behavior in a Diverse Society	3
or		
ED 5005	Social Psychology and Mythology Across Culture	s 3
ED 5010	Philosophy, Ethics and Education	3
ED 5030	Research Design	3
or		
AD 5030	Research Design for the Professions	3
Library Media	a Specialist Component	
LM/CE 5010	Learning Resources Centers and Services	3
LM 5020	Cataloging and Classification	3
LM 5030	Reference and Research	3
LM/CE 5040	Integrating Technology in the School	3
LM 5300	Advanced Children's/Young Adult Literature	3
Elective Com	ponent	6
Capstone Exp	perience	
LM 5210	Practicum in School Media	3
Total for MEd in Library Media, K-12 Certification		

Dual Certification: Library Media Specialist K–12 Certification and Education Technology Integrator K–12 Certification

Students may now choose to pursue a dual-certification option to obtain Library Media Specialist K-12 and Education Technology Integrator K-12 certifications. Students may complete the dual-certification program on its own or in conjunction with a Master of Education (MEd) degree with a double major in Library Media and Curriculum and Instruction.

Certified teachers are required to complete 36 credits, which includes two, three-credit practicums in School Media and Educational Computing (LM 5210 and CE 5800). Non-Certified teachers are required to complete 51 credits, which includes the Learning Theory Component courses (9 credits), LM 5210 Practicum in School Media (3 credits) and ED 5960 Internship in Teacher Education (9 credits).

Program of Study

REQUIRED COURSES

Master's	Core	Component	
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manuster b co.	e component	
ED 5000 or	Social Behavior in Diverse Society	3
ED 5005	Social Psychology and Mythology Across Cultures	3
ED 5010	Philosophy, Ethics and Education	3
ED 5030 or	Research Design	3
AD 5030	Research Design for the Professions	3
Learning Th	eory Component (if not previously met)	
ED 5060	Theories of Learning and Cognitive Development	3
ED 5270	Foundations of Teaching	3
SE 5581	Technology for Diverse Learners	3
Library Med	ia Specialist Component	
LM/CE 5010	Learning Resources Centers and Services	3
LM 5020	Cataloging and Classification	3
LM 5030	Reference and Research	3
LM/CE 5040	Integrating Technology in the School	3
LM 5300	Advanced Children's/Young Adult Literature	3
Technology 1	Integrator Component	
CE 5120	The Integration of Digital Technology into	
	the Common Core Standards	3
CE 5140	Electronic Portfolio Development and Assessment	3
Capstone Ex	perience	
LM 5210	Practicum in School Media	3
CE 5800 or	Practicum in Educational Computing	3
ED 5960	Internship in Teacher Education	9
	d in Library Media, K–12 Certification, and riculum and Instruction, Education	

36-51

Technology Integrator K-12 Certification

MEd in MATHEMATICS EDUCATION

Program Coordinator: Osama Ta'ani, PhD (603) 535-3073, e-mail: otaani@plymouth.edu

The MEd in Mathematics Education degree offers two areas of concentration: Middle School 5–8 Mathematics Certification and Secondary School 7–12 Mathematics Certification. Middle school teachers may select either concentration, as both are appropriate to that educational level and are designed to strengthen the mathematics and pedagogical background of the MEd candidate. A non-certification option also exists, which consists of the master's core component, a capstone experience, and math electives to be selected with an advisor. The MEd program seeks to raise students' awareness of current thinking in the field of mathematics education and in education in general.

The goals of the program are to have candidates deepen their own mathematical knowledge; have candidates broaden their teaching strategies and techniques; encourage candidates to consider their goals and broaden their professional background by completing selected professional education offerings; offer candidates an opportunity to complete coursework in an area not previously considered; and encourage candidates to complete courses pertinent to their teaching assignments.

Degree Requirements

- I. Each candidate must either:
 - a. take a course in each of the three fields of algebra, geometry, and probability and statistics; or
 - show competency and recent involvement in each of those fields
 by having had a course within the last six years from time of acceptance into the program.
- 2. Candidates in the secondary mathematics program must either:
 - a. be certified in secondary mathematics education; or
 - be seeking secondary mathematics certification through the MEd program.

Additional credits may be required.

3. The individualized portion of the program may be selected from MG 3100 (courses lower than MG 3100 are not acceptable for graduate credit), MG 4000, and MG 5000 numbered courses in mathematics or from professional education courses. Students and their mathematics advisor will select courses and write a program of study that strengthens their undergraduate program, enriches their knowledge of mathematics and mathematics education, and improves their teaching ability. Graduate courses (5000 level) are offered in each field and should be included in programs.

5-8 or 7-12 Mathematics Certification

Program of Study

REQUIRED COURSES CREDITS				
Master's Co	Master's Core Component			
ED 5000 or	Social Behavior in a Diverse Society	3		
ED 5005	Social Psychology and Mythology across Cultures	3		
ED 5010	Philosophy, Ethics, and Education	3		
ED 5030	Research Design	3		
ED 5XXX	Graduate Elective	3		
Learning Th	neory Component			
MA 3080 or	Introduction to Math Education	2		
ED 5270	Foundations of Teaching	3		
MG 4020 or	Cultural and Psychological Aspects of Mathematics	s 3		
ED 5060	Theories of Learning and Cognitive Development	3		
CO 5430 or	Assessment and Consultation	3		
RL 5710	Advanced Diagnostic Testing and the Improvement of Reading and Writing	it 3		
or ED (Cil I			
ED 6100	Curriculum Integration and Performance-Based Assessment	3		
or	A			
ED 5140	Assessment Principles and Practices	3		
SE 5400	Classroom Interventions and Special Education Strategies			
MC 4020	Math in the Secondary and Middle School	3		
MG 4030 or	Matir in the Secondary and Middle School	3		
ED 5080	Instructional Strategies and Curriculum Design	3		
Capstone Ex	xperience			
ED 5960 or	Internship in Teacher Education	9		
ED 5210	Graduate Practicum	6		
	Total for MEd in Mathematics Education Mathematics Certification Concentrations	33		
•				

Note: Additional credits may be needed for math competencies to obtain New Hampshire Educator Certification.

MEd in MUSIC EDUCATION

Program Coordinator: Gary Corcoran, EdD (603) 535-2495, e-mail: garyc@plymouth.edu

The MEd in Music Education degree offers one concentration area: Instrumental Music Education. This program offers instrumental music educators an opportunity to address musical and academic issues pertaining to their multifaceted responsibilities as band directors in the public schools. In addition to the core education component, students will be afforded flexibility in enhancing their professional development through their involvement with those topic areas that are based upon their professional interests, those that build upon their undergraduate training, or those that may reflect changes in music teaching methodologies since they last undertook formal study.

Instrumental Music Education

REQUIRED CO	DURSES	CREDITS
Master's Co	ore Component	
ED 5005	Social Psychology and Mythology Across Culture	s 3
ED 5010	Philosophy, Ethics, and Education	3
ED 5030	Research Design	3
ED 5060	Theories of Learning and Cognitive Developmen	t 3
Specializati	ion Component	
ME 5120	New England Band Directors Institute	3
ME 5260	Instrumental Conducting and Repertoire	3
ME 5300	Music Technology for Educators	3
ME 5560	Special Topics in Music Education	6
Capstone E	xperience	
ME 5290 or	Practicum in Instrumental Music Education	6
ED 5580 or	Individual Research in Education	6
ED 5950	Graduate Thesis	6
Total for M	Ed in Music Education, Instrumental Music	
Education	Concentration	33

MEd in PHYSICAL EDUCATION

PSU's Master of Education in Physical Education serves professionals who seek to further their careers in such fields as physical education teaching, coaching, and directing athletic or recreation programs. Within the major, candidates may choose one of three concentrations: Adventure Education, Athletic Administration and K-12 Certification.

Prior college-level coursework or the equivalent in fitness activities, adventure skills, motor learning and development, dual and team sports, kinesiology, human anatomy and physiology, first aid, CPR, and personal wellness may be required to pursue this degree.

Adventure Education

Program Coordinator: Jamie Hannon, EdD (603) 535-2513, e-mail: jhannon@plymouth.edu

The Adventure Education concentration is offered through partnerships with Project Adventure and High 5 Adventure Learning Center, two leading providers of professional training in adventure education. Through multi-day workshops, guided projects and other customized learning experiences, students develop or enhance their competencies in the accepted domains of Adventure Education such as technical skills, processing skills and teaching skills. By combining the multi-day workshops with theory and practice projects at their home sites students have powerful learning experiences.

Program of Study

REQUIRED COURSES		CREDITS
Master's Core Component		
ED 5000	Social Behavior in a Diverse Society	3
or		
ED 5005	Social Psychology and Mythology Across Culture	s 3
ED 5010	Philosophy, Ethics, and Education	3
ED 5030	Research Design	3
Adventure 1	Learning Component	
Project Adv	venture or High 5 Adventure courses	20
EE 5100	Risk Management in Experiential Education	2
Capstone E	xperience	
ED 5210	Graduate Practicum	3
or		
ED 5580	Individual Research Project	3
or		
ED 5950	Graduate Thesis	3
or		
ED6900	Graduate Capstone Project	3
Total for MEd in Physical Education, Adventure		
Education Concentration		34

Athletic Administration

Program Coordinator: Irene Cucina, DPE (603) 535-2517, e-mail: icucina@plymouth.edu

The Athletic Administration concentration is for students seeking career opportunities within the professional and collegiate sport industry. Occupational paths for athletic administration graduates include sport facility and arena management; professional sport organizations; managerial positions at sporting goods companies; management of resorts, private clubs, and camps; and managerial jobs in governmental agencies and sport marketing organizations. The graduate curriculum includes coursework in organizational theory, personnel management, sport marketing, and liability issues. The program is designed to meet the interests and needs of students coming from a variety of undergraduate backgrounds, including business management. Individual coursework and electives are determined on the basis of the candidate's educational experience, vocational training, needs, and interests.

CREDITS

Program of Study REQUIRED COURSES

	0.1020	
Master's Co	re Component	
ED 5000	Social Behavior in a Diverse Society	3
ED 5010	Philosophy, Ethics, and Education	3
ED 5030	Research Design	3
or		
AT 5600	Research Design in Health Sciences	3
Athletic Adr	ministration Component	
PE 5600	Athletic Administration	3
PE 5610	Sport Law	3
PE 5620	Sport Finance, Budgeting, and Marketing	3
PE 5630	Sport Psychology	3
Athletic Adr	ninistration Electives	
Choose 9 ca	redits of electives from the following list. Other e	lectives
may be take	en upon approval of advisor.	
HH 5700	Creating Organizational Health	3
HH 5820	Women as Leaders	3
HP 5090	Mind Body Techniques for Stress and Health	3
PA 5560	Special Topics: Project Adventure	3
PE 5560	Special Topics: Strength and Conditioning	3
PE 5560	Special Topics: High/Low Ropes Course	3
PE 5640	Sports, Society, and Cultures	3
Capstone Ex	xperience	
ED 6900 or	Graduate Capstone Project	3
ED 5210	Graduate Practicum	6
Total for M	Ed in Physical Education, Athletic	
Administra	tion Concentration	33-36

K-12 Certification

Program Coordinator: Irene Cucina, DPE (603) 535-2517, e-mail: icucina@plymouth.edu

This concentration is intended for educators who wish to combine their MEd studies with endorsement for New Hampshire certification as a K–12 Physical Education Teacher. Students intending to follow this concentration are encouraged to meet with the program coordinator so that their prior educational experience may be taken into consideration in planning an individualized program of study.

Program of Study

REQUIRED COURSES		CREDITS
Master's Con	re Component	
ED 5000	Social Behavior in a Diverse Society	3
ED 5010	Philosophy, Ethics and Education	3
ED 5030	Research Design	3
Learning Th	eory Component	
ED 5270	Foundations of Teaching	3
ED 5060	Theories of Learning and Cognitive Developmen	
ED 6100	Curriculum Integration and Performance-Based	
	Assessment	3
ED 5080	Instructional Strategies and Curriculum Design	3
SE 5400	Classroom Interventions and Special Education	-
	Strategies	3
Physical Ed	ucation Component	
Minimum of 6 credits		
Capstone Ex	perience	
ED 5960	-	9
or	morning in Zudeunon	J
ED 5210	Graduate Practicum	6
Total for MEd in Physical Education, K-12 Certification		
Concentration 36-		

GRADUATE CERTIFICATE

Athletic Administration Certificate

KEQUIKED COOKSES		CKEDIIS
PE 5600	Athletic Administration	3
PE 5610	Sport Law	3
PE 5620	Sport Finance, Budgeting and Marketing	3
PE 5630	Sport Psychology	3
T-1-1 C A1	Llatia Adaminiatan tian Cantiforn	
Total for Athletic Administration Certificate		12

MEd in READING AND WRITING

Program Coordinator: Edith Patridge, MEd (603) 535-2636, e-mail: epatridge@plymouth.edu

PSU's Master of Education in Reading and Writing is for those seeking K–12 Specialist Certification. The program is aimed at helping K–12 classroom teachers, special educators, Title I personnel, literacy coaches, curriculum coordinators, adult literacy teachers, educators, and administrators provide the highest quality literacy instruction to all students in today's diverse classrooms.

The program of study builds on candidates' preparation and experience in reading and writing while addressing standards from the International Reading Association and the NH Department of Education. This advanced specialist program requires that candidates be certified as a teacher and have a minimum of two years of teaching experience before completion of the program. Students work closely with faculty members, who have extensive experience and expertise in the field

The coursework emphasizes concepts based on the roles of the reading and writing specialist in the areas of instruction, assessment, and leadership. Reading and writing specialists provide service through many roles, including remedial teacher, co-teaching with the regular classroom teacher, professional development provider, literacy coach, Title I coordinator, and mentor. Newly graduated reading and writing professionals in this program will have the opportunity to develop the competencies in providing leadership for school-, district-, and statelevel literacy programs, assessing and evaluating reading achievement and literacy programs, and communicating information about literacy to staff, administration, parents, and the community.

Candidates will demonstrate knowledge and skills in six categories of standards outlined by the International Reading Association, including foundational knowledge; curriculum and instruction; assessment and evaluation; diversity; literate environment; and professional development.

Students may now take Reading and Writing (RL) courses in an intensive three-summer block and other required courses online through the rest of the year. Conact the program coordinator for more information.

K-12 Specialist Certification

Program of Study

REQUIRED COURSES		CREDITS		
Master's Con	re Component			
ED 5000	Social Behavior in a Diverse Society*	3		
ED 5010	Philosophy, Ethics, and Education	3		
Reading and	Reading and Writing Component			
CE 5120	Integration of Digital Technology into the			
	Common Core Standards	3		
or				
CE 5150	Inspiring Digital Media Fluency in the K–12			
	Classroom	3		

ED 5060 or	Theories of Learning and Cognitive Development	3
ND 5000	Foundations of Neurodevelopmental Theory	3
LL 5004	Language and Linguistics**	3
RL 5014	Reading, Writing, and Literature	3
RL 5110	Research in Reading and Writing	3
RL 5170	Content Area Literacy	3
RL 5710	Advanced Diagnostic Testing and the Improvement	
	of Reading and Writing	3
RL 5770	Developing Language and Literacy for	
	Diverse Learners	3
Capstone Ex	perience	
RL 5820	Literacy Practicum	3
RL 5830	Practicum in Reading Diagnosis and Remedial	
	Reading	3

- * Approved substitutions: IN 5970 Integrating the Arts, OH 5200 Creating Socially Responsible Organizations, ED 5005 Social Psychology and Mythology Across Cultures, OH 5180 Exploring Personal and Organizational Health, OH 5100 Full Spectrum Leadership, or OH 5300 Work as a Personal Journey.
- *** Approved substitutions: LL 5050 Mainstream Classroom Strategies for English Language Learners, LL 5005 Foundations of TESOL Methodology, LL 5007 ESOL Literacy, or NHEON LT-05, or LT-06, or LT-07.

Total for MEd in Reading and Writing, K-12 Specialist Certification Concentration

36

Related Programs

In addition to the MEd program, PSU offers a Reading and Writing K–12 Specialist certification for those with a master's degree, as well as a new K–12 Reading and Writing Teacher certification program. The new program leads to certification only, and is not completed in conjunction with a master's degree. For more information, see Certification Programs, Educator and Specialist. Students interested in post-master's study may consider the Certificate of Advanced Graduate Studies (CAGS) in K–12 Reading and Writing Specialist.

MEd in SCHOOL COUNSELING

Program Coordinator: Gary Goodnough, PhD (603) 535-3119, e-mail: ggoodno@plymouth.edu

MEd in SCHOOL PSYCHOLOGY

Program Coordinator: Cindy Waltman, PhD (603) 535-3119, e-mail: cwaltman@plymouth.edu

The Master of Education in School Counseling and Master of Education in School Psychology are designed to prepare counselors and school psychologists who understand and are sensitive to the needs of the individuals with whom they work. These programs emphasize those abilities that enable practitioners to promote the development of children not only in direct ways, but also through consultation and the initiation of systemic change

In these professional preparation programs, emphasis is placed on personal and interpersonal growth in addition to academic excellence. The programs are structured so that students progress through a foundational core to self-development, skill development, and application. This is facilitated by a sequence of field experiences that progressively assist students to connect theory with practice. For example, pre-practicum experiences are integrated into selected professional courses (CO 5050, CO 5030, CO 5230, CO 5600, and SY 6010) and include brief counseling and other activities in schools or other settings. Practica are taken in order for students to develop and practice counseling skills and community outreach with a number of students and clients. Finally, the internship places students in settings that allow them to experience the full range of activities that are associated with the role of the counselor or school psychologist. While completing their internship experiences, students must be able to attend weekly seminars in Plymouth.

Admission Process

Professional organizations recommend that program admissions criteria include consideration of the applicant's openness to self-examination and personal and professional self-development. For this reason, students need to participate in the Counselor Education and School Psychology (CESP) Department Group Interview, as part of the admissions process. The Group Interview is a half-day event held quarterly, and involves an informational session along with a group interview. Participation in the interview process is open to any prospective student and is not dependent on students having completed the application process to PSU's College of Graduate Studies. An admissions decision will be made upon completion of both of the application and admissions interview. Visit plymouth.edu/graduate/admissions/requirements for instructions on how to register for the group interview.

While students are allowed to take up to 12 credits before completing the application process, it is important for students to understand that successful completion of coursework is not a guarantee of admission into CESP Department programs.

CESP Department Monitoring and Dismissal Process

The program faculty has the responsibility to monitor students' personal and professional characteristics that have the potential to interfere with their ability to perform in an ethically and professionally competent manner. Additionally, faculty monitor students' academic performance. Thus, all CESP Department students are continuously monitored while they are enrolled in CESP courses. This review is done

at regularly scheduled faculty meetings by CESP faculty in consultation with adjunct faculty. All students' academic, personal, and professional progress is reviewed at the end of each academic term.

As part of the regular review of students' personal and professional performance, faculty members note personal and professional issues that significantly affect students' ability to function adequately as counselors, graduate students, and professionals. The CESP faculty delineates specific action steps for students as needed. The students' advisors (sometimes in conjunction with the Department Chair) meet with students to discuss remediation action steps. Depending upon the nature and severity of the concerns, appropriate action steps range from (a) collaborative strategies for personal and professional improvement to (b) a required leave of absence to (c) dismissal from the CESP Department programs. For those continuing in their program, a schedule of follow-up meetings occurs as part of the process.

A review of all dismissal decisions can be requested from the Associate Vice President of the College of Graduate Studies and the Vice President for Academic Affairs.

Internship

All required professional courses must be successfully completed before students can enroll in the internship experience. Students must contact their program coordinator during the term prior to their internship experience in order to make appropriate arrangements. The deadlines are October 1 for the winter and spring terms and February 1 for the fall term (or the first business day of those months).

Students in the School Counseling program must successfully complete a 600-hour comprehensive public school internship in school counseling at the elementary, middle, and secondary levels in order to demonstrate and further develop relevant competencies. In order to be recommended for certification as a school counselor, students must complete six credits of CO 5850 Seminar and Internship in School Counseling K–12. The internship component of these experiences must be completed in school settings that have as their primary function the education of public school students. In addition, students must be supervised on site by a certified school counselor and must be able to attend on-campus seminars during the terms they are involved in their internship experiences. Internships must be completed during the academic year and must be approved in advance by the Counselor Education faculty.

Students in the School Psychology program must successfully complete a 1,200-hour comprehensive public school internship in school psychology that spans the K–12 grade levels in order to demonstrate and further develop relevant competencies. In order to be recommended for certification as a school psychologist, students must complete 12 credits of SY 6800 Seminar and Internship in School Psychology. The internship component of these experiences must be completed in school settings that have as their primary function the education of public school students. In addition, students must be supervised on site by a certified school psychologist and must be able to attend on-campus seminars during the terms they are involved in their internship experiences. Typically, the internship requirement is met over three academic terms (fall, winter, and spring) and carries 12 credits. Students must complete their internship experience within two calendar years.

Comprehensive Assessment/Praxis II

School counseling students demonstrate mastery of all program competencies through a) the successful completion of the Counselor Preparation Comprehensive Examination and b) a culminating project.

School psychology candidates will be expected to develop an electronic portfolio based on the New Hampshire state standards. This portfolio will be reviewed and completed during the internship.

Candidates must submit passing scores on the Praxis II test prior to completion of the program.

School Counseling

The MEd in School Counseling is designed to prepare students to function as K–12 Certified Professional School Counselors. This program is approved by the New Hampshire Department of Education and leads to New Hampshire certification in school (guidance) counseling. PSU's school counseling program is nationally accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP). It is the only school counseling program in New Hampshire to hold this prestigious accreditation.

Program of Study

REQUIRED COURSES		CREDITS
Counselor E	ducation Component	
CO 5010	Professional Orientation, Ethics, and Advocacy	3
CO 5020	Counseling Skills	3
CO 5040	Social Behavior and Diversity	3
CO 5050	Advanced Human Development	3
CO 5070	Research Design in the Helping Professions	3
CO 5100	Practicum in Counseling	3
CO 5230	Career Counseling and Development	3
CO 5260	Counseling Theories	3
CO 5430	Assessment and Consultation	3
CO 5460	Group Counseling	3
School Counseling Specialization Component		
CO 5030	Foundations of School Counseling	3
CO 5080	The Counselor in the Classroom	3
CO 5650	Critical Issues in Schools	3
CO 5780	Counseling Youth	3
CO 5850	Seminar and Internship in School Counseling	6

Successful completion of comprehensive assessments as noted above.

Total for MEd in School Counseling 48

School Psychology

The MEd in School Psychology is a 69-credit program designed for individuals who desire certification in school psychology at the state and national level. Those candidates who already possess a master's degree in a related field will want to explore the post-master's CAGS or professional certification program. Candidates are expected to possess strong interpersonal skills.

Program of Study

REQUIRED COURSES C		REDITS
Foundation Component		
CO 5040	Social Behavior and Diversity	3
CO 5050	Advanced Human Development	3
CO 5070	Research Design in the Helping Professions	3
CO 5130	Psychopharmacology and the Biological Basis of	
	Mental Health	3
CO 5260	Counseling Theories	3
CO 5670	Working with Children and Families	3
or		
CO 5300	Foundations and Multicultural Aspects of Parentin	ng 3
CO 5770	Psychopathology: Disorders of Childhood,	
	Adolescence, and Adulthood	3
ED 5060	Theories of Learning and Cognitive Development	3
SE 5600	Language and Learning Disabilities	3
or		
SE 5601	Advanced Psycho Educational Assessment of	
	Learning Disabilities and Exceptionalities	3
Professiona	al Component	
CO 5020	Counseling Skills	3
CO 5780	Counseling Youth	3
SE 5400	Classroom Interventions and Special Education	
	Strategies	3
SY 6010	Introduction to School Psychology	3
SY 6200	Behavioral Assessment, Analysis, and Intervention	n 3
SY 6300	Social/Emotional/Behavioral Assessment	3
SY 6400	Administering Individual Intelligence Tests	3
SY 6500	Educational Assessment and Consultation	3
SY 6700	Practicum I: Assessment, Intervention, and	
	Consultation	3
SY 6710	Practicum II: Integration and Case Studies	3
SY 6800	School Psychology Internship and Seminar	
	(1,200 hours with full-time school psychologist)	12

Note: Students who complete the program may wish to apply for national certification, which is granted by the National School Psychology Certification Board and is called NCSP for the Nationally Certified School Psychologist. The University's school psychology graduate program has been approved by the New Hampshire Department of Education.

69

Total for MEd in School Psychology

15

GRADUATE CERTIFICATE

Parent Involvement and Education Certificate

The Parent Involvement and Education Certificate is offered for graduate students, counselors, teachers, and other human relations professionals interested in enhancing their understanding of parent involvement and education, developing the skills necessary to work with parents, and planning or refining existing parenting programs. This program allows matriculating students to use their electives to add parenting education as a specialization within their degree programs.

Candidates must be admitted graduate students or hold a master's degree in a related area. Admitted graduate students must be recommended for the program by their advisor. Other candidates must provide two recommendation letters attesting to their potential as a parent educator. Waivers for prerequisite courses must be obtained from the instructors.

Program of Study

REQUIRED COURSES CREDIT		
CO 5300	Foundations and Multicultural Aspects of Parenting	3
CO 5310	Strategies for Parenting Education	3
ED 5210	Graduate Practicum	3
Human Development/Special Education Courses		

Total for Parent Involvement and Education Certificate

Play Therapy Certificate

Play is the universal language of children. Play Therapy is a natural form of communication that allows children to communicate their awareness of what is occurring in their world in a manner that is cognitively and developmentally appropriate.

The Play Therapy post-master's certificate provides school and mental health counselors and school psychologists with useful, research-based tools and techniques to help children and adolescents through a variety of social, emotional, behavioral, and learning difficulties, including post-traumatic stress disorder, conduct disorder, aggression or impulsive anger, anxiety, depression, ADHD, and low self-esteem.

PSU's play therapy courses prepare post-master's counseling professionals and master's degree students with prior coursework in counseling children with the necessary 150-hour educational requirement to gain the Registered Play Therapist credential through the Association for Play Therapy.

Registered Play Therapists and Registered Play Therapists-Supervisors are licensed or certified practitioners, including school-based counselors, who have earned a master's degree or advanced mental health degree; have taken 150 or more hours of specialized play therapy training; and have documented 500 hours of clinical and play therapy-specific experience under supervision with a Registered Play Therapist-Supervisor. Supervision is not provided by the University, but is available from Registered Play Therapist-Supervisors in the area.

Program of Study

REQUIRED COURSES CRED	
Dynamic Play Therapies	I
Child-Centered Play Therapy	I
Expressive Play Therapies	I
Special Populations in Play Therapy	I
Special Topics in Play Therapy	4
(Students take four, one-credit special topics course	s)
	Dynamic Play Therapies Child-Centered Play Therapy Expressive Play Therapies Special Populations in Play Therapy Special Topics in Play Therapy

Total for Play Therapy Certificate

8

Note: Students may also be interested in learning more about the following certificate programs:

- Addictions Treatment Certificate (see the MS in Clinical Mental Health Counseling).
- Eating Disorders Institute Certificate (see the MEd in Health Education),
- Personal Approaches to Transformation and Healing (PATH)
 Institute Certificate (see the MA in Personal and Organizational
 Wellness)
- Organizational Approaches to Transformation and Healing (OATH)
 Certificate (see the MA in Personal and Organizational Wellness)

Capstone Experience

SSE 6010 Guided Inquiry in Social Studies

3

MEd in SOCIAL STUDIES EDUCATION

Program Coordinator: Mike Kopish, PhD (603) 535-3011, e-mail: makopish@plymouth.edu

The program is designed for experienced, certified educators; it is aimed at developing leaders in social studies education for settings such as community colleges, high schools, curriculum agencies, publishing companies, foundations and museums. Emphasis is on specialized work in curriculum development and the subject matters, methods, and materials of instruction. This degree program is also suitable for students contemplating future doctoral study. The capstone experience is an individual research thesis in areas such as, but not limited to: effective practice, democratic education, curriculum design, and global education.

Students seeking certification should pursue the 5–12 certification concentration. This certification requires the completion of approximately 36 credits of undergraduate coursework in various areas, such as Behavioral Science, History, Political Science, Geography, and Economics. The program coordinator will review transcripts and previous coursework to determine if there are any deficiencies that need to be satisfied.

Program of Study

REQUIRED COURSES CREDITS				
Diversity Core Component (choose 6 credits)				
LL 5050	Mainstream Strategies for ELL	3		
ED 5000	Social Behavior in a Diverse Society	3		
SE 5600	Language and Learning Disability	3		
SE 5400	Classroom Interventions and Special Education			
	Strategies	3		
Assessment	Core Component (choose 3 credits)			
ED 5140	Assessment Principles and Practices	3		
ED 6100	Curriculum Integration and Performance-			
	Based Assessment	3		
Pedagogy Co	omponent (choose 3 credits)			
ED 5080	Instructional Strategies and Curriculum Design	3		
IN 5970	Integrating the Arts	3		
EN 5630	Writing Workshop for Teachers	3		
EN 5370	Writing Across the Curriculum	3		
Social Studio	Social Studies Component			
SSE 5030	Advanced Pedagogy in Social Studies	3		
SSE 5040	Theory and Research in Social Studies	3		
SSE 5020	Technology in Social Studies	3		
SSE 5010	Issues in Social Studies Education	3		
Social Studies Content (6 credits minimum, selected with advisor)				

Social Studies Content (6 credits minimum, selected with advisor) Examples include courses in U.S. and World History, Political Science, Economics, Geography, Sociology, Psychology, and Anthropology

Research Component (choose 3 credits)

ED 5030	Research Design	3
EN 5000	Teacher Action Research	3

SSE 6800	Thesis	3
Total for MI	Ed in Social Studies Education	39
5-12 Cert	tification	
Program o	fStudy	
REQUIRED CO	URSES	CREDITS
Diversity Co	ore Component (choose 3 credits)	
LL 5050	Mainstream Strategies for ELL	3
ED 5000	Social Behavior in a Diverse Society	3
SE 5600	Language and Learning Disability	3
Professiona	l Core Component	
ED 5270	Foundations of Teaching	3
SE 5400	Classroom Interventions and Special Education	
	Strategies	3
Assessment	Core Component (choose 3 credits)	
ED 5140	Assessment Principles and Practices	3
ED 6100	Curriculum Integration and Performance-	
	Based Assessment	3
Pedagogy Co	omponent (choose 3 credits)	
ED 5080	Instructional Strategies and Curriculum Design	3
IN 5970	Integrating the Arts	3
EN 5630	Writing Workshop for Teachers	3
EN 5370	Writing Across the Curriculum	3
Social Studi	es Component	
SSE 5030	Advanced Pedagogy in Social Studies	3
SSE 5020	Technology in Social Studies	3
SSE 5010	Issues in Social Studies Education	3
Social Studies Content (6 credits minimum, selected with advisor) Examples include courses in US and World History, Political Science, Economics, Geography, Sociology, Psychology, Anthropology.		
Research Co	omponent (choose 3 credits)	
ED 5030	Research Design	3
SSE 5040	Theory and Research in Social Studies	3
EN 5000	Teacher Action Research	3
Capstone Ex	sperience	
ED 5210 or	Graduate Practicum	6
ED 5960	Internship in Teacher Education	9
Total for Mi	Ed in Social Studies Education, 5–12	
	n Concentration	36-39

MEd in SPECIAL EDUCATION

Program Coordinator: Marcel Lebrun, PhD (603) 535-2288, e-mail: mrlebrun@plymouth.edu

PSU offers a MEd in Special Education (non-certification), which is the most flexible option for students who are not interested in pursuing certification. In addition to the major, students may choose from three concentrations:

- General Special Education K-12 Certification
- Fifth-Year General Special Education K-12 Certification
- K-12 Administrator Certification

Note: Students may also pursue a post-master's Certificate of Advanced Graduate Studies (CAGS) in Educational Leadership with a concentration in Special Education Administrator K-12 Certification.

Program of Study

REQUIRED COURSES CI			
Learning Theory Component			
ED 5030	Research Design	3	
ED 5060 or	Theories of Learning and Cognitive Developmen	t 3	
ND 5000	Foundations in Neurodevelopmental Approach		
,	to Teaching	3	
General Spe	cial Education Component		
SE 5300	Special Education Law	3	
SE 5581	Technology for Diverse Learners	3	
SE 5600	Language and Learning Disabilities	3	
SE 5760	Collaboration, Consultation and Leadership in		
	Special Education	3	
SE 5765	Families and Children: Ethical and Legal Issues	3	
Elective Con	nponent (Choose 4 courses)		
LL 5003	Language Acquisition	3	
LL 5004	Language and Linguistics	3	
LL 5005	Foundations of TESOL Methodology	3	
ND 5005	Understanding the Mind of a Learner	3	
ND 5050	Understanding and Remembering: The Role of		
	Attention and Memory in Learning	3	
CO 5130	Psychopharmacology and the Biological Basis		
	for Mental Health	3	
SE 5190	Educational Testing	3	
SE 5570	Autism and Spectrum Disorders	3	
SE 5563	PBIS: School-wide Approaches for All Students	3	
SE 5564	PBIS: Comprehensive Approaches for Students		
	with Intense and Chronic Needs	3	
SE 5566	PBIS: Targeted Approaches for Students at Risk	3	
SE 5568	PBIS: Facilitation Specialist as Coach and Resour	-	
,,,	Person	3	
SE 5770	Behavioral Disorders in School Aged Children	3	
Capstone Experience			
ED 6900	Graduate Capstone Project	3	
<i>or</i> ED 5180	Collaborative Action Research	3	
Total for MEd in Special Education 36			

General Special Education K-12 Certification

Courses in special education address competencies in such areas as classroom management, survey of exceptionalities, human development, foundations, assessment, and teaching strategies. This concentration is aligned with the Council of Exceptional Children standards.

Program of Study

REQUIRED CO	purses	CREDITS
Master's Co	re Component	
ED 5000	Social Behavior in a Diverse Society	3
SE 5765	Working with Families and Children: Legal and	
	Ethical Issues	3
ED 5030	Research Design	3
Learning Tl	neory Component	
ED 5060	Theories of Learning and Cognitive Developmen	t 3
SE 5600	Language and Learning Disabilities	3
SE 5400	Classroom Interventions and Special Education	
71	Strategies	3
Specializati	on Component	
SE 5300	Special Education Law	3
SE 5770	Behavioral Disorders in School-Aged Children	3
SE 5190	Educational Testing	3
SE 5760	Collaboration, Consultation, and Leadership in	
,,	Special Education	3
SE 6040	Curriculum Development in Special Education	3
Capstone E	xperience	
SE 5800	Practicum in Special Education	3–6
or		
ED 5960	Internship in Teacher Education	9
	Ed in Special Education, General Special	
Education 1	K–12 Certification Concentration	36-42

Fifth-Year General Special Education K-12 Certification

This concentration is designed for the professional who would like to engage in intensive training to gain knowledge and skills in the field of special education. The fifth-year program follows a prescribed sequence of coursework paired with a special education internship. Through this intensive format, candidates receive a Master of Education (MEd) with NH General Special Education K–12 certification in one year. Taught by faculty who are specialists and leaders in the field, courses are designed to provide candidates with the knowledge and skills crucial to teaching effectively in today's inclusive classrooms.

This 42-credit full-time program is for candidates who have completed an undergraduate degree in a teacher certification program or related educational field and are interested in working effectively in today's inclusive classrooms or related fields. Courses in this program are designed in scope and sequence to allow candidates to apply course concepts in school settings, to collaborate with professionals in the field, and to collaborate within a cohort model. Beginning in the summer

term, candidates progress through the program three courses at a time over one year. In addition, candidates engage with students with exceptionalities through an internship in the fall, winter and spring terms, providing candidates with a variety of opportunities for field-based project completion and practical application of course concepts.

Plymouth State University's General Special Education certification programs are accredited by the National Council for Accreditation of Teacher Education (NCATE) and aligned with the national Council for Exceptional Children (CEC) Standards.

Program Requirements

The candidate must have successfully completed an undergraduate degree in K-3, K-8, K-12, 5-12, or 7-12 teacher certification, or related educational field (e.g., Adventure Education, Early Intervention, Social Work).

The candidate must successfully complete a comprehensive screening interview with the special education program coordinator in addition to meeting graduate admissions requirements. Application materials must be received by May 15 of the admitting year with courses to begin at the end of June.

Required Courses

The cohort groups will be formed at the onset of the program, summer term, and will be monitored by the special education program coordinator. Students entering the program must meet the following prerequisites: courses in human development, diversity, general exceptionalities, philosophy, and literacy.

Program of Study

REQUIRED COURSES CREDIT		REDITS	
SE 5181	Collaborative Action Research in Special Education	1 3	
or			
ED 5030	Research Design	3	
SE 5190	Educational Testing	3	
SE 5300	Special Education Law	3	
SE 5570	Autism and Spectrum Disorders	3	
SE 5581	Technology for Diverse Learners	3	
SE 5600	Language and Learning Disabilities	3	
SE 5760	Collaboration, Consultation, and Leadership	3	
	in Special Education		
SE 5765	Working with Families and Children: Legal and	3	
	Ethical Issues		
SE 5770	Behavioral Disorders in School-Aged Children	3	
LL 5050	Mainstream Classroom Strategies for Students EL	L 3	
SE 6040	Curriculum Development in Special Education	3	
SE 5821	Internship Seminar	9	
Total for MEd in Special Education, Fifth-Year General			

Special Education K-12 Certification Concentration

K-12 Administrator Certification

Graduates of this concentration are eligible for certification as a special education administrator in New Hampshire. Reciprocity through interstate compacts extends this certification to additional states. This program requires previous certification in K–12 General Special Education as well as three years of teaching experience.

Program of Study

REQUIRED COL	JRSES	CREDITS
Master's Cor	e Component	
AD 5030	Research Design	3
ED 5000	Social Behavior in a Diverse Society	3
ED 5010	Philosophy, Ethics, and Education	3
ED 5060	Theories of Learning and Cognitive Developmen	
Initial Cours	e in Educational Leadership Component	
AD 5010	Organizational Leadership in Schools	3
,		
Educational	Leadership Component	
AD 5020	Staff Development and Evaluation	3
AD 5300	School Finance and Negotiation	3
AD 5700	School Law	3
or		
SE 5300	Special Education Law	3
Special Educ	ation Component	
CO 5430	Assessment and Consultation	3
SE 5760	Collaboration, Consultation, and Leadership in	
	Special Education	3
SE 6040	Curriculum Development in Special Education	3
Capstone Ex	perience	
SE 7800	Special Education Leadership Practicum	3
Total for ME	d in Special Education, K–12 Administrator	
	Concentration	36

42

GRADUATE CERTIFICATE

71

Positive Behavioral Interventions and Support (PBIS) Certificate

The Positive Behavioral Interventions and Support (PBIS) graduate certificate is designed for teachers, para-educators, administrators, guidance counselors, psychologists and other school or community providers, and family members interested in increasing their understanding of the process of enhancing the emotional well being of students through systemic, positive, prevention-focused, and data-based decision making in schools. This program may be completed fully online.

Program Requirements

- The candidate must hold a baccalaureate degree in education or a related field.
- The special education program coordinator must interview the candidate
- The candidate must complete a minimum of 12 credits from the PBIS course list. Courses will be determined according to the student's needs and must be approved by the program coordinator.
- The student must maintain a 3.0 grade point average or higher in the program.

Competencies

- Knowledge and application of positive behavioral interventions and supports designed to enhance the emotional well-being of all students in schools.
- Knowledge and application of universal, positive, and proactive school-wide approaches designed to enhance discipline practices and school climate, including:
 - developing skills in collaboration and consultation with colleagues and families;
 - developing and implementing school-wide expectations;
 - developing and implementing a behavior matrix of expectations across settings;
 - developing and implementing teaching scripts to address prosocial behaviors;
 - developing and implementing a school-wide reinforcement system;
 - determining office versus classroom referrals;
 - developing and implementing a database system for behavior;
 - evaluating the universal system using data-based decision making for improving practice.
- Knowledge and application of targeted approaches aimed at addressing the behavior of students for whom universal interventions are insufficient, including:
 - developing skills in collaboration and consultation with colleagues and families;

- developing and implementing a process for addressing the behavior of students who are not experiencing success with universal interventions;
- completing functional behavioral assessments on targeted students;
- completing behavior intervention plans based on functional behavioral assessments;
- designing and implementing targeted group interventions aimed at reducing problem behavior and increasing pro-social behavior and academic achievement;
- evaluating the targeted system using data-based decision making for improving practice.
- Knowledge and application of intensive approaches aimed at addressing the behavior of students for whom targeted interventions are insufficient, including:
 - developing skills in collaboration and consultation with colleagues and families;
 - developing and implementing a process for addressing the behavior of students who are not experiencing success with universal and targeted interventions;
 - developing skills in wrap-around planning;
 - developing skills in interagency coordination;
 - evaluating the intensive system using data-based decision making for improving practice.

The PBIS courses are sequential and build upon one another; therefore, it is necessary to take the courses in the specified order.

Program of Study

Total for PBIS Certificate

REQUIRED COURSES		CREDITS
PBIS Comp	onent	
SE 5563	PBIS: School-wide Approaches for All Students	3
SE 5564	PBIS: Comprehensive Approaches for Students	
	with Intense and Chronic Needs	3
SE 5566	PBIS: Targeted Approaches for Students at Risk	3
SE 5568	PBIS: Facilitation Specialist as Coach and Resour	rce
	Person	3

Students who are part of a school that is implementing PBIS may register and receive graduate credits for the work that they are doing at the school level.

12

Master of Science

MS in APPLIED METEOROLOGY

Program Coordinator: Eric Hoffman, PhD (603) 535-2312, e-mail: ehoffman@plymouth.edu

The Master of Science in Applied Meteorology program is managed by the Department of Atmospheric Sciences and Chemistry and is housed in the Judd Gregg Meteorology Institute in the Boyd Science Center. The degree is designed to meet regional and national needs for professional meteorologists who require more than baccalaureate-level education and qualifications. The program offers students the latest knowledge and research skills in many core areas of operational meteorology that are needed to provide modern weather support to a wide variety of customers. The program focuses on such areas as advanced weather analysis and forecasting; air quality; aviation meteorology; hydrology; mesonet/road weather meteorology; radar/satellite meteorology; and computer-based programming and other meteorological applications.

Program Highlights

- The only MS in meteorology program in New Hampshire and one of only a handful in the northeastern United States
- · Outstanding technology and facilities
- · Dedicated faculty willing to work closely with students
- · Most professors have real operational meteorological experience
- Active collaborations with NOAA, NASA, NWS, UNH, USAF, MWO, NHDOT, and USA CRREL
- Some assistantships with tuition waivers are available
- Flexibility in course selection to tailor a program to the student's needs
- Well-qualified students may be able to complete the program in approximately 18 months
- · Office area for graduate students
- · Cost-efficient program

Admission

Plymouth considers applications on a rolling admissions basis that allows students to apply at any time of the year. The program is based on full fall, winter, spring, and summer terms. However, it is generally recommended that students start the program during the fall term. Applicants planning to begin studies during the fall term should submit completed admissions applications by January 31 for priority consideration for the limited enrollment slots and available assistantships. Prospective students will automatically be considered for assistantships during the admission process. Applicants wanting to start in the spring term should apply by August 31 for limited enrollment slots, but should be advised that assistantship support may not be available. An official score report is required from the Graduate Record Examination for the quantitative, verbal, and analytical writing components. Applicants with degrees in subjects other than meteorology or atmospheric science should have had at least an introductory course in meteorology, calculus courses through multivariate calculus, and two calculus-based physics courses. All interested candidates are encouraged to contact the program coordinator for an in-person or phone interview before submitting their applications.

Types of Admittance

Full admission to the program may be granted to students meeting all of the criteria for admission. The most highly qualified admitted students may be offered assistantships or tuition waivers or both based on available resources.

Students not initially receiving assistantships or tuition waivers may later be considered eligible for them based on their academic performance in the program.

Graduate Study by Undergraduate Seniors

Plymouth State University seniors with a cumulative GPA (CGPA) of 3.0 or better may take up to six graduate credits with prior permission as outlined on the Student Request form.

GPA Requirements

Graduate students in the program must maintain a CGPA of 3.0 or higher in the program to maintain satisfactory progress. Only one passing course grade of less than B- will be allowed to count toward the 30-credit degree minimum.

Students fully enrolled in the program who fall below a 3.0 CGPA will have one semester to restore it to the satisfactory level. If a student does not achieve this level after one semester, the student will be barred from future coursework and pursuit of the MS degree and lose assistantship support (if applicable).

Students who fail more than one graduate course will also not be allowed to continue in the program.

Program of Study and Degree Requirements

The program requires a minimum of 30 credits to complete an MS degree. By the end of their second full semester, students will choose either the thesis or non-thesis degree option. However, not all students may be able to select the thesis option since the number of students that can be supported in this option is limited by faculty availability. Students desiring to pursue the thesis option will need to consult with their advisor and other meteorology faculty to identify a faculty mentor.

Credit minimums for each option are:

- Thesis: 24 credits of coursework and six credits of thesis research
- Non-thesis: 27 credits of coursework (not to include thesis research credits) and three credits of independent study

Students taking the thesis option would take fewer formal courses and make up credits through thesis research. Non-thesis students would be expected to complete a shorter research paper through a three-credit independent study course arranged with a member of the meteorology faculty. As part of their coursework, all students must take a one-credit Graduate Seminar course each full semester. Only three credits from this course may count toward the 30-credit degree requirement

Coursework

There are no specific courses required for degree completion except the three semesters of Graduate Seminar and either six credits of thesis research or three credits of independent study/research credits. Students are encouraged to complete courses in a variety of areas, but have flexibility in selecting the courses that will fit their academic goals. Students will work closely with their academic advisors to develop an appropriate program of study, generally by the end of their first semester in the program. This plan must be approved by both the advisor and the associate vice president for the College of Graduate Studies.

Co-listed Courses

Some upper-division undergraduate courses are co-listed as graduate courses. Graduate students enrolled in these courses will be expected to complete additional coursework, such as papers and projects, to earn graduate credit in these courses. The co-listed courses are as follows:

CO-LISTED METEOROLOGY COURSES		
MT 5150/4150	Air Quality	3
MT 5280/4280	Synoptic Meteorology II*	3
MT 5310/4310	Dynamic Meteorology I*	3
MT 5320/4320	Dynamic Meteorology II*	3
MT 5400/4400	Numerical Weather Prediction	3
MT 5410/4410	Atmospheric Physics*	3
MT 5420/4420	Tropical Weather and Climate	3
MT 5430/4430	Climate Change	3
MT 5450/4450	Advanced Synoptic Meteorology	3
MT 5470/4470	Micrometeorology	3
MT 5480/4480	Mesoscale Meteorology	3
MT 5550/4550	Topics in Meteorology	3

* Students with undergraduate degrees in meteorology or atmospheric science are expected to have already completed MT 4280, MT 4310, MT 4320, and MT 4410 along with undergraduate courses in Atmospheric Thermodynamics and Synoptic Meteorology I or their equivalents, and these students cannot usually take these courses for graduate credit. Eligible undergraduate students desiring graduate credit for the other courses listed should sign up for the courses using the graduate course numbers listed (MT 5150, 5280, etc.). Students entering into the program without a BS in meteorology or sufficient meteorology course background will need to complete the four courses highlighted with an asterisk at a minimum, and MT 5550 topics courses listed as Introduction to Synoptic Meteorology and Atmospheric Thermodynamics. Note that only the credits from two of the (*) or topics courses can be counted toward the 30 graduate credit requirement. Any further prerequisite deficiencies would have to be made up with nondegree credits.

Graduate Courses

At least 15 of the credits counting toward the MS degree must come from the non-co-listed, 5000-level meteorology courses listed below. All students must sign up for the Graduate Seminar during each of their fall and spring semesters and may count up to three seminar credits toward the 30-credit degree requirement.

NON CO-LISTI	CREDITS	
MT 5200	Transportation Meteorology	3
MT 5330	Satellite Meteorology	3
MT 5340	Radar Meteorology	3
MT 5350	Boundary Layer Meteorology	3
MT 5400	Numerical Weather Prediction	3
MT 5600	Computer Applications in Meteorology	3
MT 5700	Graduate Seminar Meteorology	I
MT 5800	Thesis Research	1-6
MT 5910	Independent Study	1-3

Additional non-meteorology courses could also be used to fulfill up to nine credits toward degree requirements with approval of the advisor and meteorology program coordinator.

Total for MS in Applied Meteorology 30

MS in ATHLETIC TRAINING

Program Coordinator: Marjorie King, PhD, ATC, PT (603) 535-3108, e-mail: making1@plymouth.edu

The MS in Athletic Training program offers two concentration areas: (1) Entry-Level for those seeking a CAATE accredited program in preparation for taking the Board of Certification examination in athletic training and (2) Higher Education for those Certified Athletic Trainers seeking combined clinical and teaching roles in Athletic Training higher education.

Entry-Level

The CAATE-accredited Entry-Level concentration is designed to provide students interested in the field of athletic training the opportunity to develop the necessary skills and knowledge through classroom experiences and clinical rotations to meet the competencies set forth by the National Athletic Trainers' Association (NATA) Education Council, and to further develop skills and knowledge in the field of athletic training through research and advanced courses. During each semester, for a minimum of four semesters, students will enroll in an athletic training practicum. During the practical experience, students will be placed under the direct supervision of an approved clinical instructor. Students must have at least a grade of B in the following four core courses: Orthopedic Assessment I, Orthopedic Assessment II, Modalities in Sports Medicine, and Therapeutic Exercise in Athletic Training. The Entry-Level concentration is a two-year program that begins each summer.

Admission

The application deadline for admission into the Entry-Level program is January 15 of each year. Admission is competitive, limited, and is not guaranteed even to those who meet the minimum requirements. Students must verify that they can comply with the program's Technical Standards. Technical Standards are available to all interested students and can be obtained by visiting the Athletic Training website at plymouth.edu/graduate/academics/degrees/masters/ms/athletic-training/entry-level.

Prerequisites

- 1. Baccalaureate degree from accredited institution
- 2. 3.0 undergraduate GPA
- 3. Comprehensive statement of professional goals
- 4. Three letters of recommendation
- 5. Entry-Level only:
 - a. Minimum of 50 hours observation under direct supervision of a BOC Certified Athletic Trainer. Original letters of documentation must be submitted as part of the application.
 - b. Completed physical form
 - c. Minimum grade of B in the following college or university courses (must be taken within the past seven years):

		CREDITS
•	Anatomy/Physiology I and II (with lab)	8
•	Kinesiology	3
•	Exercise Physiology	3
•	Nutrition	3
•	Personal Health	3

- Fitness Education and Assessment
- Current First Aid and CPR/AED certification

Note: For applicants who have not met all required prerequisites, an extended program option is available.

2-3

CREDITS

Program of Study

REQUIRED COURSES		CREDITS	
AT 5000	Preventative Theories and Psychomotor Skills	3	
AT 5010	Orthopedic Assessment I	3	
AT 5020	Orthopedic Assessment II	3	
AT 5100	Athletic Training Administration	3	
AT 5200	Pharmacology in Sports Medicine	2	
AT 5250	Therapeutic Exercise in Athletic Training	3	
AT 5255	Introduction to Burdenko Conditioning	I	
AT 5300	General Medical	3	
AT 5500	Modalities in Sports Medicine	3	
AT 5330	Research and Statistics in Athletic Training	3	
AT 5750	Practicum in Athletic Training I	3	
AT 5760	Practicum in Athletic Training II	3	
AT 5770	Practicum in Athletic Training III	3	
AT 5780	Practicum in Athletic Training IV	3	
Minimum Total for MS in Athletic Training, Entry-Level			
Concentration			

Higher Education

The MS in Athletic Training advanced master's program in Higher Education provides graduate students the opportunity to further develop skills and knowledge through research and advanced courses in athletic training and education. The Higher Education concentration is designed to prepare certified athletic trainers for a variety of teaching and leadership roles in higher education.

Admission

REQUIRED COURSES

The application deadline for admission into the Advanced Master's program is January 15 of each year. Advanced Athletic Training candidates must submit a completed graduate program application, have BOC certification and one year of experience (preferred) as a certified athletic trainer (ATC), and provide proof of current CPR/AED certification.

Master's Core Component				
AT 5600	Research Design in Health Sciences	3		
or				
ED 5030	Research Design	3		
AT 5610	Statistics in Health Science	3		
AT 5950	Graduate Thesis	6		
or				
AT 5900	Directed Research	6		
Higher Edu	cation Component			
AL 5080	Teaching Adults	3		
AL 5090	Program Design and Evaluation	3		
AT 5310	Fundamentals in AT Education Instruction I	3		
AT 5320	Fundamentals in AT Education Instruction II	3		
ED 5140	Assessment Principles and Practice	3		

Elective Component

Choose 6 credits from the following:

AI 5700	Instructional Strategies in Burdenko Conditioning	3
AT 5710	Burdenko Certification Part 1	3
AT 5790	Advanced Practicum in Athletic Training	1–6
AT 5850	Performance Enhancement Specialization	3
AT 5875	Special Topics: Corrective Exercise Specialist	3
AT 5875	Special Topics: Principles of Strength and	3
	Conditioning	
AT 5875	Special Topics in Athletic Training	3
AT 5910	Independent Study in Athletic Training	1–6
Total for MS	S in Athletic Training, Higher Education	
Concentration		

MS in BIOLOGY

Program Coordinator: Len Reitsma, PhD (603) 535-2558, e-mail: leonr@plymouth.edu

The MS in Biology degree program provides students with expanded knowledge and research skills in some of the core areas in biological sciences that are necessary for students to attain professional goals. Coursework in this program prepares professional biologists with a wide variety of skills needed to apply current knowledge and technology to address and support current and future biological problems. The research emphasis of this program will further enhance these skills and contribute to the body of knowledge in the field of biology.

Biology Program Objectives

Students in PSU's MS in Biology program will develop research skills by working on unanswered questions in the field of biology; become familiar with the latest biological technology relating to physiology, behavior, biotechnology, and ecology; understand the capabilities and limitations of these various technologies; and be able to communicate biological issues effectively both verbally and in writing.

Admissions Standards for the MS in Biology

Admission is competitive and is dependent upon a faculty member agreeing to serve as advisor to the students; therefore, students should investigate faculty research interests before applying to the program. Applicants must possess a 3.0 cumulative grade point average for their undergraduate coursework in the areas of science and math to be considered for full matriculation in the program. Exceptions to this may be possible upon consultation with faculty in the department. Applicants must have acceptable Graduate Record Examination (GRE) scores and provide official GRE results. Successful applicants will also need proper backgrounds in key areas, such as mathematics, physics, chemistry, and biology. Students without the necessary prerequisites may have to mitigate these shortfalls. All other College of Graduate Studies admissions policies, fees, and conditions apply.

Students will be selected for admission by a biology faculty committee. Students not meeting admissions requirements may take courses as a non-matriculated student, and would not be eligible for assistantships or tuition waivers until they are fully admitted into the MS in Biology program.

Degree Requirements

The program requires a minimum of 30 credits with the following framework for thesis and non-thesis options:

- Thesis: 18-24 credits of coursework and 6-12 credits of thesis research
- Non-thesis: 28 credits of coursework and two credits of independent study

Non-thesis students will need to complete a shorter research paper through a two-credit independent study. All students are required to maintain a 3.0 cumulative graduate grade point average. The only required courses for all students are the one-credit Biology Colloquium that must be taken each semester (and may cover up to two credits of the graduate credit requirements) and the one-credit of University Biology Teaching.

Program of Study

Students, along with their faculty advisor, will design their program of study in one or more of the following general areas: animal behavior, biological rhythms, biotechnology, botany and plant physiology, conservation biology, ecology, and electron microscopy.

Students will be required to complete courses in a variety of the above listed areas, but there are flexible options to select those courses. Students, along with their faculty advisor and graduate committee, will determine the best course selections for their program of study. Some of the current upper-division undergraduate courses are co-listed as graduate courses. Graduate students can enroll at the graduate 5000 level for these co-listed courses, which will require a grade of B or better to pass, along with the additional graduate-level assigned papers or projects.

			CREDITS
Biology Cor	nponen	ıt	
BI 5100	Biolo	gy Colloquium	1-2
BI 5230	Land	scape Ecology	3
BI 5350	Cons	ervation Biology	3
BI 5380	Aviar	ı Ecology	3
BI 5560	Speci	al Topics in Biological Sciences	3
BI 5810	Univ	ersity Biology Teaching	I
BI 5900	Grad	uate Seminar: Biology	3
BI 5910	Indep	pendent Study: Biology	2
BI 5950	Thesi	is Research: Biology	6–12
Undergradi	uate and	d Graduate Co-Listed Biology Courses	
BI 4050/B		O,	3
		Cell Structure and Function	3
BI 4180/BI	5120	Biotechnology	3
BI 4760/B	I 5140	Animal Behavior	3
BI 4770/BI	5150	Animal Physiology	3
BI 4780/B	5160	Neurobiology	3
Minimum	Total fo	r MS in Biology	30

Admitted students to the MS in Biology can apply for up to 6 credits from their upper division undergraduate coursework to count toward the MS degree. The credits must be approved by their advisor and thesis committee. Students entering into the program without a BS in Biology or sufficient biology course background will need to meet with a program advisor to discuss the possible need to take undergraduate courses in certain subdisciplines of biology as prerequisites for the program.

MS in CLINICAL MENTAL HEALTH COUNSELING

Coordinator: K. Hridaya Hall, PhD (603) 535-3119, e-mail: khall18@plymouth.edu

The Master of Science in Clinical Mental Health Counseling is designed to prepare students to function as licensed clinical mental health counselors. It provides the educational requirements outlined by the New Hampshire Board of Mental Health Practice as requisite to attaining mental health counseling licensure. Students should note that there are significant post-degree requirements to undertake prior to being licensed. The mental health counseling program is nationally accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP).

Admission Process

Professional organizations recommend that program admissions criteria include consideration of the applicant's openness to self-examination and personal and professional self-development. For this reason, students need to participate in the Counselor Education and School Psychology (CESP) Department Group Interview, as part of the admissions process. The Group Interview is a half-day event held quarterly, and involves an informational session along with a group interview. Participation in the interview process is open to any prospective student and is not dependent on students having completed the application process to PSU's College of Graduate Studies. An admissions decision will be made upon completion of both of the application and admissions interview. Visit plymouth.edu/graduate/admissions/requirements for instructions on how to register for the group interview.

While students are allowed to take up to 12 credits before completing the application process, it is important for students to understand that successful completion of coursework is not a guarantee of admission into CESP Department programs.

CESP Department Monitoring and Dismissal Process

The program faculty has the responsibility to monitor students' personal and professional characteristics that have the potential to interfere with their ability to perform in an ethically and professionally competent manner. Additionally, faculty monitor students' academic performance. Thus, all CESP Department students are continuously monitored while they are enrolled in CESP courses. This review is done at regularly scheduled faculty meetings by CESP faculty in consultation with adjunct faculty. All students' academic, personal, and professional progress is reviewed at the end of each academic term.

As part of the regular review of students' personal and professional performance, faculty members note personal and professional issues that significantly affect students' ability to function adequately as counselors, graduate students, and professionals. The CESP faculty delineates specific action steps for students as needed. The students' advisors (sometimes in conjunction with the Department Chair) meet with students to discuss remediation action steps. Depending upon the nature and severity of the concerns, appropriate action steps range from (a) collaborative strategies for personal and professional improvement to (b) a required leave of absence to (c) dismissal from the CESP Department programs. For those continuing in their program, a schedule of follow-up meetings occurs as part of the process.

A review of all dismissal decisions can be requested from the Associate Vice President of the College of Graduate Studies and the Vice President for Academic Affairs.

Internship

Students in the Clinical Mental Health Counseling program must successfully complete a 600-hour mental health counseling internship in a mental health setting. Students can choose to remain in one setting or can split their time between two settings. A mental health provider licensed under the New Hampshire Board of Mental Health Practice must provide individual supervision at the internship site on a weekly basis. Students interning out of state need to be supervised by mental health providers licensed in the state in which they are practicing. In addition to their field experience, students are required to attend a weekly University-based internship seminar. Typically, the internship requirement is met over two academic terms and carries six credits. Students must complete their internship experience within two calendar years.

Comprehensive Assessment

Clinical mental health counseling students demonstrate mastery of all program competencies through a) the successful completion of the Counselor Preparation Comprehensive Examination and b) a culminating project.

Program of Study REQUIRED COURSES

Counselor Education Components				
CO 5010	Professional Orientation, Ethics, and Advocacy	3		
CO 5020	Counseling Skills	3		
CO 5040	Social Behavior and Diversity	3		
CO 5050	Advanced Human Development	3		
CO 5070	Research Design in the Helping Professions	3		
CO 5100	Practicum in Counseling	3		
CO 5230	Career Counseling and Development	3		
CO 5260	Counseling Theories	3		
CO 5430	Assessment and Consultation	3		
CO 5460	Group Counseling	3		
Clinical Me	ntal Health Counseling Specialization Components			
CO 5130	Psychopharmacology and the Biological Basis of			
	Mental Health	3		
CO 5600	Foundations of Mental Health Counseling	3		
CO 5670	Working with Children and Families	3		
CO 5710	Crisis and Trauma Counseling	3		
CO 5720	Addictions and Related Disorders	3		
CO 5770	Psychopathology: Disorders of Childhood,			
	Adolescence, and Adulthood	3		
CO 5790	Assessment, Diagnosis, and Treatment Planning	3		
CO 5880	Seminar and Internship in Mental Health			
	Counseling	6–9		
Elective		3-6		
Successful	completion of comprehensive assessments			

as noted above.

Total for MS in Clinical Mental Health Counseling

CREDITS

9

GRADUATE CERTIFICATES

Addictions Treatment Certificate

Total for Addictions Treatment Certificate

The Addictions Treatment Certificate provides specialized education to students interested in learning how to treat individuals with addictions and related disorders. This certificate program is in alignment with the professional licensing standards for alcohol and other drug abuse counselors.

Program of Study

REQUIRED COURSES C		CREDITS
CO 5720	Addictions and Related Disorders	3
CO 5730	Addictions Treatment Modalities	3
CO 5740	Seminar and Internship in Addictions Treatment	3

Students may also be interested in learning more about the following certificate programs:

- Eating Disorders Institute Certificate (see the MEd in Health Education),
- Parent Involvement and Education Certificate (see the MEd in School Counseling and MEd in School Psychology),
- Personal Approaches to Transformation and Healing (PATH)
 Institute Certificate (see the MA in Personal and Organizational
 Wellness),
- Play Therapy Certificate (see the MEd in School Counseling and MEd in School Psychology)
- Organizational Approaches to Transformation and Healing (OATH)
 Certificate (see the MA in Personal and Organizational Wellness).

MS in ENVIRONMENTAL SCIENCE AND POLICY

Program Coordinator: June Hammond Rowan, EdD (603) 535-3218, e-mail: jhammondrowan@plymouth.edu

The Master of Science (MS) in Environmental Science and Policy is designed to expand students' understanding of the natural, social and physical dimensions of environmental issues. Students work with faculty members in areas such as forest ecosystems, hydrology, climate change, environmental economics, and land use planning to learn about the relationship between science and policy. The program's multidisciplinary approach helps students develop the ability to think analytically and creatively about environmental issues in order to understand the scientific basis of environmental problems, as well as the social, political and economic factors that shape appropriate management and policy responses.

The program's core courses (Forest Ecosystems, Environmental Law and Policy, Science Colloquium Series, and the Nature of Environmental Systems) provide students with a comprehensive foundation in environmental science. In addition, students in the program must take at least one biophysical science course, one social science course, and one course that integrates multiple disciplines.

Students in the program are required to complete a minimum total of 30 credits either made up of 24 course credits and a six-credit thesis or 27 course credits and a three-credit research project. Students work with their advisors to develop and conduct their research project. The program also includes an outreach project to help students develop science communication skills.

The program is intended to be flexible to meet the varied needs of individual students. Students may complete the program on a full- or part-time basis. Depending on availability, full-time graduate students may be eligible to receive graduate assistantships, which include a stipend and tuition benefits. Contact the program coordinator for more information about funding opportunities.

Students are encouraged to apply by January 15 for enrollment in the fall. The strongest applicants to the program have at least a 3.0 undergraduate GPA; prior course work in biology, ecology, physical geography or geology, physics, chemistry, sociology or anthropology, algebra, and statistics Applicants are encouraged to contact faculty and the program coordinator to identify a prospective faculty advisor during the application phase.

The Center for the Environment coordinates this degree program with PSU's College of Graduate Studies. The Center lends its expertise and knowledge in engaging on- and off-campus partners, providing opportunities for students to work on research projects.

Program of Study

REQUIRED CO	URSES CREI	DITS			
ESP Core Component					
ESP 5210	Forest Ecosystems	2			
ESP 5620	Environmental Law and Policy	3			
	Science Colloquium Series	I			
ESD 5710	Nature of Environmental Systems				
E31 3/00	Nature of Environmental Systems	3			
Biophysical	Component (choose one course)				
ESP 5050	Earth Surface Dynamics	3			
ESP 5080	Soils and Environmental Change	3			
ESP 5320	Watershed Hydrology	3			
ESP 5510	Analysis of Limnological Systems	3			
ESP 5580	Climate Change	3			
ESP 5700	Graduate Seminar in Ecology and the Environment	3			
Social Scion	co Component (change one course)				
	ce Component (choose one course)				
ESP 5060	Ecological Economics	3			
ESP 5070	Decision Making in Natural Resource Management	3			
ESP 5610	Environment and Society	3			
ESP 5660	Principles of Environmental Education and				
EGD	Interpretation	3			
ESP 5750	Environmental Ethics	3			
Integrative (Component (choose one course)				
ESP 5530	Science-based Research Design and Data				
	Visualization	3			
ESP 5720	Land Use Planning Seminar	3			
ESP 5740	Ecosystem Management: Principles and Applications				
ESP 5780	Applied Environmental GIS	3			
Elective Con	nnonent				
5–8 credits	•				
) o creario					
Research Ex	perience (3–6 credits)				
ESP 592	o Independent Environmental Research	2			
ESP 556	o Independent Environmental Research Outreach	I			
	or				
ESP 590	oo Master's Thesis Research	5			
ESP 554	o Master's Thesis Outreach	I			
Minimum 7	Minimum Total for MS in Environmental Science and Policy 30				

MS in SCIENCE EDUCATION

Program Coordinator: Mary Ann McGarry, EdD (603) 535-3209, e-mail: mmcgarry@plymouth.edu

The MS in Science Education degree program enhances the science content knowledge and further develops the scientific process and inquiry skills of middle and high school science teachers. The program provides the opportunity for teachers to gain the knowledge and skills to make informed decisions necessary for the development, implementation, and assessment of meaningful science programs in their school districts. These efforts will help to ensure that science teachers are effective teachers and are prepared according to the National Science Education Standards and the National Science Teachers Association Standards for Science Teacher Preparation. This program is intended for science teachers already holding science certification.

The MS in Science Education is designed to promote science learning for teachers through the use of both innovative teaching methods in the classroom, laboratory, and field, and authentic assessment strategies that are applicable to their own classrooms. The program is based on the research, goals, vision, and best practices derived from the science education community.

Objectives

The general objectives of the MS in Science Education program are to increase the science knowledge and skills of teachers, including the use of technology, through study in biology, chemistry, meteorology, biotechnology, the Earth systems, or the physical sciences; update the teacher's knowledge about current issues and best practices in science teaching, learning, and assessment in the classroom and laboratory setting based on national and local school data; provide laboratory and field opportunities for teachers to participate in scientific research so that they may enhance their understanding of the process of scientific inquiry; develop a discipline-based scientific collaboration with University faculty and organizations to provide teachers with support to reflect on issues and resources; develop classroom-based research strategies (action research) to promote improvement of existing science teaching practices; and enhance the teacher's understanding and application of the national and state science education standards.

Program of Study

REQUIRED COURSES		CREDITS	
Science Edu	cation Core Component		
NS 5200	Action Research in Science Education	3	
NS 5700	Science Teaching in the Middle and High School	3	
NS 5800	Seminar: Current Issues in Science Education	3	
Science Education Component Minimum of 20 credits determined with advisor			
Capstone Experience			
NS 5850	Capstone Research Project	4	
Total for MS in Science Education 33			

Certificate of Advanced Graduate Studies

CAGS in CLINICAL MENTAL HEALTH COUNSELING

Program Coordinator: K. Hridaya Hall, PhD (603) 535-3119, e-mail: khall18@plymouth.edu

The Certificate of Advanced Graduate Studies (CAGS) in Clinical Mental Health Counseling is intended for two distinct groups of counselors who aspire to be leaders in the field of mental health counseling:

- Those who hold a counseling master's degree that does not meet the educational requirements for licensure as a clinical mental health counselor in New Hampshire: The individuals may be able to meet their educational licensure requirements through the CAGS concentration in Mental Health Counseling. This program allows counselors with specializations in other areas such as school, or rehabilitation to gain the specialized academic and field experiences required for clinical mental health counseling.
- Already licensed clinical mental health counselors: The CAGS contains
 coursework targeted at leadership issues applicable to mental health
 counseling settings. The CAGS concentration in Clinical Mental
 Health Counseling offers the opportunity for counselors who are
 already licensed or license-eligible to further their education and take
 specialized coursework in areas that will expand their areas of expertise.

Admission Process

Professional organizations recommend that program admissions criteria include consideration of the applicant's openness to self-examination and personal and professional self-development. For this reason, students need to participate in the Counselor Education and School Psychology (CESP) Department Group Interview, as part of the admissions process. The Group Interview is a half-day event held quarterly, and involves an informational session along with a group interview. Participation in the interview process is open to any prospective student and is not dependent on students having completed the application process to PSU's College of Graduate Studies. An admissions decision will be made upon completion of both of the application and admissions interview. Visit plymouth.edu/graduate/admissions/requirements for instructions on how to register for the group interview.

While students are allowed to take up to 3 credits before completing the application process, it is important for students to understand that successful completion of coursework is not a guarantee of admission into CESP Department programs.

CESP Department Monitoring and Dismissal Process

The program faculty has the responsibility to monitor students' personal and professional characteristics that have the potential to interfere with their ability to perform in an ethically and professionally competent manner. Additionally, faculty monitor students' academic performance. Thus, all CESP Department students are continuously monitored while they are enrolled in CESP courses. This review is done at regularly scheduled faculty meetings by CESP faculty in consultation with adjunct faculty. All students' academic, personal, and professional progress is reviewed at the end of each academic term.

As part of the regular review of students' personal and professional performance, faculty members note personal and professional issues that significantly affect students' ability to function adequately as counselors, graduate students, and professionals. The CESP faculty delineates specific action steps for students as needed. The students' advisors (sometimes in conjunction with the Department Chair) meet with students to discuss remediation action steps. Depending upon the nature and severity of the concerns, appropriate action steps range from (a) collaborative strategies for personal and professional improvement to (b) a required leave of absence to (c) dismissal from the CESP Department programs. For those continuing in their program, a schedule of follow-up meetings occurs as part of the process.

A review of all dismissal decisions can be requested from the Associate Vice President of the College of Graduate Studies and the Vice President for Academic Affairs.

Internship

Candidates in the Clinical Mental Health Counseling concentration may intern in any mental health organization that can provide the requisite clinical opportunities and clinical supervision.

Comprehensive Assessment

Clinical Mental Health Counseling CAGS students demonstrate mastery of all specialty competencies through a culminating project.

Program of Study

REQUIRED COL	JRSES	CREDITS
Counselor E	ducation Component	
CO 7120	Professional, Legal, and Ethical Issues in Counse	eling 3
CO 7300	Counseling Supervision	3
EP 7050	Qualitative Methodology and Applied Research	3
Clinical Men	ntal Health Specialization Component	
CO 5600	Foundations of Mental Health Counseling	3
CO 5710	Crisis and Trauma Counseling	3
CO 5720	Addictions and Related Disorders	3
CO 5770	Psychopathology: Disorders of Childhood,	
	Adolescence, and Adulthood	3
CO 5790	Assessment, Diagnosis, and Treatment Planning	g 3
CO 5130	Psychopharmacology and the Biological Basis of	
	Mental Health	3
CO 5880	Seminar and Internship in Mental Health	
•	Counseling	6-9

Minimum Total for CAGS in Clinical Mental Health Counseling

Note: Those seeking alternative routes to licensure as a Clinical Mental Health Counselor should consult an advisor to develop an individual program of study to progress toward that goal. This consultation is needed to assure that students address needed content areas between the previous degree and the CAGS. In some cases additional courses may be required, while in other cases some of the competencies may already have been met and more electives may be possible within the 33-credit minimum. While program faculty offer advising, it is ultimately the student's responsibility to thoroughly review New Hampshire law and the administrative rules outlined by the New Hampshire Board of Mental Health Practice to determine steps necessary for licensure in the state.

33

CAGS in EDUCATIONAL LEADERSHIP

The CAGS program in Educational Leadership was first offered in the spring of 1997. It is a 33- to 6o-credit program that addresses the needs of practicing educators who have completed a master's degree and who are interested in pursuing advanced academic work in educational change and leadership. This program is built on a foundation of human development and systems theories, critical thinking and reflection, advanced practice models, and democratic leadership skills.

The program is designed for professionals in education or a related field who are interested in becoming part of a dynamic, advanced-level graduate program. Accepted candidates will explore contemporary issues in education for all students. Students can design their program of study in the following concentration areas:

Arts, Leadership, and Learning Curriculum Administrator, K–12 Curriculum and Instruction Neurodevelopmental Approach to Teaching Reading and Writing Specialist, K–12 School Principal, K–12 Special Education Administration, K–12 Superintendent of Schools, K–12

Course meetings are sometimes held in conjunction with major educational conferences in New Hampshire and the region. One-week intensive core courses are offered during the summer, making it possible to complete the core courses within two years. Students may transfer post-master's level courses into their CAGS program. The number of credits approved for transfer will be determined on a case-by-case basis by the program advisor with approval from the associate vice president for the College of Graduate Studies.

For further information on certification, see Certification Programs, Educator and Specialist chapter.

Arts, Leadership, and Learning

Program Coordinator: Patricia Lindberg, PhD (603) 535-2647, e-mail: plindber@plymouth.edu

The CAGS concentration in Arts, Leadership, and Learning is a 33-credit program that addresses the needs of practicing educators and administrators who have completed a master's degree and are interested in pursuing advanced academic work in arts, leadership, and learning. The program is a natural extension of the work being done at PSU in arts integration and serves to address current national trends and legislation toward the integration of the arts as an integral part of the core curriculum.

Program of Study

REQUIRED COURSES		CREDITS
Educational	Leadership Component	
EP 7020	Collaborative Leadership	3
EP 7030	Transforming the Educational Agenda	3
EP 7050	Qualitative Methodology and Applied Research	3
EP 7090	Critical Perspectives for Arts Advocacy	3
EP 7110	Arts and Learning	3
EP 7130	Shaping Policies and Practices in Arts Education	1 3
EP 7840	Capstone in Arts, Leadership, and Learning	3

Specialization Component

Coursework selected in conjunction with advisor.

Total for CAGS in Educational Leadership, Arts, Leadership, and Learning Concentration

Curriculum Administrator, K-12

Program Coordinator: Christie Sweeney, EdD (603) 535-3096, e-mail: clsweeney@plymouth.edu

The Curriculum Administrator concentration is designed to develop outstanding instructional leaders who will encourage the improvement of learning opportunities and academic achievement for all students. The objectives of the various courses required in the program are based on the NH state standards for the certification endorsement and adhere to the guidelines set by ISLLC for programs in educational leadership.

The program of study addresses the role of the curriculum administrator as a leader of a professional learning community who is charged with the responsibilities of planning, implementing, and evaluating educational programs that are relevant and responsive to the needs of learners. Courses will address the competencies required of the curriculum administrator as collaborative leader, decision-maker, consultant, and specialist in advising administrators, teachers, the community, and other professional personnel on the research and best practices in curriculum development, instruction, and assessment of student learning.

Candidates for the Curriculum Administrator program must have at least three years of experience as a K-12 educator and hold at least a master's degree in curriculum and instruction, or in education, with additional coursework in the areas of curriculum, instruction, and assessment.

Candidates will participate in coursework and field experiences and construct a portfolio based on the standards for certification to demonstrate their skills, competencies, and knowledge before completing the program for certification endorsement.

Program of Study

REQUIRED	COURSES	REDITS
Prerequi	site Coursework (from master's or post-master's)	
AD 5700 or	o School Law	3
SE 5300	Special Education Law	3
CE 5140 or	Electronic Portfolio Development and Assessment	3
CE 5120	Integration of Digital Technology into the	
	Common Core Standards	3
ED 5060 or	Theories of Learning and Cognitive Development	3
CO 5050	Advanced Human Development	3
ED 5080 or	Instructional Strategies and Curriculum Design	3
SE 6040	Curriculum Development in Special Education	3
ED 5140 or	Assessment: Principles and Practices	3
ED 6100	Curriculum Integration and Performance-Based Assessment	3

Educational Leadership Component AD 5020 Staff Development and Evaluation 3 AD 5330 Leadership in Curriculum Development and 3 ED 5XXX Elective in Curriculum, Instruction or Assessment 3 EP 7020 Collaborative Leadership 3 EP 7030 Transforming the Educational Agenda 3 EP 7040 Planning in Education and Human Services 3 EP 7050 Qualitative Methodology and Applied Research 3 EP 7060 Legal Issues in Policy Making 3 EP 7070 Contemporary Social Trends 3 Capstone Experience Practicum: K-12 Curriculum Administrator 6 EP 7830 Total for CAGS in Educational Leadership, Curriculum Administrator K-12 Certification Concentration 33

Curriculum and Instruction

Program Coordinator: Christie Sweeney, EdD (603) 535-3096, e-mail: clsweeney@plymouth.edu

Program of Study

REQUIRED COURSES		CREDITS		
Educational	Educational Leadership Component			
EP 7020	Collaborative Leadership	3		
EP 7030	Transforming the Educational Agenda	3		
EP 7040	Planning in Education and Human Services	3		
EP 7050	Qualitative Methodology and Applied Research	3		
EP 7060	Legal Issues in Policy Making	3		
EP 7070	Contemporary Social Trends	3		
Specializati	on Component			
Concentrat	ion area different from master's degree	12		
Elective Cor	•			
To be appro	oved by advisor	3		
Capstone Experience (3–6 credits)				
EP 7850	CAGS Capstone	3-6		
or	G.705 Captione	, ,		
EP 7910	Independent Study	1-4		
or				
EP 7560	Special Topics in Educational Leadership	1-4		
Total for CAGS in Educational Leadership, Curriculum and				
	Concentration	33		
uction				

Neurodevelopmental Approach to Teaching

Program Coordinator: Cheryl B. Baker, EdD (603) 535-2737, e-mail: cbaker@plymouth.edu

The College of Graduate Studies has partnered with the Center for School Success to create graduate programs focusing in the Neurodevelopmental Approach to Teaching—the only programs of their kind in the country. The Center for School Success (CSS) is a

non-profit organization that helps struggling students achieve measurable success in school and in life. Located in West Lebanon, NH, CSS is the only community-based, educational resource of its type in New Hampshire and Vermont.

Candidates seeking a CAGS with a concentration in the Neuro-developmental Approach to Teaching will be able to use recent brain-based research to inform their teaching practice, in particular how to identify, respond, and manage students with learning differences. Candidates will demonstrate an understanding of themselves as learners and how they can best capitalize on their own strengths, experiences, and expertise in order to become more effective teachers. Candidates will also use their understanding of the neurodevelopmental systems to provide specific instructional strategies to promote self-advocacy and school success. The Neurodevelopmental Approach to Teaching courses will provide the essential tools and knowledge needed for sustained implementation.

The Neurodevelopmental Approach to Teaching rationale is based on research, best practices, and professional development standards outlined by the College of Graduate Studies, the Council for Exceptional Children (CEC), the National Staff Development Council (NSDC), and the National Council for Accreditation of Teacher Education (NCATE).

Program of Study

REQUIRED COL	URSES	CREDITS
Educational	Leadership Component	
EP 7020	Collaborative Leadership	3
EP 7030	Transforming the Educational Agenda	3
EP 7040	Planning in Education and Human Services	3
EP 7050	Qualitative Methodology and Applied Research	3
EP 7060	Legal Issues in Policy Making	3
EP 7070	Contemporary Social Trends	3
Specializatio	on Component	
ND 5000	Foundations of Neurodevelopmental Theory	2
or		
ND 5005	Understanding the Mind of a Learner	2
ND 5010	Effective Classroom Practice	2
ND 5020	Instructional Practice	3
ND 5030	Collaborative Practices	2
ND 5040	Authentic Data to Engage Students' Minds	2
ND 5050	Attention and Memory in Learning	2
Specialized 1	Electives (choose one)	
ND 5100	Reconsidering Referrals to Support Teams	3
ND 5110	New Coaches Institute–Critical Friends	3
Capstone Ex	perience	
ND 5800	Practicum	9
Total for CA	GS in Educational Leadership, Neurodevelopment	al
Approach to	Teaching Concentration	43

3

3

3

3

3

Reading And Writing Specialist, K-12

Program Coordinator: Edith Patridge, MEd (603) 535-2636, e-mail: epatridge@plymouth.edu

The Reading and Writing Specialist program is based on a broad foundation of courses and experiences in a comprehensive and balanced approach to literacy learning and development. The program is aimed at helping K–12 classroom teachers, special educators, Title I personnel, literacy coaches, curriculum coordinators, adult literacy teachers, educators, and administrators provide the highest quality literacy instruction to all students in today's diverse classrooms. The program of study builds on candidates' preparation and experience in reading and writing while addressing standards from the International Reading Association and the NH Department of Education. This advanced specialist program requires that candidates be certified as a teacher and have a minimum of two years of teaching experience before completion of the program.

The coursework emphasizes concepts based on the roles of the reading and writing specialist in the areas of instruction, assessment, and leadership. Reading and writing specialists provide service through many roles, including remedial teacher, co-teaching with the regular classroom teacher, professional development provider, literacy coach, Title I coordinator, and mentor. Newly graduated reading and writing professionals in this program will have the opportunity to develop the competencies in providing leadership for school-, district-, and statelevel literacy programs, assessing and evaluating reading achievement and literacy programs, and communicating information about literacy to staff, administration, parents, and the community.

Candidates will demonstrate knowledge and skills in six categories of standards outlined by the International Reading Association, including foundational knowledge; curriculum and instruction; assessment and evaluation; diversity; literate environment; and professional development.

Program of Study

RL 5110

REQUIRED COURSES		
Educational	Leadership Component	
EP 7020	Collaborative Leadership	3
EP 7030	Transforming the Educational Agenda	3
EP 7040	Planning in Education and Human Services	3
EP 7050	Qualitative Methodology and Applied Research	3
EP 7060	Legal Issues in Policy Making	3
EP 7070	Contemporary Social Trends	3
Specializati	on Component	
CE 5120	Integration of Digital Technology into the	
	Common Core Standards	3
or		
CE 5150	Inspiring Digital Media Fluency in the K–12	
	Classroom	3
ED 5060	Theories of Learning and Cognitive Developmen	nt 3
or		
ND 5000	Foundations of Neurodevelopmental Theory	3
LL 5004	Language and Linguistics*	3
RL 5014	Reading, Writing, and Literature	3

RL 5170 RL 5710 RL 5770	Content Area Literacy Advanced Diagnostic Testing and the Improvement of Reading and Writing Developing Language and Literacy for Diverse Learners	
Capstone Ex RL 5820 RL 5830	perience Literacy Practicum Practicum in Reading Diagnosis and Remedial Reading	

*Approved Substitutions: LL 5005 Foundations of TESOL Methodology, LL 5007 ESOL Literacy, or NHEON LT-05, or LT 06, or LT-07.

Total for CAGS in Educational Leadership, Reading and Writing Specialist K–12 Certification Concentration 48

School Principal, K-12

Program Coordinator: Christie Sweeney, EdD (603) 535-3096, e-mail: clsweeney@plymouth.edu

Educators who wish to explore the possibilities of school leadership and administration will find PSU's school principal certification program rich in opportunities for collaboration, research and practical experience. From curriculum development and assessment to school law, school budgets, and community partnerships, candidates will master the wide array of responsibilities, duties and leadership qualities an effective school principal must possess.

The School Principal program provides candidates with:

- · An increased understanding of the changing roles of school leaders
- An ability to identify strategies that can lead an educational institution in a positive direction for the benefit of children, teachers, school staff, families, and communities
- A background in school leadership that reflects a diverse and flexible array of approaches and philosophies appropriate to today's schools and communities
- Opportunities to extend previous leadership experience through research and collaboration
- Support in developing the self-confidence and vision necessary for providing leadership to others and creating partnerships between schools and communities

Graduates of this degree program who possess at least three years of K–12 teaching experience are eligible for certification as a school principal (with appropriate coursework) in the state of New Hampshire. Reciprocity through interstate compacts extends this certification to many additional states.

Program of Study

3

	REQUIRED COURSES		CREDITS
Educational Leadership Component			
	EP 7020	Collaborative Leadership	3
	EP 7030	Transforming the Educational Agenda	3
	EP 7040	Planning in Education and Human Services	3
	EP 7050	Qualitative Methodology and Applied Research	3
	EP 7060	Legal Issues in Policy Making	3
	EP 7070	Contemporary Social Trends	3

Research in Reading and Writing

School Principal Component AD 5020 Staff Development and Evaluation 3 AD 5300 School Finance and Negotiation 3 AD 5330 Leadership in Curriculum Development and Assessment 3 ED 5060 Theories of Learning and Cognitive Development 3 SE 5400 Classroom Interventions and Special Education Strategies 3 Capstone Experience AD 5800 Practicum in Educational Leadership: The Principalship 3

Special Education Administration, K-12

Total for CAGS in Educational Leadership, School Principal K–12 Certification Concentration

Program Coordinator: Marcel Lebrun, PhD (603) 535-2288, e-mail: mrlebrun@plymouth.edu

Candidates in the Special Education Administration concentration must have a minimum of three years teaching experience and possess certification in General Special Education K-12.

Program of Study

REQUIRED COURSES		CREDITS	
CAGS Core Component			
EP 7020	Collaborative Leadership	3	
EP 7030	Transforming the Educational Agenda	3	
EP 7040	Planning in Education and Human Services	3	
EP 7050	Qualitative Methodology and Applied Research	3	
EP 7060	Legal Issues in Policy Making	3	
EP 7070	Contemporary Social Trends	3	
Special Educ	cation Administration Component		
AD 5020	Staff Development and Evaluation	3	
AD 5300	School Finance and Negotiation	3	
CO 5430	Assessment and Consultation	3	
ED 5060	Theories of Learning and Cognitive Developmen	t 3	
SE 5760	Collaboration, Consultation, and Leadership in		
	Special Education	3	
SE 6040	Curriculum Development in Special Education	3	
Capstone Ex	perience		
SE 7800	Special Education Leadership Practicum	3	
Total for CAGS in Educational Leadership, Special			
Education Administration K-12 Certification Concentration 39			

Superintendent of Schools, K-12

Program Coordinator: Christie Sweeney, EdD (603) 535-3096, e-mail: clsweeney@plymouth.edu

The School Superintendent certification concentration combines the competencies required for school principal certification with school leadership courses within the CAGS program. Graduates will be endorsed for certification as K–12 School Superintendents in New Hampshire.

Program of Study

36

REQUIRED COL	JRSES C	REDITS
CAGS Core Component		
EP 7020	Collaborative Leadership	3
EP 7030	Transforming the Educational Agenda	3
EP 7040	Planning in Education and Human Services	3
EP 7050	Qualitative Methodology and Applied Research	3
EP 7060	Legal Issues in Policy Making	3
EP 7070	Contemporary Social Trends	3
Superintend	ent of Schools Component	
AD 5020	Staff Development and Evaluation	3
AD 5300	School Finance and Negotiation	3
AD 5330	Leadership in Curriculum Development and	
	Assessment	3
EP 7100	School Labor Relations, Negotiations, and	
	Personnel Management	3
EP 7200	School Buildings and Transportation	3
EP 7300	The Superintendency and School District Leadersh	nip 3
Learning Th	eory Component Courses (if not met previously)	
ED 5060	Theories of Learning and Cognitive Development	3
SE 5400	Classroom Interventions and Special Education	
	Strategies	3
Capstone Ex	perience	
EP 7800	Practicum in Educational Leadership: The	
	Superintendency	3
Total for CA	GS in Educational Leadership, Superintendent	
of Schools K	1–12 Certification Concentration	45

CAGS in HIGHER EDUCATION

Program Coordinator: Kathleen Norris, EdD (603) 535-3023, e-mail: knorris@plymouth.edu

PSU's Certificate of Advanced Graduate Studies (CAGS) in Higher Education is designed to provide post-masters graduate students with background needed for successful careers in a variety of higher education environments. The CAGS in Higher Education offers two, 36-credit concentrations in Administrative Leadership and Curriculum and Instruction.

These programs will prepare students to assume leadership positions in higher education, whether as administrators or instructors, and develop students' critical thinking and creative skills to enable them to develop innovative solutions and programs in higher education environments. Students will learn the roles, functions and responsibilities of higher education institutions and be prepared to work with and serve these institutions' diverse stakeholders.

Administrative Leadership

Program of Study

REQUIRED COURSES		CREDITS	
Administrati	ive Leadership Component		
EP 7050	Qualitative Methodology and Applied Research	3	
EP 7121	Designing and Leading Healthy Organizations	3	
HD 7000	Foundations of Higher Education	3	
HD 7010	Legal and Ethical Issues in Higher Education	3	
HD 7020	Collaboration in Higher Education	3	
HD 7030	Higher Education Administration and		
	Organizational Management	3	
HD 7040	Emerging Trends in Higher Education	3	
HD 7050	Coaching Innovative Leaders	3	
Elective Con	•		
To be determined with advisor		3–6	
a . =			
Capstone Ex	-		
HD 7022	8		
	Leadership	3–6	
Maria Control			
	otal for CAGS in Higher Education,		
Administrative Leadership Concentration			

Curriculum and Instruction

Program of Study

REQUIRED COURSES		CREDITS
Curriculum	and Instruction Component	
EP 7050	Qualitative Methodology and Applied Research	3
HD 7000	Foundations of Higher Education	3
HD 7010	Legal and Ethical Issues in Higher Education	3
HD 7020	Collaboration in Higher Education	3
HD 7060	Integrating Technology in Higher Education	3
HD 7070	Working with Post –Secondary Learners	3
HD 7080	Curriculum, Instruction, and Assessment	3
HD 7090	Teacher Transformation	3

Elective Component	
To be determined with advisor	
Capstone Experience HD 7021 Practicum in Higher Education Instruction	3–6
Minimum Total for CAGS in Higher Education,	
Curriculum and Instruction Concentration	

CAGS IN SCHOOL PSYCHOLOGY

Program Coordinator: Cindy Waltman, PhD (603) 535-3119, e-mail: cwaltman@plymouth.edu

This program is designed for students who already have a master's degree in a discipline related to school psychology. This flexible degree program contains a minimum of 33 credits, but may include up to 57 credits depending on the relatedness to school psychology of the candidate's previous master's degree. Please see the MEd in School Psychology program for a complete listing of courses needed to become certified as a school psychologist.

Admission Process

Professional organizations recommend that program admissions criteria include consideration of the applicant's openness to self-examination and personal and professional self-development. For this reason, students need to participate in the Counselor Education and School Psychology (CESP) Department Group Interview, as part of the admissions process. The Group Interview is a half-day event held quarterly, and involves an informational session along with group and individual interviews. Participation in the interview process is open to any prospective student and is not dependent on students having completed the application process to PSU's College of Graduate Studies. An admissions decision will be made upon completion of both of the application and admissions interview. Visit plymouth.edu/graduate/admissions/requirements for instructions on how to register for the group interview.

While students are allowed to take 3 CAGS credits before completing the application process, it is important for students to understand that successful completion of coursework is not a guarantee of admission into CESP Department programs.

CESP Department Monitoring and Dismissal Process

The program faculty has the responsibility to monitor students' personal and professional characteristics that have the potential to interfere with their ability to perform in an ethically and professionally competent manner. Additionally, faculty monitor students' academic performance. Thus, all CESP Department students are continuously monitored while they are enrolled in CESP courses. This review is done at regularly scheduled faculty meetings by CESP faculty in consultation with adjunct faculty. All students' academic, personal, and professional progress is reviewed at the end of each academic term.

As part of the regular review of students' personal and professional performance, faculty members note personal and professional issues that significantly affect students' ability to function adequately as counselors, graduate students, and professionals. The CESP faculty delineates specific action steps for students as needed. The students' advisors (sometimes in conjunction with the Department Chair) meet with students to discuss remediation action steps. Depending upon the nature and severity of the concerns, appropriate action steps range from (a) collaborative strategies for personal and professional improvement to (b) a required leave of absence to (c) dismissal from the CESP Department programs. For those continuing in their program, a schedule of follow-up meetings occurs as part of the process.

A review of all dismissal decisions can be requested from the Associate Vice President of the College of Graduate Studies and the Vice President for Academic Affairs.

Internship

All required professional courses must be successfully completed before students can enroll in the internship experience. Students must contact their program coordinator during the term prior to their internship experience in order to make appropriate arrangements. The deadlines are October 1 for the winter and spring terms and February 1 for the fall term (or the first business day of those months).

Students must successfully complete a 1,200-hour comprehensive public school internship in school psychology that spans the K–12 grade levels in order to demonstrate and further develop relevant competencies. In order to be recommended for certification as a school psychologist, students must complete 12 credits of SY 6800 Seminar and Internship in School Psychology. The internship component of these experiences must be completed in school settings that have as their primary function the education of public school students. In addition, students must be supervised on site by a certified school psychologist and must be able to attend on-campus seminars during the terms they are involved in their internship experiences. Typically, the internship requirement is met over three academic terms (fall, winter, and spring) and carries 12 credits. Students must complete their internship experience within two calendar years.

Comprehensive Assessment / Praxis II

School psychology candidates will be expected to develop an electronic portfolio based on the New Hampshire state standards. This portfolio will be reviewed and completed during the internship.

Candidates also must submit passing scores on the Praxis II test prior to completion of the program.

Program of Study

REQUIRED COURSES			
Counselor Education Component			
CO 7300	Counseling Supervision	3	
or			
EP 7040	Planning in Education and Human Services	3	
EP 7020	Collaborative Leadership	3	
or			
EP 7030	Transforming the Educational Agenda	3	
EP 7050	Qualitative Methodology and Applied Research	3	
School Psychology Specialization Component 12+			
Students take what they need for certification based on the			
competencies met in their master's degree program.			
Capstone Experience			
SY 6800	School Psychology Internship and Seminar	12	
Minimum Total for CAGS in School Psychology 33			

Doctor of Education

EdD in Higher Education

Program Coordinator: Kathleen Norris, EdD (603) 535-3023, e-mail: knorris@plymouth.edu

PSU's Doctor of Education (EdD) in Higher Education is designed to provide doctoral students with the skills and knowledge needed for successful careers in a variety of higher education environments. Doctoral students who currently work in higher education, and those who aspire to, will be able to explore the field of higher education through core and specialization courses, and participate in a practicum experience designed to give them direct experience in their areas of interest.

The Higher Education program provides experiences in and assessment of these learning outcomes: Leadership, Advocacy, Reflection, Innovation, Scholarship, Application, Professionalism, Service, Global Awareness, Social Responsibility, Reflective Writing, Academic Writing, Research Methodology, Systems Analysis, Information Management and Collaboration

The field of Higher Education is evolving and changing to meet the demands of 21st century demographics and work force needs. By incorporating principles of reflective practice and contemplative pedagogy into this program, the Higher Education faculty members look to prepare innovative leaders and instructors who will be equipped to do transformative work in their chosen higher education environments

Administrative Leadership

Program of Study

REQUIRED COURSES CREDITS

Prerequisite Coursework

A graduate-level Research Design course

An advanced graduate-level Qualitative Methodologies course

Area of Specialty: Administrative Leadership

Development

EP 8010

EP 7121	Designing and Leading Healthy, Effective		, ,	
	Learning Organizations	3	Doctoral Core Component	
HD 7000	Foundations of Higher Education	3	EP 8000	Emerging Perspectives on Learning and
HD 7010	Legal and Ethical Issues in Higher Education	3		Development
HD 7030	Higher Education Administration and		EP 8010	Program Evaluation: Theory and Practice
	Organizational Management	3	EP 8020	Ethical Leadership and Advocacy
HD 7040	Emerging Trends in Higher Education	3	EP 8030	Leadership in a Diverse World
HD 7050	Coaching Innovative Leaders	3	EP 8040	Resource Planning and Stewardship
HD 7022	Practicum in Higher Education		EP 8050	Vision Synergy and Synthesis
	Administrative Leadership	3-6	EP 8060	Doctoral Seminar: Writing the Proposal
Plus one-two elective courses		3-6	EP 8820	Externship
Possible electives are:				
EP 7560	Special Topics in Educational Leadership	3	Dissertation Blocks	
HD 7020	Collaboration in Higher Education	3	EP 8070	Dissertation Block I: Review of Literature
HD 7070	Teaching Post-Secondary Learners	3	EP 8080	Dissertation Block II: Methodology and
HD 7090	Teacher Transformation	3		Proposal Defense
			EP 8090	Dissertation Block III: Data Gathering and
Doctoral Core Component			-	Analysis, Conclusions and Dissertation Defense
EP 8000	Emerging Perspectives on Learning and			

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EP 8020

EP 8030

EP 8040

EP 8050

EP 8060

EP 8820

EP 8070

EP 8080

EP 8090

Leadership Concentration

Prerequisite Coursework

Program of Study

REQUIRED COURSES

HD 7000

HD 7010

HD 7060

HD 7070

HD 7080

HD 7090

HD 7021

EP 7560

HD 7020

HD 7030

HD 7040

Curriculum and Instruction

A graduate-level Research Design course

Area of Specialty: Curriculum and Instruction

Assessment

Plus one-two elective courses

Possible electives are:

Teacher Transformation

Total for EdD in Higher Education, Curriculum and

Instruction Concentration

Dissertation

Ethical Leadership and Advocacy

Resource Planning and Stewardship

Doctoral Seminar: Writing the Proposal

Dissertation Block I: Review of Literature

Dissertation Block III: Data Gathering and

Analysis, Conclusions and Dissertation Defense

Dissertation Block II: Methodology and

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60

CREDITS

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3-6

Leadership in a Diverse World

Vision Synergy and Synthesis

Externship

Proposal Defense

Total for EdD in Higher Education, Administrative

An advanced graduate-level Qualitative Methodologies course

Foundations of Higher Education

Teaching Post-Secondary Learners

Legal and Ethical Issues in Higher Education

Integrating Technology in Higher Education

Innovations in Curriculum, Instruction and

Practicum in Higher Education Instruction

Special Topics in Educational Leadership

Collaboration in Higher Education

Higher Education Administration and Organizational Management

Emerging Trends in Higher Education

Program Evaluation: Theory and Practice

89 Doctor of Education

EdD in Learning, Leadership, and Community

Program Coordinator: Kathleen Norris, EdD (603) 535-3023, e-mail: knorris@plymouth.edu

The Doctor of Education (EdD) degree is designed for experienced practitioners and professionals, including teachers, administrators, counselors and individuals working in higher education, community agencies and other organizations. Discovery, dissemination, and application of knowledge and research are integral to the program. Doctoral students participate in a cohort model that is developed into a learning community. The program courses and faculty support intellectual challenge, collaborative inquiry, and focused scholarship.

Doctor of Education Learning Outcomes

The EdD degree provides experiences in and assessment of learning outcomes related to the Graduate Program Hallmarks and is designed to:

- Enhance the leadership capacity of professionals through the expansion of knowledge and the refinement of skills;
- Foster inquiry and reflective practice through course content, learning, leadership, pedagogy, social theory and research;
- Develop participants' knowledge and expertise through research addressing current and best practices;
- · Encourage creative scholarship, reflection, and inquiry;
- Examine global and local issues of diversity and their impact in organizations as well as the larger society;
- Prepare participants to be system leaders and agents of change in their communities;
- Support and advance the application of knowledge and research that contributes to innovation and transformation in a variety of local, regional, national and international settings.

The Cohort Model

Students in the PSU doctoral program participate in their core courses as part of a cohort. The cohort is an integral component of the PSU doctoral program.

Two cohort models exist, and they begin in alternating summers. Doctoral students in the year-round model take their core courses on campus throughout the year, starting with their first summer, and they transfer in up to 27 credits of CAGS or equivalent post-master's work so their specialization courses are complete before enrolling. Doctoral students in the summer model take their core courses on campus over four summers and have time to take their specialization courses during the fall, winter and spring terms between the summers. Individuals who live at a considerable distance from campus, particularly those from outside New England, including international students, and those applicants who do not yet have a CAGS or equivalent post-masters work, will find the summers model designed for them.

The core courses, specialization coursework, and externship are sequenced across the terms of enrollment. Doctoral candidates in a year-round cohort take one or two courses during each term on campus, in sequence, starting in one summer and ending the following summer. Doctoral candidates in a summer cohort take two core courses each summer on campus, and conduct research, participate in practica or externships, or enroll in their specialization or elective courses (hybrid or online) during the academic year (falls, winters, springs). Core

courses are offered in an intensive or hybrid format, with pre-and post-course assignments required. It is expected that students will complete the 6o-credit degree within three to six years, depending on their cohort model. The total time taken to complete the degree may not exceed eight years.

Admissions

Admission to the doctoral program is competitive. The EdD degree is open to individuals who possess a master's degree and at least five years of successful experience in education and who have demonstrated evidence of or potential for professional leadership. Preference will be given to those with a Certificate of Advanced Graduate Studies (CAGS) or its equivalent.

Admission to the EdD degree program is based on the following:

- Submission of the Plymouth State University College of Graduate Studies online admissions application and application fee
- An official transcript from each institution attended (graduate and undergraduate) indicating, at minimum, a master's degree
- · A professional résumé or curriculum vitae
- · A professional writing sample displaying research and writing skills
- Three letters of recommendation that provide evidence of five years of experience, collaboration, and leadership in schools or educationrelated organizations
- An on-campus interview conducted by the doctoral admissions committee

The application deadline is March I of the year the cohort commences. The doctoral faculty serve as the admissions review board for this program and they select the applicants to be interviewed, and from those a cohort is chosen. Not every applicant who is interviewed will be admitted. Prospective applicants are encouraged to meet with the program coordinator well ahead of the application deadline for advising about the cohort model, application process, and other program information.

Prerequisite coursework

A graduate-level Research Design course An advanced graduate-level Qualitative Methodologies course

Program of Study

REQUIRED COURSES		CREDITS	
Doctoral Core Component (24 credits)			
	EP 8000	Emerging Perspectives on Learning and	
		Development	3
	EP 8010	Program Evaluation: Theory and Practice	3
	EP 8020	Ethical Leadership and Advocacy	3
	EP 8030	Leadership in a Diverse World	3
	EP 8040	Resource Planning and Stewardship	3
	EP 8050	Vision: Synergy and Synthesis	3
	EP 8060	Doctoral Seminar: Writing the Proposal	3
	EP 8820	Externship	3

Concentration or Specialization (27 credits)

Students select coursework based on their professional goals, certification needs, and interests. In some instances, career goals may require a degree program in excess of 60 credits; therefore, consulta-

tion with an academic advisor prior to taking courses is essential. Course selection must have the approval of the academic advisor and the doctoral program coordinator.

The concentration or specialization component can be fulfilled with courses taken for the student's Certificate of Advanced Graduate Studies (CAGS) or equivalent program. For example, students may apply courses from any of the Plymouth State University CAGS program options.

Dissertation (9 credits)

EP 8070	Dissertation Block I (Review of Literature)	3
EP 8080	Dissertation Block II (Methodology and Proposal	
	Defense)	3
EP 8090	Dissertation Block III (Data Gathering and	
	Analysis, Conclusions, and Dissertation Defense	3

60

Total for EdD in Learning, Leadership, and Community

The Dissertation

The purpose of the dissertation is to produce knowledge, insight, or new methods in the candidate's field of specialization. The dissertation must be meaningful and provide evidence of familiarity with existing research in the field. The dissertation should display mastery of and the ability to apply research findings, new analyses, syntheses, interpretations, and other research methods and procedures in order to contribute to a scholarly knowledge base.

Continuous Enrollment

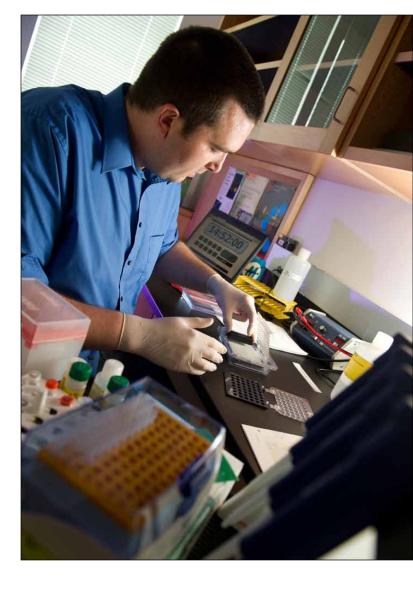
Candidates must remain enrolled continuously through the completion of the Dissertation. The program is designed for students to complete their Dissertation over three terms (9 dissertation credits). Students needing more time must register for continuation status until their Dissertation is complete.

Awarding the Doctor of Education Degree

The assessment for the award of the EdD degree is based on three components: coursework, the dissertation with proposal and final defenses, and the final approval by the dissertation committee.

Graduate Course Codes

AD	Administration	92
AE	Art Education	93
AL	Adult Learning	94
AN	Anthropology	94
AR	Art	95
AT	Athletic Training	95
BI	Biology	97
BU	Business	98
CE	Computer Education	102
CH	Chemistry	104
CO	Counseling	104
EC	Economics	108
ED	Education	109
EE	Experiential Education	II2
EL	Elementary Education	113
EN	English	114
EP	Educational Leadership	116
ER	Early Childhood Education	119
ESP	Environmental Science and Policy	119
EV	Environmental Science	123
FR	French	123
GE	Geography	123
HD	Higher Education	123
НН	Health and Healing	124
HI	History	125
HL	Health Education	126
HP	Health Promotion	126
HPR	Historic Preservation	127
HS	Heritage Studies	129
IN	Integrated Arts	129
LL	Languages and Linguistics	130
LM	Library Media	131
ME	Music Education	132
MG	Mathematics	133
MT	Meteorology	134
MU	Music	136
ND	Neurodevelopmental Approach to Teaching	136
NS	Natural Science	т217



ОН	Organizational Health	140
PA	Project Adventure	140
PE	Physical Education	141
PH	Physics	141
PO	Political Science	141
PS	Psychology	141
RL	Reading and Writing	142
SE	Special Education	143
SSE	Social Studies Education	145
SO	Sociology	146
SP	Spanish	146
SY	School Psychology	146
TH	Theatre	147

Graduate Course Descriptions

Administration

AD 5010 Organizational Leadership in Schools 3 Credits

Students in the educational leadership program are strongly encouraged to take this course first in the educational leadership course sequence. Roles and functions of administrators in elementary and secondary schools will be addressed. A variety of theories will be analyzed and applied in the context of the dynamic milieu, personal and group biases, and the multivariate issues facing organizational life in schools.

AD 5020 Staff Development and Evaluation 3 Credits

Major functions concerning the supervision of staff in a school setting, including the selection, orientation, and development of staff members, will be covered. Theories and techniques for promoting a positive school climate will be explored and applied. Alternative approaches to assessing and enhancing a staff's instructional competence will be examined. Prerequisite: AD 5010.

AD 5030 Research Design for the Professions 3 Credits

This course is designed for students in the Educational Leadership and Counseling programs. Students will gain knowledge of statistical concepts, including reliability and validity, scales of measurement, measures of central tendency, indices of variability, shapes and types of distributions, and correlations. Each student will develop a complete proposal for a program in their profession, including a needs assessment, data collection design, review of related literature, and plans for implementation and evaluation.

AD 5300 School Finance and Negotiation 3 Credits

The development of school budgets that support the planning processes within a school setting will be covered. Other relevant topics will include cost effectiveness, revenue sources, communication with the public, capital projects, state and federal programs, using the budget to promote excellence in the schools, and principles and practices in collective bargaining. Prerequisite: AD 5010.

AD 5330 Leadership in Curriculum Development 3 Credits and Assessment

Leading the participatory process for developing curricula in schools will be addressed. The relationship of philosophy, a school's identity, and mission to curricula is emphasized. Included are strategies for developing, assessing, and revising curricula as well as a review of recent research and trends. The course is intended for experienced educators who currently fill or aspire to the roles of school principal, team leader,



or department chair. Prerequisite: AD 5010; to be taken concurrently with or after ED 5060.

AD 5520 Negotiating, Collaborating, and Leading in 3 Credits Today's World

This course examines the dynamics, constraints, and skills needed in negotiation, collaboration, and leadership. It focuses equally on using negotiation in business planning and in dispute resolution. Theories of negotiation are examined through current literature, and specific techniques are taught through simulated exercises. The course is drawn from the fields of business, law, psychology, administration, and communication. Also offered as BU 5520.

AD 5560 Special Topics in Educational Leadership 1-3 Credits

An in-depth study of a particular topic, contemporary issue, or concern will be the focus of this course. It will be taught by a specialist within the field being studied or as an alternative methodology. A faculty member will coordinate a series of guest speakers who will meaningfully address the topic. Since topics vary, the course may be repeated with permission of the instructor.

AD 5700 School Law 3 Credits

Federal and state laws that apply to school systems, educational programs, and personnel will be discussed. Also covered will be the legal prerogatives available to the administrator and local boards of education. Consideration of constitutional, statutory, and case-law foundations of education systems, and the school administrator's role, will be discussed. Prerequisite: AD 5010.

AD 5800 Practicum in Educational Leadership: 3 Credits The Principalship

This course will provide a practical encounter with the administrative practices, strategies, and policies presently used in the public schools. Practicum visitations required as part of the course will be especially designed to match the experience, occupational aspirations, and

interests of the student. Conference with the instructor and meetings with fellow students will provide for exchange of ideas and reports of observations. AD 5010 and AD 5020 recommended but not required. It is recommended that this course be taken near the end of the candidate's program.

AD 5830 Educational Planning and Problem Solving 3 Credits

An overview of sound planning and evaluation models as applied to specific educational problems. Discussion will include collaborative strategies to implement effective change within the school setting. This course should be taken as the final course in either the MEd in Educational Leadership or the School Principal K–12 Certification.

AD 5910 Independent Study in Educational 1-3 Credits Leadership

This course provides the enrichment of the background of students in education through the pursuit of a special topic pertinent to their interests and abilities. This offers a chance for an in-depth study of a problem in the field of education. Consent of a faculty supervisor, the department chair, and the associate vice president for the College of Graduate Studies is required.

AD 6220 Dynamic Teacher Leadership 3 Credits

Dynamic Teacher Leadership is a course designed for the master/experienced classroom teacher/specialist who is passionate about making a difference in education and aspires to a leadership role in his/her school district. Current best practices will be examined, along with emerging standards in the area of teacher leadership. The various ways in which an educator can apply leadership skills, without being an administrator in a school, will be explored.

AD 6230 Extending Leadership-Community Outreach 3 Credits

Becoming a teacher leader includes understanding and responding to all stakeholders involved in education. Stakeholders include not only those directly involved in education such as students and parents, but also the extended community. This course will enable participants to identify various constituencies and understand the importance of multiple perspectives related to education and educational change. Participants will examine the psychological issues of change and begin to create opportunities to address those issues through comprehensive communication plans.

AD 6240 Staying Current as Teacher Leaders 3 Credits

It is the responsibility of all educators to participate in ongoing professional development. It is through this high level of professional engagement that educators gain the knowledge they need to be successful in the classroom. This course examines alternative ways of providing individualized, sustained professional development opportunities within an educator's work environment. Participants will review levels of advocacy and how they might become educational advocates within their organizations. This course will provide participants the opportunity to create personalized learning opportunities for themselves and their colleagues. Participants will create a gap analysis regarding a specific educational goal and develop a plan to advocate for change.

Art Education

AE 5020 Contemporary Challenges in Art Education 1-3 Credits

This course provides the opportunity for immersion in a specialized topic or area of study concerning selected art form(s), art history, multicultural arts traditions, special education and the arts, the arts and technology, or art education. Guest artists, educators, and professionals working in the field of the arts will be invited as guest instructors to share their experiences and expertise, as well as faculty members at PSU.

AE 5050 Elementary Methods and Materials in 3 Credits Art Education

This course will provide the opportunity to develop an in-depth understanding of the correlative roles of children's holistic learning, artistic growth, and development, which will provide the foundation for the study and application of constructivist and learner-centered approaches to instructional planning and dialogic pedagogy applied to art education. Study will encompass content of undergraduate courses AE 2000 and AE 3050, and extend to an applied research project and expanded theoretical reading in art education. Readings, research, discussion, studio production, and classroom observations will provide the framework for the study of art education as a discipline incorporating studio production, aesthetics, art history, and criticism. Art materials health and safety regulations will be examined. A 20-hour school observation component is required.

AE 5060 Pedagogy and Planning in Secondary Level 3 Credits Art Education

This course provides extended study of holistic methodology and inquiry based on learning for art education and diverse student populations, with an emphasis on adolescent development and instructional planning at the middle and high school levels. Components include community and citizenship, multicultural education, diversity issues, and inclusion. Standards-based unit planning at the secondary level will address interdisciplinary and multicultural social themes. A 20-hour school observation and teaching component is required. Study will encompass content of undergraduate course AE 3060 and extend to an applied research project and expanded theoretical readings in art education.

AE 5410 Art Education Student Teaching K-12 9 Credits

This is the culminating public school field-based teaching experience for MAT Art Education majors that fulfills the student teaching requirements for New Hampshire K–12 teacher certification in art education. The internship is a continuous, full-time (five days per week) experience at both elementary and secondary levels during which, after a period of structured observation, students gradually assume responsibility for a full range of visual art teaching activities encountered in a school situation, thereby demonstrating the appropriate professional skills and attitudes essential for successful teaching of diverse populations of students. The internship is conducted under the supervisory guidance of certified K–12 school art faculty and PSU Art Education Clinical Faculty. Required seminars complement the experience. Falls and springs. Prerequisite: completion of all course requirements for the MAT in Art Education. All the policies related to the undergraduate and graduate field experience apply to this course.

AE 5560 Special Topics in Art Education

This course provides a specialized offering by a specialist in a specific art education field. Students will participate in an intensive hands-on education experience. A departmental faculty supervisor and technician will be assisting the specialist in guiding the students in a focused environment. Students may repeat this course when offered under a different topic title.

1-3 Credits

AE 5700 Curriculum Development and Assessment 3 Credits in the Arts

Curriculum design, implementation, and assessment for curriculum developers, supervisors, educators, and students in the arts will be addressed. The course provides an introduction to the goals, history, content, theory, and practice of arts curriculum in public education as an independent discipline and an integrated component of a child's education. Emphasis is placed on state and national standards in the arts and reflects state mandates on arts assessment in K–12 public education. Participants will develop a working knowledge of the field through the development of balanced, discipline-based curriculum and assessment models for the arts which may be adapted to specific school sites. Summers.

Adult Learning

AL 5060 Psychology of Adulthood

This course takes a life-span developmental approach to adulthood in contemporary American society and includes the major theoretical perspectives regarding developmental transitions and age-related tasks. The course seeks to acquaint the student with seven broad themes of adult development: Theory; Research; Changes that occur within oneself throughout adulthood (e.g., physical, cognitive, health, social); Personality characteristics; Meaning in life; Stages and pointers for a successful journey; and Death and dying. Students use their own life experiences as a context for creating understanding in these seven areas.

AL 5070 Learning in Adulthood 3 Credits

This course focuses on the nature and process of learning in adulthood, especially in formal learning situations in business, industry, adult basic education, and adult higher education. Emphasizes the concept of learning how to learn and the ways in which adults function in independent learning situations. Examines theory, research, and practice from several different discipline perspectives to answer the question: "How do adults learn?"

AL 5080 Teaching Adults 3 Credits

This course builds on adult learning theory and examines the role of the instructor as the facilitator of learning. Major focus is on incorporating strategies for encouraging active learning, collaboration, self-directed learning, and self assessment by learners into a variety of learning situations. Class participants will be involved in demonstrating teaching methodologies and receiving feedback from group members.

AL 5090 Program Design and Evaluation 3 Credits

This course addresses a broad spectrum of program development ranging from an individual course to a complete program of major learning activities conducted over a period of time. Participants will design programs based on their own special interests, for example, adult higher education, business and industry training, adult basic education, etc.

Major emphasis will also be placed on designing program evaluations tailored to meet specified goals.

AL 5130 Educating for Adult Literacy 3 Credits

This course examines current theory and best practice related to adults' development of functional literacy skills. The purpose of this course is to offer useful hands-on experiences and strategies for teaching literacy skills as well as the theoretical background and relevant research in the literacy field that will assist in understanding and appreciating the problems of adults with limited literacy. Understanding the problem of illiteracy requires knowledge about the sociological effects of schooling, the effects of poor education, issues of resistance to education, learner motivation, and the physiological, psychological, and societal barriers and incentives related to the successful development of literacy skills.

AL 5140 The Learning Workplace 3 CREDITS

This course deals with the professional learning needs and priorities of the workplace. It examines the variety of ways in which employees and their managers gain new knowledge and skills as part of their professional growth. Particular emphasis is given to the concept of the learning organization: its characteristics, how the concept of 'learning organization' is implemented in different types of organizations, the benefits of a learning organization to both the employee and the organization, and the role that the professional educator or trainer plays in building a learning organization. Also included is the role knowledge management plays in the development of the learning organization.

AL 5150 Learning and Teaching Styles 3 CREDITS

This course examines the concept of learning style, or cognitive style, in relation both to teaching and learning. Participants will take learning style inventories as part of the class and will be involved in practical applications of learning style concepts through the creation of learning activities, assignments, geared to the particular audience they teach. Emphasis will be on adolescent and adult learning but will be applicable to all levels and ages. In addition, teaching styles will be examined.

Anthropology

AN 5140 Special Topics in Anthropology 3 Credits

Specialized topics chosen for Graduate Seminar by individual faculty. Scheduled as needed.

AN 5410 Native Americans: Past and Present 3 Credits

This course traces the history of native cultures in North America with an accent on the northeastern region for teachers and other educators. Various Indian cultures will be described in traditional anthropological categories such as language, kinship, religion, politics, and subsistence. Cultural change, relativism, ethnocentrism, and social conflict are some of the topics used to understand their culture from the past into the present.

AN 5910 Independent Study in Anthropology 1–3 Credits

Independent study provides students with the opportunity to round out their background in anthropology through reading and research that supplements previous coursework in the field. A research paper, periodic conferences, and an oral examination may be required. Consent of a faculty supervisor, the department chair, and the associate vice president for the College of Graduate Studies is required.

Art

AR 5200 Survey of Arts Projects, Programs, and 3 Credits Technology

An overview of art projects, programs and technologies, this survey course acquaints the student with a wide variety of integrated arts experiences that have been successfully implemented into a wide range of educational, cultural, and recreational settings. Commonalties between projects and programs will be examined, as will the qualities that make them unique. The latest in art technologies will also be surveyed in order to expose students to new possibilities in arts integration through technology.

AR 5300 The Arts in Society 3 Credits

An exploration of the relationship of the creative artist and the arts (i.e., visual arts, theatre, and music) to society is addressed. The changing role of the arts will be considered within the context of the socioeconomic, historical, political, and cultural forces that shape them. Particular attention will be given to the societal values that mold and are expressed by the arts in a range of cultures, both East and West. The role of the artist as a force in cultural change also will be studied. Summers.

AR 5560 Special Topics In Art 3 Credits

This course provides a specialized offering by an off-campus specialist in a specific studio method. Students will participate in an intensive hands-on studio experience running for six days and five evenings. A departmental faculty supervisor and technician will be assisting the specialist in guiding the students in a focused environment. Students may repeat this course when offered under a different topic title.

AR 5800 Studio/Design Teaching Apprentice 3-4 Credits

This course provides the opportunity for a qualified student to assist the area coordinator, or with teaching and studio responsibilities for one undergraduate course at the 1000- to 4000-level in the student's area of concentration. The student will have designated studio/lab and instructional responsibilities in the class and will participate with the faculty member in regular discussions concerning the course content, student needs, studio/lab maintenance, and instructional methodology. The student will receive mentorship in their area of studio mastery and have the opportunity to develop a personal body of work. Offered fall and spring. Student must present a portfolio of work and be interviewed and approved by the area coordinator, with additional approval of MAT in Art Education coordinator, and chair of the department. Student must have earned a BA or BFA in Art or BS in Art Education.

AR 5910 Independent Study in Art 1–3 Credits

Advanced work in a limited area of studio art, art history, or art education, selected and carried out in consultation with an art faculty advisor. Consent of a faculty supervisor, the department chair, and the associate vice president for the College of Graduate Studies is required.

Athletic Training

AT 5000 Preventative Theories and Psychomotor Skills 3 Credits

This course will examine the preventative theories and psychomotor skills that the entry-level Athletic Trainer must possess to effectively prevent and treat the injuries of athletes and others involved in physical activity. Prerequisite: admission to the Entry-Level Athletic Training degree program.

AT 5010 Orthopedic Assessment I 3 Credits

A systematic approach to orthopedic assessment will be examined. Each body section will be studied individually, stressing the anatomy, myology, neurology, physiology, etiology, pathology, and assessment techniques. This course will cover the lower extremity, trunk, abdomen, and lumbar spine. Assessment techniques will be presented and discussed in a didactic manner as well as applied through lab experiences.

AT 5020 Orthopedic Assessment II 3 Credits

A systematic approach to orthopedic assessment will be examined. Each body section will be studied individually, stressing the anatomy, myology, neurology, physiology, etiology, pathology, and assessment techniques. This course will cover the upper extremity, cervical spine, head, and face. Assessment techniques will be presented and discussed in a didactic manner as well as applied through lab experiences.

AT 5100 Athletic Training Administration 3 Credits

This course will examine the knowledge, skills, and values that the entry-level athletic trainer must possess to develop, administer, and manage a health care facility and associated venues that provide health care to athletes and others involved in physical activity. Additionally, this course will provide the knowledge, skills, and values that an entry-level athletic trainer must possess to understand professional responsibilities, avenues of professional development, and national and state regulatory agencies and standards in order to promote athletic training as a professional discipline and to educate athletes, students of athletic training, the general public, the physically active, and associated individuals.

AT 5200 Pharmacology In Sports Medicine 2 Credits

This course will examine knowledge, skills, and values required of the entry-level athletic trainer on pharmacological applications including awareness of the indications, contraindications, precautions, and interactions of medications, and governing regulations relevant to the treatment of injuries to and illnesses of athletes and others involved in physical activity.

AT 5250 Therapeutic Exercise in Athletic Training 3 Credits

This course will examine the knowledge, skills, and values the entry-level athletic trainer must possess to plan, implement, document, and evaluate the efficacy of therapeutic exercise programs for the rehabilitation and reconditioning of the injuries and illnesses of athletes and others involved in physical activity. Assessment techniques will be presented and discussed in a didactic manner as well as applied through lab experiences.

AT 5255 Introduction to Burdenko Conditioning 1 Credit

This course will identify the principles for, and the relationship between, water and land exercises. Participants will learn how to use water as a modality to develop the qualities of flexibility, balance, endurance, strength, speed, and coordination.

AT 5300 General Medical 3 Credits

This course will examine the knowledge, skills, and values that the entry-level athletic trainer must possess to recognize, treat, and refer, when appropriate, the general medical conditions and disabilities of athletes and others involved in physical activity.

AT 5310 Fundamentals In AT Education Instruction I 3 Credits

This course introduces the advanced higher education athletic training student to classroom teaching methodologies in a CAATE-accredited athletic training education program. Students will learn about and apply skills in didactic as well as practical settings under the guidance of assigned classroom instructors. This is an introductory course in the fundamentals of classroom instruction.

AT 5320 Fundamentals In AT Education Instruction II 3 Credits

This course is designed for the advanced higher education athletic training student to develop and refine teaching methodologies in CAATE-accredited athletic training education program. Students will learn about and apply skills in didactic as well as practical settings under the guidance of assigned classroom instructors. This is an advanced level course in the fundamentals of classroom instruction.

AT 5330 Research and Statistics in Athletic Training 3 Credits

Introduces the research process in athletic training with an emphasis on evidence-based medicine. Students will learn to evaluate the quality of available research evidence and interpret statistical data and relevance. Scientific writing experience will be gained in the form of research proposals, literature reviews, case studies and critical appraisals. Fall of odd years. Prerequisites: admission to the EL Athletic Training Degree Program, AT 5010, and Statistics is recommended but not required.

AT 5500 Modalities in Sports Medicine 3 Credits

This is a comprehensive course in the theory and use of therapeutic modalities in a sports medicine setting. Principles of neurophysiology, pain control, and the electromagnetic and acoustic spectra will be discussed and applied through lab experiences.

AT 5600 Research Design in Health Sciences 3 Credits

This course is designed to develop skills in research design, as well as to enhance the student's understanding of literature searching, reading, and synthesizing of information in health science. In this course, students will conduct a review of literature to explore potential research topics. Students will develop a research question in preparation for their research experience.

AT 5610 Statistics in Health Sciences 3 Credits

This course is designed to be a continuation of Research Design in Health Sciences and will further develop skills in statistical design and research procedures. This course will outline the procedures for piloting and collecting data, and will provide guidelines for writing results, discussion, and the development of a paper acceptable for submission for publication.

AT 5700 Instructional Strategies in Burdenko 1–3 Credits Conditioning

Students will learn and apply the instructional knowledge base on how to plan, implement, and evaluate comprehensive conditioning programs based on the Burdenko Method of conditioning. This method identifies the principles for, and the relationship between, water and land exercises. Students will learn how to use water as a modality to develop the qualities of flexibility, balance, endurance, strength, speed, and coordination.

AT 5710 Burdenko Certification Part I 3 Credits

The Part I (level I, 2, 3) core program introduces the student to the philosophy of the Burdenko Method both on land and in water. Techniques are introduced that exemplify, illustrate, and expand upon that philosophy. This learning phase is accomplished through written material, demonstrations, and active participation. Active practice occurs both in large groups and pairs, under the supervision of the instructor. The student is then asked to teach that sequence to his or her partner and the instructor. The student will then receive feedback from the partner and the instructor. It is expected that the student will prepare for the practical and written exams. Prerequisite: anatomy, physiology, and kinesiology coursework.

AT 5720 Burdenko Certification Part II 3 Credits

Part II (levels 4, 5, 6) expands on the techniques utilizing more complex movement patterns both on land and in water relative to rehabilitation, conditioning, and training. This learning phase is accomplished through written material, demonstrations, active participation, and feedback. Active practice occurs both in large groups and pairs, under the supervision of the instructor. The student is then asked to teach that sequence to his or her partner and is given feedback by both the partner and the instructor. Prerequisite: Burdenko Certification Part I.

AT 5730 Burdenko Certification Part III 3 Credits

Part III certification is designed to train a student who is already currently certified in Burdenko Part I and Part II, and committed to become a certifying instructor of the method. Upon completion and certification of this course, the student would be able to host and teach certification level programs for both Part I and Part II. Prerequisite: Burdenko Certification Parts I and II.

AT 5740 Aquatic Exercise for Therapeutic Intervention 3 Credits and Sports Training and Conditioning

This course provides students with the opportunity to explore the use of water as a therapeutic, conditioning, and training modality. Principles of hydrostatic pressure, buoyancy, drag, and turbulence will be introduced and applied in this student-centered, active learning course. Therapeutic, conditioning, and training progression will be introduced from the more elementary exercises for rehabilitation and reconditioning through the introduction of aquatic exercises for strength and conditioning. Prerequisite: anatomy and kinesiology coursework.

AT 5750 Practicum In Athletic Training I 3 Credits

Practicum in Athletic Training is designed to provide the graduate student in athletic training some hands-on experiences with which to understand, recognize, evaluate, and treat athletic injuries and illnesses using the range of skills required of an athletic training professional. Experience is completed under the direct supervision of a certified athletic trainer.

AT 5760 Practicum In Athletic Training II

3 Credits

Practicum in Athletic Training is designed to provide the graduate student in athletic training some hands-on experiences with which to understand, recognize, evaluate, and treat athletic injuries and illnesses using the range of skills required of an athletic training professional. Experience is completed under the direct supervision of a certified athletic trainer.

AT 5770 Practicum In Athletic Training III 3 Credits

Practicum in Athletic Training is designed to provide the graduate student in athletic training some hands-on experiences with which to understand, recognize, evaluate, and treat athletic injuries and illnesses using the range of skills required of an athletic training professional. Experience is completed under the direct supervision of a certified athletic trainer.

AT 5780 Practicum in Athletic Training IV 3 Credits

Practicum in Athletic Training is designed to provide the graduate student in athletic training some hands-on experiences with which to understand, recognize, evaluate, and treat athletic injuries and illnesses using the range of skills required of an athletic training professional. Experience is completed under the direct supervision of a certified athletic trainer.

AT 5790 Advanced Practicum in Athletic Training 1-6 Credits

Practicum in Athletic Training is designed to provide the graduate student in athletic training a variety of opportunities to expand their knowledge of the profession. The practicum coordination, content, and requirements are determined by the student's advisor. Repeatable.

AT 5800 Current Issues in Athletic Training 3 Credits

This course was designed to provide a forum for discussion of contemporary issues in athletic training. Presentations will be made by students, instructor, and guest lecturers.

AT 5850 Performance Enhancement Specialization 3 Credits

This course is based on the National Academy of Sports Medicine certification program for the Performance Enhancement Specialist. The curriculum will follow the required content material to prepare each student to take the Performance Enhancement certification exam upon completion of the course.

AT 5875 Special Topics in Athletic Training 1–3 Credits

An in-depth study of a particular topic, contemporary issue, or concern in athletic training. The course will be taught by a specialist in the field related to the topic. May be repeated with a different topic.

AT 5900 Directed Research 1-12 Credits

This course will give students valuable experience in research design, data collection, or analysis by playing an integral role in a faculty sponsored research project. Repeatable.

AT 5910 Independent Study 1–6 Credits

This course is designed to provide enrichment to the background of students in athletic training through the pursuit of a special topic pertinent to their interest and abilities. This course provides an opportunity for in-depth study of a problem in the field of athletic training. The consent of a faculty supervisor is required.

AT 5950 Graduate Thesis

1-6 Credits

Students select a topic for study in consultation with their program advisor and related faculty. A timeline, thesis proposal, and defense are outlined. Two copies of the thesis must be submitted to Lamson Library; bound copies are presented to the thesis committee. Students will be required to enroll in AT 5950 Thesis every term until thesis is complete. Repeatable. P/NP.

Biology

BI 5100 Biology Colloquium

1 Credit

This course is comprised of lectures featuring prominent speakers from a variety of institutions.

BI 5110 Cell Structure and Function 3 Credits

Addresses the diversity of form and function found in the basic units of life, the cells. The first segment centers on the various techniques, especially electron microscopy, which are used to study microscopic anatomy. The components, or organelles, that comprise a "generalized cell" are examined and their functional relationships discussed. The second segment centers on the structural differences between tissues of the body (classical histology). Finally, this knowledge of cell and tissue structure will be employed to understand organs and organ systems. This course will not be purely morphological. The development and functional properties of these systems will be examined. There will be a laboratory component in this course. Fall.

BI 5120 Biotechnology 3 Credits

This course is an exploration of the use of living organisms to produce products beneficial to human kind, the application of biological organisms to technical and industrial processes, and the use of "novel" microbes that have been altered or manipulated by humans through techniques of genetic engineering. This is a laboratory-oriented course.

BI 5130 Ecology 3 Credits

Fundamental ecological concepts that illustrate the complex interrelationships of living organisms with each other and with the non-living environment will be the focus of the course. Laboratory time used for fieldwork, experimentation, and analysis of data will be incorporated. Graduate students will have additional coursework or projects equivalent to graduate level study. Fall.

BI 5140 Animal Behavior 3 Credits

The study of animal behavior offers a unique opportunity to understand the relationship between ecology, evolution, physiology, populations, and individual organisms. Examines the influence of genetics and environment on animal behavior. Outdoor and laboratory investigations test specific student or instructor generated hypotheses concerning the causal mechanisms underlying behavior. Fall.

BI 5150 Animal Physiology 3 Credits

This course will examine the various systems of the body including the respiratory, cardiovascular, digestive, and excretory systems using a comparative approach. Discusses the control of these systems and behavior by the nervous and endocrine systems. Inherent is an analysis of an interaction between the mechanisms of homeostatic regulation and the environment. Laboratory investigations using local animals

illustrate some of the principles outlined in lecture through the use of student or instructor-generated hypothesis testing and using modern equipment including computers, data acquisition units, amplifiers, transducers, stimulators, and activity monitors. Spring of even years.

BI 5160 Neurobiology 3 Credits

Examines the functioning of the nervous system in vertebrates and invertebrates. The fundamental principles underlying membrane potentials, action potentials, and conduction are followed by mechanisms of communication between single cells and groups of cells. Different aspects of sensory, motor, and integrative physiology are discussed and the role of specific parts of the brain is explored. The laboratory portion is used to demonstrate certain principles and phenomena discussed in lecture. The laboratory involves a series of student-driven mini-projects. Students use computers, Data Acquisition Units, oscilloscopes, manipulators, transducers, and amplifiers to test student or instructor generated hypotheses. Spring of odd years.

BI 5230 Landscape Ecology 3 Credits

The study of ecological principles at the landscape scale. Topics to be examined include the problem of scale, how models are used in land-scape ecology, what biotic and abiotic features are associated with the pattern of the landscape, what processes take place in the landscape, and what the applications of landscape ecology are. Course will include both lecture and practical experience in landscape ecology.

BI 5350 Conservation Biology 3 Credits

Conservation Biology investigates the causes and consequences of loss of biodiversity. Species are first placed into their ecological context. Then global and regional patterns of species extinction are discussed. The mechanisms that precipitate loss and eventually cause extinction are examined through modeling and statistical exercises. Students share in the responsibility for covering the material by presenting selected topics.

BI 5370 Behavioral Ecology 3 Credits

This graduate seminar focuses on the interface between behavior and fitness. Several categories of behavior are covered through presentations, reading of primary literature, and discussion. The topics include but are not limited to optimal foraging, mating systems and mate attraction, social organization (including eusociality), predator-prey interactions, and learning.

BI 5380 Avian Ecology 3 Credits

Avian Ecology is a field-oriented course that focuses on bird interactions with each other and their environment as a medium for understanding field ecological research. Students become familiar with local bird identification, give presentations on selected topics, assist in banding birds, and carry out their own individual research projects under the guidance of a researching avian ecologist.

BI 5560 Special Topics in Biological Sciences 1–3 Credits

Lectures on special topics in selected areas of the biological sciences. May be repeated in the same or separate terms, as topics vary, to a maximum of nine graduate hours.

BI 5810 University Biology Teaching 1 Credit

A course designed for graduate students interested in learning more about teaching biology effectively at the university level. The format of

the course will primarily be discussion-oriented with contributions from faculty both in and outside of the Department of Biological Sciences. Students should either be currently teaching or have taught at the college level. Topically the course will cover three areas: teaching and learning, the academic job market, and faculty life.

BI 5900 Graduate Seminar: Biology 1 Credit

Specific topics vary from year to year depending upon the interests of the faculty and the students enrolled.

BI 5910 Independent Study: Biology 1-4 Credits

Original research done in an area of the student's choosing in conjunction with a sponsoring faculty member. Results must be presented at a scientific conference.

BI 5950 Thesis Research: Biology 6–12 Credits

Supervised execution of thesis research. Prerequisite: permission of advisor after submission of a thesis proposal to committee.

Business

BU 5050 Business Graduate Internship 3 Credits

A supervised internship in business for graduate students. The purpose is to gain meaningful work experience and apply knowledge learned in previous coursework to the on-the-job situation. The internship placement must provide a new learning experience for the student. A work journal, reading in the field, and a report on work experience are required. Permission of internship coordinator, department chair, and the graduate program coordinator required. Prerequisite: nine graduate credits in business.

BU 5110 Managing Organizational Behavior 3 Credits

A review of theory and research findings in the field of organizational behavior, with emphasis on applications by practicing managers. Topics to be covered include perception, motivation, leadership, communication, group dynamics, conflict management, and organization theory. Pedagogical techniques include case analysis, presentations, role plays, and other experiential activities. Prerequisites: Common Professional Component (CPC) competencies in business ethics, business policies, and legal environment.

BU 5120 Financial Analysis 3 Credits

A complete corporate financial management course. Content covers the classic areas of valuation, capital structure, and budgeting, as well as more specialized financial topics. Online version incorporates online course materials and exercises. Prerequisites: BU 5190 and Common Professional Component (CPC) competency in business finance.

BU 5160 Seminar in Managing Human Resources 3 Credits

A review of contemporary techniques, practices, and research results in the area of human resource management, with emphasis on the perspective of the practicing manager. Topics to be covered include recruitment, selection, training and development, performance appraisal, compensation, labor relations and collective bargaining, occupational safety, and health and employee rights within the context of federal and state legal regulation. The case method is used extensively. The goal is to

assist the line or staff manager in effective utilization and implementation of human resource policies and practices.

BU 5165 Training and Development 3 Credits

This course provides the application of learning theories and instructional development to the education and training of employees. Topics include instructional design, strategy, technology, and the implementation, evaluation, and management of training in an organizational environment.

BU 5180 Exploring Personal and Organizational Health 3 Credits

Exploration of the evolving and emerging paradigms of holistic health and healing, and how the personal and organizational realms interconnect. In addition to examining the traditional wellness models, discussions will include concepts of mind, transpersonal psychology and energetics. Through an examination of personal and organizational contexts, students will explore ways to transform personal and work environments through mindfulness towards good intention, open mind and compassionate heart.

BU 5190 Accounting for Managers 3 Credits

Budgetary accounting and cost accounting including profit planning and control systems, budget process, cost systems, and their managerial applications. Prerequisite: Common Professional Component (CPC) competency in accounting.

BU 5210 Economic Analysis 3 Credits

Today's business climate demands managers who can make decisions involving the best use of an organization's scarce resources under conditions that change rapidly. This course demonstrates the power of problem-solving insights and uses a cross-functional approach. Topics to be covered include strategic pricing using game theory, forecasting techniques and demand estimation, cost analysis, linear programming, and optimization under various market structures. Prerequisites: Common Professional Component (CPC) competencies in economics and quantitative/statistics.

BU 5220 The Legal Environment of Business 3 Credits

A basic understanding of legal problems is expanded, analytical ability is developed, and an awareness of the presence of legal problems that surround the businessperson is explored. Freedom of choice, taxation, stockholder status, acquisitions and divisions, antitrust, employment, administrative law, and bankruptcy are covered as time allows. Prerequisite: Common Professional Component (CPC) competency in legal environment.

BU 5225 Current Issues in Employment Law 3 Credits

A study of legal issues that affect employers and employees in the modern American workplace, including wage and hour regulation, employment discrimination, sexual harassment, workers' compensation, disabled employee protection, covenants not to compete, whistleblowers' protection, and union representation.

BU 5230 Management of Organizational Changes 3 Credits

A study of the nature and scope of organizational change and development, from the perspective of the practicing manager. Consideration is given to the need for and role of consultants in this process, be they internal or external to the organization. Procedures to be discussed include survey research, job enrichment, management by objectives,

team building, and program evaluation. The case method will be used. Emphasis is on the role of the practicing manager in the control and facilitation of organizational change.

BU 5240 Seminar In Organizational Communication 3 Credits

An in-depth study of the variables affecting the transmission of internal and external organizational communication. While focusing on audience analysis, message transmission, and business and media relations, critical skills such as listening, speaking, writing analysis, and an understanding of nonverbal, visual, and mass communication, will be developed. Practical topics will include: organizational systems, conference organization, metacommunications, public relations, improved listening skills, and presentational speaking. Prerequisites: Common Professional Component (CPC) competencies in management and marketing.

BU 5360 Social Media Marketing 3 Credits

Social media is not a fad. The Internet has forever changed the way humans communicate. Web-based social media outlets are woven into the fabric of our lives; directly and indirectly. For businesses, social media presents strategic opportunities and challenges related to product offerings, promotion, pricing strategies, delivery of products or service, as well as presentation of brand. Through this course students will: (1) Gain a strong understanding of the current face look of social media; (2) Develop the ability to stay up-to-date as social media evolves; and (3) Learn how businesses can successfully leverage social media techniques to achieve strategic objectives. Prerequisite: Common Professional Component (CPC) competency in marketing.

BU 5370 Strategic Communication and Crisis 3 Credits Management

An understanding of issues management, media relations, and crisis planning are crucial to an organization's survival in today's volatile environments. This course examines the tactical communication skills necessary to strategically plan for these topics. From common readings, individual cases, lectures, videos, guest speakers, and student presentations, an understanding of current corporate communication functions relating to these issues will be examined. The culmination of this course will be the development of a Crisis Communication Plan for each student's profit or non-profit organization.

BU 5400 Survey of Issues in Health Care 3 Credits Administration

This course serves as the introduction to the Health Care Administration certificate program. In this course, students will be able to recognize and discuss the basic components of the United States health care system by learning various aspects of the industry, global alternatives, and how a multitude of internal and external factors impact and shape our delivery system. Topics will be supported by information in textbooks, articles, and Websites. Students will use this material in preparation for written essays, presentations, and classroom discussions.

BU 5410 Human Resources in Health Care 3 Credits Administration

This course addresses managing organizational behavior issues and techniques with a specific focus on human resource management issues unique to the health care industry. Prerequisites: Common Professional Component (CPC) competencies in business ethics, business policies, and management.

BU 5420 Health Care Law And Ethics 3 Credits

This course is specifically designed for graduate students enrolled in the Health Care Administration certificate program or an MBA with a health care administration focus. This course will focus on the principles and theories of law as it relates to health care delivery, health care management and administration, examination of the applications of laws in relation to health care liability prevention, and risks facing administrators, managers, and practitioners. Prerequisites: Common Professional Component (CPC) competencies in business ethics and legal environment.

BU 5430 Health Care Administration and 3 Credits Financial Management

This course presents an in-depth review of the financial management of health care organizations. This includes but is not limited to budget formulation process specific to health care delivery systems, funding sources and payment methodology, managing working capital and capital budgeting, the unique characteristics of non-profit organizations, and financial analysis of such organizations. Students will also do case study analysis in the previously mentioned topics. Prerequisites: BU 5190 and Common Professional Component (CPC) competency in business finance.

BU 5440 Information Technology in Health Care 3 Credits

This course takes a comprehensive look at a broad range of technologies used throughout the health care industries and continuum of care. This includes and not limited to, Medical Informatics, Administrative Applications, Medical Office Automation, Telemedicine and Electronic Medical Record. The course will also cover technology in surgery and informational resources access and use.

BU 5450 Comparative Health Systems 3 Credits

This course is an online elective course designed for those that are interested in healthcare systems around the world. This course is designed to encourage further understanding of healthcare policy in the United States as compared to other countries. How does each deal with the provision of healthcare? What are the strengths and weaknesses of each? This course will require critical thinking and writing skills.

BU 5460 Graduate Money and Banking 3 Credits

Designed to provide students with a working knowledge of the roles of commercial and central banking in the U.S. economy. Topics of special interest include monetary policy, including interaction effects with fiscal policy; analysis of the role of monetary factors in our recent inflation-proof economy; and the significance to the domestic economy of international financial developments, particularly the role of the "Eurodollar." Of special interest is the recent inability of the banking system to compete effectively for funds with other financial intermediaries (especially money market mutual funds). Prerequisites: Common Professional Component (CPC) competencies in economics and quantitative/statistics.

BU 5470 Issues in Career Management 3 Credits

This course is designed to meet the needs of graduate students from all degree programs. It will explore a variety of current issues and challenges related to career management from both the individual and organizational perspectives. The course will be structured around the latest fourth edition of the classic career management textbook by

Greenhaus, Callanan, and Godshalk (2009). The course will blend theory and practice through extensive use of case studies to develop two sets of skills in students: (I) skills in personal career management, and (2) skills in developing and management the careers of subordinates in the workplace, in order to promote overall organizational success. The course will cover the latest trends in the business world as well as wider economic and global environmental influences on career decisions

BU 5480 Leadership in Health Care 3 Credit

Health Care leadership is an introduction to the principles of management and leadership as the foundations for the administration of health care products and service delivery. The course covers the evolution of management principles and practices, and the bases for health care administration. Emphasis is on the management of global health care systems and the need for innovation and creativity in health care administration. The focus is placed on mastering graduate-level critical thinking, writing and ethical decision making skills.

BU 5490 Capstone: Health Care Topics 3 Credits

This course is a seminar-style presentation of current health care topics. This is an integrative course that incorporates all previous coursework into a cohesive body of knowledge. The topics include but are not limited to health care policy, quality initiatives, marketing in health care, current issues within Medicare and Medicaid, strategic decision making, and public health. Prerequisites: BU 5410 and BU 5430.

BU 5500 Small Business Problems and Strategy: 3 Credits SBI Part I

Student teams examine, research, and present case findings and recommendations or ally and in writing. Constant attention is given to those problems unique to small businesses. Students will go out into the field with the instructor as a team. Students will act as business consultants to a business in the area as part of PSU's Small Business Institute®. Prerequisites: BU 5120 and BU 5210.

BU 5501 Small Business Problems and Strategy: 3 Credits SBI Part II

Required for a six-credit Small Business Institute® project that includes primary and secondary research, complex financial analysis, and a comprehensive plan including specific recommendations for improvements in business operations. Final report preparation of findings and recommendations to the small business client are requirements of this course. Prerequisite: BU 5500.

BU 5510 Operations Management 3 Credits

Examination of the nature and structure of decision making in the midst of uncertainty. Formal techniques for measurement of risks and rewards are applied to case studies based chiefly on production systems. Concludes with a survey of current techniques for operations analysis, planning, and control. Prerequisites: Common Professional Component (CPC) competencies in management and quantitative/statistics.

BU 5520 Negotiating, Collaborating, and Leading in 3 Credits Today's World

This course examines the dynamics, constraints, and skills needed in negotiation, collaboration, and leadership. It focuses equally on using negotiation in business planning and in dispute resolution. Theories of negotiation are examined through current literature, and specific techniques are taught through simulated exercises. The course is drawn from the fields of business, law, psychology, administration, and communication. Also offered as AD 5520.

BU 5530 Multinational Marketing 3 Credits

Post WWII, the trend toward freer trade and accelerating technological change has been altering the world's economic landscape via the process of globalization. The recent drift toward regionalism (e.g., unifying European and North American markets), the collapse and subsequent restructuring of many of the world's national economies such as in the Soviet and Eastern European economies, have served as massive economic experiments. Global recession and recovery have been studies to glean what has worked and what has failed in each of these examples, yielding critical information for future marketing strategies. This course is designed to introduce some of the key issues of these international events that can be incorporated into multinational marketing. This class will focus on issues involved in marketing products and services across national boundaries. Culture, economic arrangements, technical standards, currency movements, language, religion, ideology, politics, distance, and conflicting interpretations of national and global interests combine to complicate the administration of marketing's familiar "4 Ps" cross-nationally. This course uses a combination of lectures, global marketing cases, discussion, and mini projects to examine specific issues currently involved in multinational marketing strategies. Prerequisite: BU 5700.

BU 5550 Investment Management 3 Credits

Combines modern financial theory with the real world of finance. The objective is to provide concepts and tools for practical investment analysis and portfolio management. Topics include security markets, tax environment, risk, fixed income securities, common stock valuation, fundamental and technical analysis, concentrations, mutual funds, commodity and financial futures, and portfolio theory. Emphasis is on successful strategies. Written case analysis. Subscription to the Wall Street Journal required.

BU 5580 Real Estate Entrepreneurship 3 Credits

Various methods of entry into this industry are examined. The roles and methods of brokers, developers, investors, financiers, appraisers, and managers are analyzed using financial models, economics, and law. The goal of the course is to gain a working knowledge that may be applied by the individual or by an organization.

BU 5590 Budgeting and Fund Accounting 3 Credits

This course provides an understanding of budgeting and fund accounting concepts appropriate for governmental entities, not-for-profits, school systems, and colleges and universities. The course objective is to enable students to understand different ways of constructing accounting information to be used by the various entities for reporting, planning, and control. The use of accounting in decision making will be the focus of attention. Prerequisite: BU 5190.

BU 5600 Federal Taxes and Business Decisions 3 Credits

Tax laws and their effect on management planning and decision making, as well as on personal financial transactions are of interest to managers and accountants. Representative topics include tax aspects of selecting a business form; tax factors in acquiring, using, and disposing of land, buildings, or equipment; capital gains and losses; nontaxable transactions; individual income tax; family tax planning; and common tax traps. Prerequisite: BU 5190.

BU 5610 Contemporary Accounting and the 3 Credits Business Environment

A study of contemporary accounting issues as they influence the business manager and the public. The interaction of accounting and the total business environment is discussed. Some areas that may be covered include segment reporting, social responsibility accounting, the SEC today, current value accounting, the impact of governmental regulations on various industries, management advisory services by accounting firms, and current cost issues in our society. Written research reports and oral reports are required from all students.

BU 5620 Auditing Perspectives 3 Credits

Theory and procedures underlying auditors' responsibilities in examining and reporting on financial statements of a business enterprise are discussed including professional ethics, auditing standards, reports, internal control, and the selection, scope, and application of auditing procedures. Prerequisite: BU 5190.

BU 5630 Policy Topics 3 Credits

An in-depth study of a particular topic, contemporary issue, or concern will be the focus of this course and will be taught by a specialist within the field being studied. Since topics vary, the course may be repeated with different topics.

BU 5680 Applications in Marketing Research 3 Credits

A study of "decisional research" in business and its importance to management. As an integral part of learning the marketing research process, graduate students will be involved in actual, in-the-field marketing research process, from problem identification through final presentation of findings and recommendations.

BU 5690 Behavioral Perspectives in Marketing 3 Credits

This course provides an understanding of consumer behavior and its relationship to marketing management. Applications of concepts from psychology, social psychology, cultural anthropology, sociology, and economics will be emphasized while interpreting current studies in consumer research and illustrating their marketing implications. Areas of concentration include image management, brand loyalty, product positioning, attitude measurement, market segmentation, and the consumer decision-making process. An applied orientation of behavioral science to marketing management. Prerequisite: BU 5700.

BU 5700 Marketing Techniques 3 Credits

The objective of this course is to help students develop a broad understanding of marketing techniques, strategies, and tactics employed by the marketing manager. This course will cover the use of the "marketing mix" elements as they pertain to the planning and implementation of the marketing plan. Prerequisites: Common Professional Component (CPC) competencies in management and marketing.

BU 5720 Seminar in Executive Management 3 Credits

From a decision-maker's point of view, students will participate in a seminar involving middle- and upper-level managerial responsibilities, as well as discussions concerning "state-of-the-art" methodologies appropriate to all levels of management. Case studies and group projects will be combined with informal lectures and discussions involving such areas as strategic planning, action planning techniques, policy making, managerial ethics, decision-making methods, control systems, and the integration of all resources for optimum performance. Prerequisites: BU 5120, BU 5190, BU 5210, and Common Professional Component (CPC) competency in economics.

BU 5730 Current Issues in Marketing 3 Credits

This course is designed to explore the contemporary issues and challenges impacting the future of marketing management. Developments in technology, communications, demographics, consumerism, packaging, marketing information systems, and non-product marketing are some of the variables to be examined in terms of their current and future influence on the functions of the marketing manager. All other required marketing courses should be completed before entering this course.

BU 5750 Master's Research Project 6 Credits

MBA candidates may elect to do some investigation relating to an applied or theoretical problem in their area of interest. Normally it is expected that the enrollment for this course will cover two terms. The forms for the development and approval of this project are available at the College of Graduate Studies Office. One copy of the final report will be provided to each advisor and the original copy will be submitted to the department chair. There will be an oral presentation of the Master's Research Project results to the professor and readers prior to April 1 of the year of graduation. Requirements are expected to be completed by May 1 in the year of graduation. Prerequisites: BU 5120 and BU 5210.

BU 5810 Seminar In Corporate Public Relations 3 Credits

This course combines the theoretical knowledge and applied skills needed for effective organizational public relations. Emphasis is on communication strategies for both profit and non-profit organizations. Additional emphasis is placed on writing skills, understanding media channels, and developing a major media project for your organization by utilizing the public relations theory and practices studied in this course. Specific topics include an understanding of models of communication, corporate communication decision making, methods of persuasion, targeting publics, communication channels, effective writing, mass media, and business-media relations. Specific objectives include emphasizing the importance of effective writing skills in public relations, understanding the function of public relations in organizations, public relations practices, and providing students with an opportunity to develop public relations strategies and produce supporting promotional materials for their own organization.

BU 5820 Women as Leaders 3 Credits

This course challenges women to consider the cultures, climates, and contexts that limit and support their capacities as leaders. Students will explore personal leadership styles, characteristics of effective leaders, and strategies for developing themselves as leaders.

BU 5850 New Ventures and Entrepreneurship 3 Credits

The course focuses on business start-ups, providing an intensive introduction to business planning from the defining of a "primary vision" through market size assessment and strategic operations planning, to the financing, staffing, and implementation of the new venture. Course includes readings on entrepreneurship, case studies of small and large

examples of successful new ventures, and student fieldwork. Software available to help business planning will be introduced for hands-on use. Each student will prepare a formal business plan for new ventures. Prerequisites: BU 5120 and BU 5210.

BU 5910 Independent Study 1-3 Credits

Enrichment of the background of students in business through the pursuit of a special topic pertinent to their interests and abilities is offered through independent study opportunities. This is an opportunity for an in-depth study of a problem in the business field. Consent of a faculty supervisor, department chair, program coordinator, and the associate vice president of the College of Graduate Studies is required.

Computer Education

CE 5010 Learning Resources Centers and Services 3 Credits

This course will focus on the role and functions of technology in K-12 schools. The topics covered will include the problems of organization and management, the types of learning resources and services, and federal and state programs and standards. We will also look at the developments and trends in technology and how it impacts school media centers. This course is cross-listed with LM 5010.

CE 5040 Integrating Technology in the School 3 Credits

This course is designed to provide school media specialists and technology integrators with hands-on experience with multimedia technology and its effects on the 21st century learner. Current web and multimedia tools will be explored. Other topics to be covered are collaboration/teamwork with other educators and the role of the library media specialist in integrating technology. This course is cross-listed with LM 5040.

CE 5120 Integration of Digital Technology into the 3 Credits Common Core Standards

This instructional technology course is designed to provide technology integrators, school media specialists, K–12 educators and administrators with an understanding of ways current and emerging technologies can be used to facilitate teaching, learning and managing instruction. Discussions will focus on issues, trends and current uses of technology in K-12 education. Sessions will focus upon gaining experience integrating digital technology within the Common Core Standards, evaluating web 2.0 tools, exploring video resources, and designing technology enhanced lessons utilizing digital storytelling for K–12 curriculum integration.

CE 5140 Electronic Portfolio Development and 3 Credits Assessment

This course is designed to investigate the principles of assessment educational technology that relate to the design, development, and assessment of electronic portfolios. Students will learn about the history, types, components, process, delivery, presentation, and assessment of electronic portfolios. Students will be expected to define the assessment approach, construct an electronic portfolio, and collaboratively design assessment tools that will be used to evaluate electronic portfolios. Additional areas of study in the course may include the influence of educational policy on the implementation of electronic portfolios, the role of the electronic portfolios in professional development and recertification, or innovative technologies used in electronic portfolio development.

CE 5150 Inspiring Digital Media Fluency in the 3 Credits K-12 Classroom

This collaborative, project-based online course will provide K–12 educators with a framework, information and resources necessary to explore, create and share multimedia content globally; to use multimedia to communicate and participate in authentic, interactive, networked learning communities, to inspire and motivate student learning. Exploring a variety of online resources and tools, students will collaborate in an online, constructivist environment to create a multimedia based authentic project. Educators will share how they integrate multimedia across the curriculum, using the National Education Technology Standards (NETS) for students as a foundation with a focus on media literacy.

CE 5160 Teaching and Learning in a Networked 3 Credits Classroom

The evolution of the World Wide Web from what is being called Web 1.0 to Web 2.0 has brought about a new way of teaching and learning in this digital age. The use of Web 2.0 tools such as blogs, wikis, podcasting, videocasting, and a host of other free tools are allowing educators to connect to knowledge and each other like never before. Learners will gain hands-on experiences with Web 2.0 tools and explore the learning theory that supports their use in a networked classroom environment.

CE 5200 Netcourse Instructional Methods 3 Credit

This course prepares teachers to become online course instructors. This intensive course introduces the pedagogy and methodology of online teaching while guiding each participant through the modification of an existing semester or year-long online high school course. Participants read and discuss required educational articles and book chapters, develop new content for their courses, prepare instructional resources and collaborate with their classmates in group projects. Experienced course facilitators monitor each participant's progress and act as a mentor and a resource.

CE 5310 21st Century Teaching and Learning 3 Credits

Educators need to integrate technology into their curriculum to transform student learning and meet the goals of the twenty-first century. To succeed in today's information-driven academic environment, students need to know how to find, use, manage, evaluate, and convey information efficiently and effectively. This includes not only knowledge of technology, but the ability to use critical-thinking skills to solve problems within a technological environment. Teachers wrap twenty-first century literacy skills into lesson content using a variety of strategies. This course helps educators plan and assess effective technology teaching methods, incorporate technology into any discipline, and develop key accountability and assessment strategies. In this six-week course, educators wear both a "student hat" and a "teacher hat" as they use digital technology and communication tools to solve an information problem. Educators experience how to use technology as a tool to research, organize, evaluate, and communicate information as well as develop a fundamental understanding of the ethical and legal issues surrounding the access and use of information.

CE 5320 Web-Enhanced Classroom 3 Credits

The Web-Enhanced Classroom is a six-week course that uses technology to enhance traditional face-to-face instruction. Online material is viewed as an extension of the classroom, and traditional lectures or classroom activities are linked with enhancements such as virtual tours, WebQuests, real-time information, maps, pictures, streaming

video, audio clips, and open source course components. Web-extended classrooms allow learning to happen in an interesting and exciting way. This course provides teachers with the opportunity to develop a complete unit of study for a web-extended classroom and view other units created by peers. The unit of study is developed using the internet and includes information about open source portal components, while the educator learns how to efficiently and effectively search the web for resources. The topic for the unit of study is of the educator's choice; some resources will be provided through virtual tours of websites.

CE 5330 Blended Teaching and Learning 3 Credits

A hybrid course combines face-to-face instruction and web-or computerbased learning. Common features of hybrid courses will be explored including the delivery of the syllabus, effective online lectures, readings, and assignments on web pages; discussions and presentations through online message boards, e-mail, and chat; interactive tutorials and labs; and online assessments. By taking advantage of web-enhanced instruction, less in-class time is spent on mundane tasks, and more time can be spent on collaborative, flexible, and meaningful activities that incorporate all student learning styles. In this six-week course, teachers determine what aspects of their course are best suited to presentation online, create new approaches to communicating with students, and create active independent learning experiences for students. Using computer-based technologies, instructors use the hybrid model to redesign some lecture or lab content into new online learning activities, such as case studies, tutorials, self-testing exercises, simulations, and online group collaborations.

CE 5340 Web 2.0, Collaborative Instruction 3 Credits

Web technologies are shaping education in ways that have only been dreamed about before the advent of Web 2.0. The new web enhances teaching practices and student learning because new tools allow the user to publish and interact in ways never before possible. In Web 2.0 learners become consumers of information and need to become critical readers and viewers, ready to hit the edit button, in the age of new literacies. Educators must teach and model methods in which ideas and products can be published on the Internet. Web 2.0 provides the ability to work collaboratively across the virtual environment enhancing literacies, such as communication skills and global awareness, which have the effect of bringing down classroom walls. In this six-week course, participants explore the tools of Web 2.0 while participating in activities involving some of those which are more widely accepted in educational environments. This course demonstrates how web tools can generate new and exciting learning experiences for students of all abilities and learning styles. The course will offer participants ideas to help them think differently about technology and how it can be used to strengthen student's critical thinking, writing, reflection, interactive learning, and meta-cognition.

CE 5350 Capstone Course: Becoming an Online 3 Credits Teacher

Moving from teaching in a face-to-face environment to teaching students online is not simply a matter of changing media—it also means changing instructional methodologies. In this six-week course, participants will have the opportunity to experience online teaching by partnering with an online master teacher in an established middle or high school online course. Through observation, reflection, and actively participating in the online classroom environment, the participant will

first partner with the master teacher to deliver instruction, and then will fully assume online classroom responsibilities.

CE 5360 NetCourse Instructional Methodologies 3 credits (NIM) Teacher Training

NetCourse Instructional Methodologies is comprised of three required components: 1.) Pre-course webinar and platform training. These activities require approximately five hours of instruction. 2.) A six-week NetCourse that prepares teachers to become online course instructors. This intensive course (approximately 12-15 hours per week of required "seat time") introduces the pedagogy and methodology of online teaching while guiding each participant through the modification of an existing semester or year-long online high school course. Participants read and discuss required educational articles and book chapters, practice discussion facilitation techniques, create a detailed concept map of all facets of their course, personalize documents for their courses, evaluate instructional resources and collaborate with their classmates in group projects. Experienced course facilitators monitor each participant's progress and act as a mentor and a resource. 3.) Pre-Service activities that include a pre-delivery webinar, curriculum modifications (facilitated by VHS Consortium staff) and self-paced learning management system training. These activities require approximately 25 hours of additional instruction and content development.

CE 5560 Special Topics in Computer Education 1-3 Credits

This course provides an in-depth study of a particular topic, contemporary issue, or concern. The course is taught by a specialist within the field being studied or, as an alternative methodology, a faculty member will coordinate a series of guest speakers who will meaningfully address the topic. Since topics vary, the course may be repeated with permission of the instructor.

CE 5580 Special Topics in Web-Based Learning 3 Credits

This course explores the integration of technology across various disciplines and topics. Instruction is offered in an asynchronous format. Action research projects, based on instructor approval, are assigned and reviewed through an independent guided learning contract. Projects, readings, and Web links are assigned based on research topic and discipline. Since topics vary, the course may be repeated.

CE 5800 Practicum In Educational Computing 1-3 Credits

This course is designed to allow students to pursue, in depth, a personal interest in the field of educational computing. Students working with a faculty advisor will design and carry out an individual project that applies the knowledge and skills gained in the classroom to a real problem in their home district. Projects, which will vary with individual student interest, may consist of original research, curriculum development, programming original courseware, etc. The final report must be approved by the faculty advisor. Offered according to demand. Prerequisite: ED 5030.

CE 5910 Independent Study 1-3 Credits

Enrichment of the background of students in education through the pursuit of a special topic pertinent to their interests and abilities is offered through independent study. This is an opportunity for an indepth study of a problem in the field of education. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Chemistry

CH 5910 Independent Study In Chemistry 1–3 Credits

Enrichment of the background of students in chemistry through the pursuit of a special topic pertinent to their interests and abilities is offered through independent study. This is an opportunity for an indepth study of a problem in the field. Consent of a faculty supervisor, department chair, program coordinator, and the associate vice president for the College of Graduate Studies is required.

Counseling

CO 5010 Professional Orientation, Ethics, and 3 Credits Advocacy

This course examines the foundations of the counseling profession including ethics, advocacy, professional identity, and cultural competence. It emphasizes the importance of self-awareness and its relationship to effective counseling.

CO 5020 Counseling Skills 3 Credits

The course is designed to help students develop basic counseling skills. Through role play, practice interviews, and tape transcriptions, students will have the opportunity to learn and practice basic counseling skills. The relationships among theory, case conceptualizations, and counseling interventions will be examined. Ethical and culturally responsive practices will be emphasized. Prerequisites: CO 5010 or SY 6010.

CO 5030 Foundations of School Counseling 3 Credits

Provides opportunities for students to understand school counselors' roles and responsibilities. Students will understand the development, organization, and administration of comprehensive guidance and counseling programs. Also focuses upon decision making within a legal and ethical context, cultural diversity, and contemporary issues facing school counselors. Prerequisite: CO 5010. There is a 20-hour pre-practicum field experience as part of this course.

CO 5040 Social Behavior and Diversity 3 Credits

Recognizing that social behavior occurs within an intercultural context, counselor education and school psychology students will develop the basic knowledge foundations necessary to understand and influence social behavior in a diverse society. Texts, readings, and learning modules have been chosen and/or designed to facilitate the student's ability to understand the nature of social behavior cross culturally.

CO 5050 Advanced Human Development 3 Credits

Focuses on a lifespan approach to human development and looks at the constancy and change in behavior throughout life, from conception to death. Students will study human development in the context of a multi-disciplinary approach and the larger ecological context of developmental events in human behavior.

This course will have four major concerns: to identify and describe the changes that occur across the life span; to explain these changes in the context of maturation, early learning, and societal factors impacting development; to review research and theoretical frameworks that have affected our way of thinking, and to study the interdependence and interrelatedness of all aspects of development. There is a 16-hour service learning/pre-practicum field experience as part of this course.

CO 5070 Research Design in the Helping Professions 3 Credits

This course is designed for students in the Educational Leadership and Counseling programs. Students will gain knowledge of statistical concepts, including reliability and validity, scales of measurement, measures of central tendency, indices of variability, shapes and types of distributions, and correlations. Each student will develop a complete proposal for a program in their profession, including a needs assessment, data collection design, review of related literature, and plans for implementation and evaluation. Prerequisite: CO 5010 or SY 6010.

CO 5080 The Counselor in the Classroom 3 Credits

This course is focused on providing school counseling students in the elementary, middle, or secondary school setting with the prerequisite skills necessary for successful classroom work. Students will demonstrate competence in: knowledge of curriculum, lesson and interdisciplinary unit planning, organizing and delivering instruction, adjusting instruction for diverse learning styles, individual needs and cultures, evaluating outcomes of instruction, and use of a variety of classroom management strategies. Seminars will address issues related to teaching and emphasize student reflection and evaluation of their teaching. All students will be required to complete direct observation, participation, and teaching in a field placement. Discussions of ethical practice and professionalism will permeate the course.

CO 5100 Practicum in Counseling 3 Credits

This course is a 100-hour field-based experience that focuses on developing competency in basic counseling skills through work with individuals and groups. Students will complete field experiences in approved community sites appropriate for their concentration and participate in group seminar as well as in required on-site and university supervision. Successful completion of at least 100 hours of field work, including 40 hours of direct service to clients and successful completion of the practicum course is required to be eligible for internship. Prerequisites: Completion of all courses in program contract and submission of Intent to Enroll form by departmental deadline. Selected courses may be allowed as corequisites with prior approval of course instructor.

CO 5130 Psychopharmacology and the 3 Credits Biological Basis of Mental Health

This course explores the biological influences on mental illness. This includes an examination of the physiological basis of behavior, perception, emotion, and self-regulation; the current theory and research on the relationship between biological events in the central nervous system and behavior; and psychopharmacological interventions.

CO 5140 Emotional Intelligence Skill Development 1 Credit

This course focuses on the development of skills needed in dealing effectively with interpersonal conflict. Topics include Goleman's emotional intelligence, resolving conflict peacefully, expressing empathy and demonstrating social skills. Problem solving techniques will be used to teach assertiveness, self-advocacy and communication skills essential to the resolution of conflict and the maintenance of egalitarian relationships.

CO 5150 Eating Disorder Clinical 1-3 Credits

This clinical experience is a capstone course for those enrolled in the eating disorders certificate program. Students will be able to choose a focus on awareness and prevention, and education experience or a clinical experience working in an eating disorders treatment facility for 120 hours.

CO 5160 Eating Disorder Awareness and Prevention 3 Credits

The focus of the course will be on increasing the student's knowledge of awareness, education, prevention, and treatment of eating disorders. Discussion will include diagnostic classifications; causes of eating disorders; history, prevalence, and treatment approaches to eating disorders; a discussion of a wellness/holistic approach to medical, nutritional and psychological therapies; special populations (e.g., women, children, males, and athletes); prevention programs; resources; the latest research and information on becoming a coordinator of Eating Disorder Awareness and Prevention Week. Also offered as HL 5160.

CO 5170 Treatment Modalities for Eating Disorders 3 Credits

This course will be an in-depth study of the dynamics of eating disorders followed by an overview of the dominant counseling approaches used in eating disorders treatment and management. The focus will include diagnosis, psychological assessments, psychotherapeutic, and other interventions, as well as clinical issues encountered in treatment. Prerequisite: CO/HL 5160. Also offered as HL 5170.

CO 5180 Nutrition Fundamentals and Counseling in 3 Credits the Recovery of Eating Disorders

This course will focus on nutritional education issues relevant to those interested in health and wellness for the general population, as well as those working with eating disorders clients. Discussion will include basic concepts of nutrition science and nutritional needs; evaluation of weight management methods; investigation of food facts and fallacies; and different diet plans (e.g., vegetarian and sports nutrition). Information will be presented on how the nutritionist, counselor, or health educator applies nutritional information to their clients or students. The course will also include how to present information in nutritional counseling and education for the eating disorder client. Prerequisite: CO/HL 5160 or permission of instructor. Also offered as HL 5180.

CO 5190 Medical and Physiological Aspects 3 Credits of Eating Disorders

The focus of the course will be to increase the student's knowledge of the effects eating disorders have on the body's medical systems and the physiologic function. Discussion will include diagnostic criteria and a multidisciplinary, integrative approach to assessment and management of each disorder. Emphasis will be placed on the evaluation of each body system, as well as prevention and treatment of medical complications. Prerequisite: CO/HL 5160. Also offered as HL 5190.

CO 5230 Career Counseling and Development 3 Credits

An introduction to career development theories and their application to the counseling process. Students will understand and use career information and assessments as they pertain to counseling and career development. Students will apply theory and practice to current or potential work settings. There is a 20-hour pre-practicum field experience as part of this course.

CO 5260 Counseling Theories 3 Credits

Major counseling theories and their relationship to the counseling process are explored. Individual, familial, and systemic models are presented along with dynamics and issues that reflect and cross theoretical perspectives. Students will be required to compare and contrast counseling theories and strategies, consider appropriate application of these strategies in diverse populations, and develop a personal model for providing help and facilitating behavioral change.

CO 5300 Foundations and Multicultural Aspects 3 Credits of Parenting

Focuses on developing competency in a variety of areas surrounding parenting education, including understanding of parental issues and concerns within diverse family systems; understanding the dimensions of parenting children from birth to adolescence; and knowledge of multicultural perspectives in parenting.

CO 5310 Strategies for Parenting Education 3 Credits

This course involves the planning of a parenting education program. Students will develop a parenting education proposal that will include the curriculum, delivery approaches, site, population and outcomes assessment. The curriculum will be based on research on a variety of parenting education models, incorporating features of these models into their own particular situations (e.g., schools, agencies or hospitals) and their respective populations (e.g., expectant parents or parents of preschoolers, school age children, adolescents or children with learning challenges). This course will be taught as an individual enrollment except when there is sufficient enrollment to offer it as a regular course.

CO 5360 Interpersonal and Group Process 3 Credits

Development and awareness of behavioral skills that facilitate positive social emotional-educational growth within interpersonal and group contexts. Also focuses on the development of an understanding of interpersonal and group processes.

CO 5430 Assessment and Consultation 3 Credits

This course will help the student understand and interpret the principles of assessing students with and without disabilities. It includes valid evaluations and their use in eligibility determination, development of individualized education plans, and monitoring student progress. Standardized and non-standardized assessment techniques will be discussed in detail, including some state and national assessments. The range of assessments include intellectual functioning, interest inventories, achievement tests, aptitude tests, objective and projective personality assessments, and non-test techniques such as observations and self-reporting. There will be a special emphasis placed upon the role of the counselor as a consultant to staff and colleagues in schools and other agency settings. Discussion of federal and state rules and regulations as they apply to the rights and ethical responsibilities of the professional and the population served by the professional. Special consideration will be given to the treatment of minority populations and children with disabilities in the assessment and consultation process and in the inclusive educational environment. Prerequisite: CO 5010.

CO 5460 Group Counseling 3 Credits

This course provides a comprehensive understanding of theory, practice, and ethics in group counseling across the lifespan within clinical, school and other professional settings. This course provides students an opportunity to develop group counseling skills through classroom facilitation and supervision. In addition to the didactic portion of this class students will also participate as group members in an in-class 10-hour facilitated experiential group process. Prerequisite or corequisite: CO 5010 or SY 6010, and CO 5260.

CO 5535 Foundations of Conflict Resolution 3 Credits

This course is designed to provide students with the essential foundations to create workable conflict resolution programs in their respective fields of interest. Conflict happens, therefore there needs to be a process that will allow individuals to engage in interpersonal relationships, in any circumstances, productively and peaceably. The emphasis on the course will be how the process is used in the classroom, but it is not specific to this environment. Students will review many theories and concepts that can be used to create a peaceable environment within the classroom or workplace.

CO 5560 Special Topics in Counseling 1-3 Credits

This course offers an in-depth study of a particular topic, contemporary issue, or concern. The course will be taught by a specialist within the field being studied. A faculty member can also coordinate a series of guest speakers who will meaningfully address the topic. Since topics vary, the course may be repeated with permission of the instructor.

CO 5570 Mindfulness Meditation: Theory and Practice 3 Credits

Designed to review the theory and practice relative to mindfulness meditation. Focuses on the practice of the body scan, sitting meditation, healing meditation, eating meditation, and walking meditation. Extended periods of meditation practice each day are interspersed with group discussions, presentations, and small group work. Provides students with the theories surrounding the use of meditation as a healing tool while at the same time providing an opportunity for students to learn and practice meditation techniques. Focus will be on learning the theories of mindfulness meditation; learning and practicing mindfulness techniques; incorporating mindfulness practice into our personal and professional lives; and the authentic use of mindfulness practice as a teaching tool. Students are required to pay additional fees to participate in this course.

CO 5590 Transpersonal Psychology 3 Credits

Addresses aspects of mind and behavior that transcend individual ego and personal identity. This course considers the dimensions of consciousness, the implications of transpersonal experiences, and the connection between psychology and spirituality. Class members gain an understanding of the fundamental assumptions underlying transpersonal theory and skills in applying theory to facilitate growth, health, and well-being.

CO 5600 Foundations of Mental Health Counseling 3 Credits

This course introduces students to the field of mental health counseling. Topics include the history of mental health counseling, developing a professional identity as a clinical mental health counselor, understanding the larger mental health service delivery system, and current practice issues in mental health counseling. Culturally responsive, ethical, and grounded practices will be examined. Prerequisite: CO 5010. There is a 20-hour pre-practicum field experience as part of this course.

CO 5610 Circle of Life: Living and Dying Well 3 Credits

The course is designed to facilitate the learning of individuals who intend to work in professions related to wellness. The topic of death and dying will be addressed in a comprehensive way with an emphasis on the development of compassion for individuals and their life experiences. The course will also address the topic of living well and making choices that may increase happiness and decrease suffering. The course will offer students time to examine their own beliefs and understanding of death as well as learn how the medical profession and caring communities can assist those experiencing the dying process. The course will

also offer readings and discussions that will help students to identify ways they would like to be living their own life with an emphasis on increasing their sense of wellbeing regarding their mind, body and spirit.

CO 5620 Spiritual Health 3 Credits

Provides an opportunity to explore the role of the spiritual dimensions of wellness. A process of inquiry will help you better understand the spiritual dimension of self and the relationship of spirit to the health and healing process.

CO 5650 Critical Issues in Schools 3 Credits

This course focuses on the role of the school counselor in special education and crisis prevention and intervention. Topics include special education processes, roles, laws, ethics, disability categories, the Individual Educational Plan (IEP), cultural factors, school learning, divorce, bullying, child abuse, death, illness, parents with disabilities, moving, school violence and disasters, suicide, substance abuse, homosexuality, adolescent parenthood, parent-adolescent crises, rape and sexual assault, and eating disorders. Prerequisite or corequisite: CO 5010.

CO 5670 Working with Children and Families 3 Credits

A review of the phenomenological field of both the client and the counselor in terms of personal development and the theoretical frameworks associated with social systems. Designed to enable students to identify and determine appropriate intervention strategies for both the environmental and internal variables associated with clients and their support systems that are commonly seen in counseling. Prerequisites: CO 5010 or SY 6010, and CO 5260.

CO 5700 Critical Issues: Mental Health Counseling 3 Credits

This course examines models of crisis intervention, trauma, and substance abuse treatment. Students will learn current intervention models, how to evaluate risk factors, and how to determine and use resources. Prerequisite: CO 5010.

CO 5710 Crisis and Trauma Counseling 3 Credits

This course will examine models of crisis intervention and trauma treatment. Students will learn how to evaluate risk factors, how to determine and utilize resources, and how to apply treatment interventions. Prerequisite: CO 5010.

CO 5720 Addictions and Related Disorders 3 Credits

This course will examine models of addictions treatment. Students will learn how to evaluate risk factors, diagnose clients, determine and utilize resources, and apply treatment interventions.

CO 5730 Addictions Treatment Modalities 3 Credits

This course will examine the study of current therapeutic modalities essential in the treatment of substance use disorders. Current treatment modalities such as Contingency Management, Brief Interventions, Motivational Interviewing and Cognitive Behavioral Therapy will be explored and provide students with the knowledge, skills and sensitivity to practice in the area of addictions. Prerequisite: CO 5720.

CO 5740 Seminar and Internship in Addictions 3 Credits Treatment

This course provides students with clinical counseling experiences, specializing in the treatment of addictions, under the supervision of a Masters Licensed Alcohol and Drug Counselor (MLADC) and conducted in a setting that provides substance use treatment and/or counseling for persons with dual diagnosis of addictions and mental health disorders. In addition to the 300-hour field requirement, students will meet regularly with fellow interns and their University supervisor for group supervision. This course is designed to be the culminating experience in the Addictions Treatment Certificate. Prerequisites: CO5720 and CO 5730.

CO 5770 Psychopathology: Disorders of Childhood, 3 Credits Adolescence, and Adulthood

Course provides a clear, balanced presentation of the psychology of abnormal behavior including current theoretical models, research, clinical experiences, therapies, and controversies. Enables student to understand psychological and psychiatric disorders as discrete clinical conditions and to be able to apply differential diagnoses. Prerequisite: CO 5010 or SY 6010 or permission of instructor.

CO 5780 Counseling Youth 3 Credits

Multicultural counseling skill development to intervene successfully with children and adolescents. The application of brief counseling, play therapy, and small group work with children and adolescents. Designed to provide counselors with the skills needed to effectively consult with teachers, administrators, parents, and others. Prerequisite: CO 5010 or SY 6010, CO 5260, CO 5050, CO 5020 or permission of the instructor.

CO 5790 Assessment, Diagnosis, and Treatment 3 Credits Planning

This course is designed to develop competencies in clinical interviewing, diagnostic assessment, case conceptualization, and treatment planning. Diversity considerations and current models of evidence-based practice will be emphasized. Prerequisites: CO 5010, CO 5020, CO 5260, CO 5770, or permission of the instructor.

CO 5800 Counseling Internship 1-6 Credits

An internship for students in the counselor education self-designed concentration. Students are expected to gain experience in the area of specialization chosen for the degree concentration. The internship is designed to be the culminating experience of the program. Prerequisite: completion of all major required courses and permission of the instructor.

CO 5810 Human Relations Practicum 3 credits

This course is a 100-hour field-based experience that focuses on developing competency in human relations. Students will complete field experiences in approved community sites based on their interest area. In addition to the field experience, students will also participate in a weekly group seminar to discuss the application of their knowledge and skills. Prerequisites: Completion of all core courses as listed in the Human Relations program contract.

CO 5850 Seminar and Internship in School 1–6 Credits Counseling

Personal, educational, and career guidance, and counseling experiences performed under supervision of a certified counselor and conducted in a public school setting. In addition to the required field experiences totaling 600 hours, students must attend seminar meetings on campus with fellow student interns and the PSU supervisor to exchange viewpoints and feedback. Designed to be the culminating experience in the counselor education program. Prerequisite: completion of all required courses, school counseling, and consent of instructor.

CO 5880 Seminar and Internship in Mential 1–12 Credits Health Counseling

A 600-hour clinical counseling experience under supervision and conducted in a mental health counseling setting. Students must attend an on-campus seminar that provides an opportunity for case presentation and professional development. Designed to be the culminating experience in the mental health counseling concentration. Students must provide evidence of liability insurance. Prerequisites: completion of all required courses in the mental health counseling concentration and consent of the PSU internship supervisor. Variable and repeatable.

CO 5910 Independent Study in Counselor 1–3 Credits Education

Enrichment of the background of students in education through the pursuit of a special topic pertinent to their interests and abilities. An opportunity for an in-depth study of a problem in the field of education. Consent of a faculty supervisor, the department chair, and the associate vice president for the College of Graduate Studies is required.

CO 7010 Dynamic Play Therapies 1 Credit

This course provides a broad overview of the major theories of play therapy. It covers the history of play therapy, therapeutic properties of play, developmental perspectives, beliefs, and techniques. Discussion and case histories will demonstrate the application of these theories to the playroom. Class format includes lectures, discussions, experiential practice and self-reflection.

CO 7020 Child-Centered Play Therapy 1 Credit

Students are prepared with therapeutic skills and experience in implementing Child Centered theory in the play therapy process. Class format includes lecture, discussion, personal reflection, skill development and video tape of a session demonstrating skills for group supervision.

CO 7030 Expressive Play Therapies 1 Credit

Course participants will gain skills in the use of metaphoric play therapies. A broad overview of expressive methods including sand tray therapy, bibliotherapy, and puppet play will be explored and related to current play therapy theoretical models. Class format includes lectures, discussions, sand tray exploration and skill development.

CO 7040 Special Populations in Play Therapy 1 Credit

This course offers an in-depth study of special client populations including spectrum disorders, sensory deficits, ADHD, and children with dysregulation and anger issues. Efficacy-based play therapy methods and assessments will be discussed. Class format includes lectures, discussions, reflections, case histories and skill development.

CO 7120 Professional, Legal, and Ethical Issues 3 Credits in Counseling

The study of professional, legal, and ethical issues facing clinical mental health counselors. Focus will be on developing professional identity, learning about ethical principles and standards underlying the profession, and being able to apply the law as it relates to the practice of counseling.

CO 7210 Practicum in Play Therapy 3 Credits

This post-graduate course is designed as an intensive experience in advanced training in play therapy counseling skills in the work with children. Classes will be a combination of discussion, video presentation, case presentation, personal reflection, tape reviews, and group supervision. Students will have the opportunity to conduct parent interviews, create treatment plans, and provide observations of each child in this learning experience. Prerequisites: CO 7010 and CO 7020.

CO 7300 Counseling Supervision 3 Credits

This course addresses theoretical, ethical, legal, relational, and practical issues in counseling supervision. In addition to reviewing the fundamentals of counseling supervision, the course will provide an experientially based opportunity to develop and practice relevant supervision strategies.

CO 7560 Counselor Education: Special Topics 1–3 Credits

This course offers an in-depth study of a particular topic, contemporary issue, or concern. The course will be taught by a specialist within the field being studied. A faculty member can also coordinate a series of guest speakers who will meaningfully address the topic. Since topics vary, the course may be repeated with permission of the instructor.

Economics

EC 5460 Graduate Money and Banking 3 Credits

Designed to provide students with a working knowledge of the roles of commercial and central banking in the U.S. economy. Topics of special interest include monetary policy, including interaction effects with fiscal policy; analysis of the role of monetary factors in our recent inflation-proof economy; and the significance to the domestic economy of international financial developments, particularly the role of the "Eurodollar." Of special interest is the recent inability of the banking system to compete effectively for funds with other financial intermediaries (especially money market mutual funds). Prerequisite: macroeconomics competency or permission of the instructor.

EC 5610 Economic Issues in International Finance 3 Credits

The study of international finance (international monetary relations) covers financial policies, international loans, balance of payments accounting, exchange rates, reserve and payments currencies, and international liquidity. Of particular interest is the impact of the U.S. economy on international financial developments. Balance of payments adjustment under fixed and flexible exchange rates and under the gold standard will be considered in detail. Prerequisite: macroeconomics and microeconomics competencies or permission of the instructor.

EC 5615 Global Economics

3 Credits

The national economies today are all deeply embedded in an interactive global network with profound implications for both economic theory and economic policy. In this course, students will engage in theoretical as well as empirical studies of international economic relationships.

EC 5910 Independent Study in Economics 1-3 Credits

Enrichment of the background of students in business through the pursuit of a special topic pertinent to their interests and abilities. A chance for an in-depth study of a problem in the field of business. Consent of a faculty supervisor, department chair, graduate program coordinator, and the associate vice president for the College of Graduate Studies is required.

Education

ED 5000 Social Behavior in a Diverse Society

3 Credits

Seeks to examine the manner in which the behavior, feelings, or thoughts of one individual are influenced by the behavior or characteristics of others. Topics to be considered include social perception, attitudes, gender, social cognition, conflict, social influence, intercultural awareness, prejudice, discrimination, aggression, and group behavior.

ED 5005 Social Psychology and Mythology Across 3 Credits

This course will provide an in-depth study of the social and cultural basis of behavior and examine the role of mythology as a vehicle for intrapersonal and interpersonal understanding. The major theoretical, empirical, and applied lines of work in the following topics in contemporary social psychology will be explored, including social cognition, interpersonal perception, attitudes, stereotyping and prejudice, the self, and interpersonal and group relations. Mythology will be employed as a mechanism for cross-cultural comparison and as a unifying construct to enhance multicultural understanding.

ED 5010 Philosophy, Ethics, and Education 3 Credits

A study of the historical, philosophical, and social-philosophic foundations of education. Emphasis is placed upon the ideas of the classical, medieval, Enlightenment, and post-Enlightenment periods that have influenced types of American educational systems relative to their mission and purpose. Analysis of how these systems have defined ethics and the characteristics of the virtuous person.

ED 5030 Research Design 3 Credits

Knowledge and understanding of the commonly accepted research designs. Study of research instruments and statistics used in educational research. Wide reading in various types of research design. Critical analysis of research design.

ED 5040 Education and Society 3 Credits

Explores the elements of sociology, history, and social psychology, the interaction of which produces the American public school. Reviews the social structure of the United States and its influence on curriculum, power hierarchies, the disadvantaged child, ascribed status groups, social roles, social perception, and beliefs and attitudes.

ED 5050 Mainstream Strategies for English Language 3 Credits Learners

This course is designed especially for mainstream teachers who want to know more about how to better meet the needs of English language learners (ELLs) in their classroom. It provides an in-depth examination of widely-used, evidence-based techniques for teaching non-native speakers of English within the mainstream classroom. In addition to an overview of current theories for teaching English language learners, the course foregrounds strategies and practical hands-on ways for engaging, teaching, and assessing ELLs within the K–12 mainstream classroom. Participants gain a theoretical grounding as well as practice with scaffolding content for language learners, and developing individualized learner strategies. This course includes instruction in using CALLA, the Cognitive Academic Language Learning Approach, and SIOP (Sheltered Instruction Observation Protocol), with ELLs.

ED 5060 Theories of Learning and Cognitive 3 Credits Development

An overview of current theories concerning the brain, development, and learning. Analysis of developmental concepts from birth through adolescence and adulthood. Discussion of language acquisition, thinking and learning styles, multiple intelligence, and creativity. Topics include teaching, learning, and assessment issues related to cultural diversity, technology, and learning differences.

ED 5080 Instructional Strategies and Curriculum Design 3 Credits

Focuses on providing students interested in elementary or secondary teaching with prerequisite skills necessary for successful student teaching. Students will demonstrate competence in: knowledge of curriculum; lesson and interdisciplinary unit planning; organizing and delivering instruction; adjusting instruction for diverse learning styles; individual needs and cultures; evaluating outcomes of instruction; and use of a variety of classroom management strategies. Seminars will address issues related to teaching and emphasize student reflection and evaluation of their teaching. All students will be required to complete directed observation, participation and teaching in an assigned school. Discussions of ethical practices and professionalism will permeate the course. Prerequisite: ED 5270.

ED 5090 Crucial Issues in Education 1-3 Credits

Explores significant problems affecting contemporary education. Focuses on identification of the problems, research, and recommendations leading to solutions. Major emphasis on research elements. Unscheduled.

ED 5140 Assessment: Principles and Practices 3 Credits

The emphasis throughout this course is on the practical application of appraisal techniques in education. Critical concepts related to assessment and the integration of assessment into teaching and learning include: the role of assessment in teaching; how validity is determined; factors influencing reliability; avoiding stereotypes, understanding and using numerical data; using standardized assessment to improve instruction; and ideas and strategies for mining and reporting assessment data.

ED 5150 Individual Intelligence Testing

Concepts of intelligence. Introduction to psychological tests. Students give, score, and write interpretations for the Stanford-Binet, WISC, and WAIS. Intended for special education class teachers, administrators, and guidance personnel. May be taken as PS 5150. Unscheduled.

3 Credits

ED 5180 Collaborative Action Research 1-3 Credits

A course for teaching and administrative practitioners in which a local educational problem is examined from the standpoint of how it can best be studied and solved. A blueprint for solving the problem is prepared including statement and purpose, scope, assumptions or hypotheses, limitations, and essential definitions. Course culmination will include collection of data, analysis of that data, conclusions, and recommendation preparation that follow appropriate form and style.

ED 5190 Introduction to Grant Proposal Writing 3 Credits

Students will be introduced to the art of grant proposal writing for public and private funding sources. Students will develop a grant proposal as part of the course. Sources of funding will be provided. Offered according to demand.

ED 5210 Graduate Practicum 1-6 Credits

This is a supervised practicum experience in one of several cooperating institutions or agencies in New Hampshire. The purpose is to gain meaningful work experience through applying knowledge learned in previous coursework to the on-the-job situation. Commitment includes a negotiated number of hours per week and participation in seminars. Supervision is by the institution or agency concerned, and by PSU faculty. Students anticipating more than three hours of credit should confer early in their program with the department chair to free up sufficient blocks of time. Permission of advisor, department chair, and associate vice president for the College of Graduate Studies is required.

ED 5270 Foundations of Teaching 3 Credits

An introduction to the teaching profession and the realities of teaching in today's schools. A series of seminars includes such topics as the history and structure of education, societal issues, the role of the teacher, instructional planning, legal rights and responsibilities of students and teachers, learning styles, and effective teaching. A school observation and participation experience of a minimum of 30 hours is required.

ED 5310 Young Adolescent Learners Institute 2–3 Credits

Participants will develop a clear vision of what comprises effective teaching at the middle level and learn strategies that address many challenges classroom educators face every day. This information is the foundation for making solid decisions throughout an educational career. This course is designed for participating middle level educators who want to develop tools to more effectively teach young adolescents. Participants will have certain latitude to investigate topics and strategies that will have the greatest individual meaning. Practical, meaningful, and appropriate learning practices are the foundations of these courses.

ED 5320 Active Learning Classrooms 2-3 Credits

Participants will explore all aspects of developing an instructional plan from accessing and building prior knowledge to making connections across the curriculum. The focus will be design strategies that engage each student in the processes of learning. This course is designed for participating middle level educators who want to develop tools to

more effectively teach young adolescents. Participants will have certain latitude to investigate topics and strategies that will have the greatest individual meaning. Practical, meaningful, and appropriate learning practices are the foundations of these courses.

ED 5330 Personalizing Learning 2–3 Credits

A meaningful relationship among faculty and students enhances academic achievement. Creating personalization of student learning, developing student ownership and responsibility in a school through an advisory, supports students' affective and academic needs. Personal connections are necessary for successful middle level learning. This course is designed for participating middle level educators who want to develop tools to more effectively teach young adolescents. Participants will have certain latitude to investigate topics and strategies that will have the greatest individual meaning. Practical, meaningful, and appropriate learning practices are the foundations of these courses.

ED 5340 Differentiating Middle Level Instruction 2–3 Credits

This course will guide participants from planning to practice of differentiated instruction at the middle level. Participants should bring a teacher's edition and any ancillary materials so that they can plan lessons or a unit of work. Teams will have the opportunity to develop an integrated unit of work. This course is designed for participating middle level educators who want to develop tools to more effectively teach young adolescents. Participants will have certain latitude to investigate topics and strategies that will have the greatest individual meaning. Practical, meaningful, and appropriate learning practices are the foundations of these courses.

ED 5350 Formative Assessment 2-3 Credits

This course is designed to examine current classroom assessment strategies used to check students' prior knowledge before beginning instruction and to check what they are really learning. Bring unit and/or lesson assessment you are currently using or have used. Students will incorporate the use of formative assessment strategies to guide instruction and improve student learning. This course is designed for participating middle level educators who want to develop tools to more effectively teach young adolescents. Participants will have certain latitude to investigate topics and strategies that will have the greatest individual meaning. Practical, meaningful, and appropriate learning practices are the foundations of these courses.

ED 5360 Developing Quality Education Teams 2–3 Credits

Designed to help educators create teams that are terrific, this course addresses the question of what teams should be doing to improve student learning. Team protocols, qualities of excellence, and key teaming practices will be modeled and identified. Participants will have a deeper understanding of what is needed for teacher teams to assist each young adolescent student to learn to high levels. This course is designed for participating middle level educators who want to develop tools to more effectively teach young adolescents. Participants will have certain latitude to investigate topics and strategies that will have the greatest individual meaning. Practical, meaningful, and appropriate learning practices are the foundations of these courses.

ED 5370 Nelms Leadership Institute 2-3 Credits

Participants will expand their leadership capacity and learn about the tools necessary for leaders to be successful at the school or district level.

This interactive Institute is based on "Breaking Ranks in the Middle" (BRIM) concepts and includes modeling, reflecting and transferring knowledge. Participants will earn what works in schools where young adolescents learn to high levels. This course is designed for participating middle level educators who want to develop tools to more effectively teach young adolescents. Participants will have certain latitude to investigate topics and strategies that will have the greatest individual meaning. Practical, meaningful, and appropriate learning practices are the foundations of these courses.

ED 5430 Internship in College Teaching 1–3 Credits

Supervised internship in the development of a first teaching field under the mentorship of an assigned faculty member. Development of a learning framework for teaching at the postsecondary level with attention to models of instruction, learning styles, and needs of the college student and nontraditional learner. Presentation of course syllabus, course topics, and concept lectures, course projects, tests, and related materials. May be repeated with permission of instructor. Fall and offered according to demand.

ED 5500 Special Topics in Education 1-3 Credits

An in-depth study of a particular topic, contemporary issue, or concern. The course will be taught by a specialist within the field being studied or as an alternative methodology. A faculty member will coordinate a series of guest speakers who will meaningfully address the topic. Since topics vary, the course may be repeated with permission of the instructor.

ED 5580 Individual Research in Education 3 Credits

A research project that requires students to demonstrate the ability to synthesize salient elements from the core, professional, and specialty areas. In essence, the student's research should be the natural result of the focus and direction of planned study. The project should emanate from the area of specialization and incorporate relevant concepts learned through coursework and experience. Using sound research practices, a student should illustrate ability to interpret, reflect, summarize, and conclude. The written product of this effort will be defended in a seminar before faculty and the student's peers. Students should contact the advisor to plan for this project. Topic approval is needed from the advisor and the associate vice president for the College of Graduate Studies.

ED 5600 Leadership, Mentorship, and the Brain 3 Credits

An in-depth exploration into the relationship between the brain, behavior, and leadership/mentorship. The content of the course focuses on working with adults to understand and change behavior, especially as it pertains to educators. The role of emotions in behavior is studied.

ED 5610 Research-Based Teaching and Learning 3 Credits

Participants will study research-based practices that support life-long learning. A common language will be developed to identify and articulate good instruction. The role of observation will be examined as part of a continuous cycle of improvement. Educator and learner perspectives will be emphasized.

ED 5620 Data and Collaborative Conversations 3 Credits

Participants will examine the challenges and choices inherent in the cycle of continuous improvement. Using the data from formative assessments, students will learn and apply techniques for engaging in

individual and group "difficult conversations." Using a variety of dataanalysis strategies, implementation plans will be developed.

ED 5630 Mentor Roles and Responsibilities 3 Credits

Participants will examine the many and varied roles and responsibilities of mentors, including the initial selection of mentors. In this individualized course, students will examine and apply the skills needed for different educator roles, including student teachers, new teachers, special education teachers, alternative 4 candidates, administrators, and paraprofessionals. Advocacy and evaluation of mentor programs will be studied.

ED 5640 Practicum in Mentoring

This is a supervised practicum experience in collaboration with institutions or agencies in New Hampshire. The purpose is to gain meaningful work experience through applying knowledge learning in previous coursework to the on-the-job situation.

ED 5910 Independent Study 1-3 Credits

Enrichment of the background of students in education through the pursuit of a special topic pertinent to their interests and abilities. A chance for an in-depth study of a problem in the field of education. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

ED 5950 Graduate Thesis

–9 Credits

3 Credits

The thesis carries six graduate credits that will, after careful consideration of thesis content, substitute for coursework of six credits in the program option. Students select a topic for study in consultation with their program advisor and related faculty. A timeline, thesis publication, and defense are outlined. Three copies of the thesis must be submitted with a bound copy that remains on file at the College of Graduate Studies Office.

ED 5960 Internship in Teacher Education 1-12 Credits

Student teaching for students in the MEd in Elementary or Secondary Education programs. Students must have all coursework for the degree, including any required undergraduate prerequisites, completed before taking this course.

ED 5980 Puppetry in Education Workshop 1 Credit

The goal of this one-credit, practicum-based experience is to introduce the student to the educational value of puppetry in the classroom. Basic puppetry skills (construction and manipulation of simple hand, rod, and educational puppets) will be developed and discussed with an emphasis on integration into school curriculum. Offered according to demand.

ED 6100 Curriculum Integration and 3 Credits Performance-Based Assessment

This course will focus on assessing curricula and assessment practices that correlate with state and national standards. Students will be introduced to a range of curriculum models. Various strategies and the administration of performance-based assessment will be studied. This course is designed for students in the Elementary and Secondary Teacher Certification programs.

ED 6120 Connecting Reading, Writing, and 3 Credits Mathematics in the Elementary Classroom

This course will focus on the integration of reading and writing with mathematics. Methods and activities for integration will be explored. Students will be involved in a comprehensive study of ways to use reading and writing to strengthen the mathematics curriculum. Students will develop their own integrated unity plan to use in their classroom.

ED 6900 Graduate Capstone Project 1-12 Credits

The purpose of the graduate capstone is to apply knowledge learned in previous coursework through an approved project. Capstone projects should focus on the following questions: How will the theories learned throughout the program be integrated into a coherent project or experience? How will this work enhance individual career goals? Who are the stakeholders and how will this work assist them? How does this work serve the professional community? How will this work move the profession forward? Students should plan for approximately 40 hours of work per credit to be earned. Students must submit a Graduate Capstone Project Proposal form with their registration, and the Capstone Project must be approved by the advisor and Associate Vice President for the College of Graduate Studies. The total number of credits earned also must be approved by an advisor and noted on candidates' program contract. Once completed, candidates are expected to present their final projects to their advisor and/or PSU faculty members. Students who anticipate working on their project for more than one term should register for the appropriate number of credits in each term so that they remain registered throughout the course of the project.

Experiential Education

EE 5100 Risk Management in Experiential Education 2 Credits

This online course reviews principles and current practices in experiential education program risk management for public and private school, profit and not-for-profit organizations. Topics explored in the course include incident theories, risk management strategies, risk management tools, risk evaluation, risk analysis, emergency action plan, crisis management, liability coverage, and the law related to experiential education. Students will gain a practical understanding of risk management through examinations, risk analysis exercises, online group discussion, case studies, and individual projects.

EE 5110 Adventure Basics 3 Credits

This workshop is designed to model the delivery of a condensed but carefully sequenced challenge course curriculum. Participants will learn both the basic technical skills of operating a challenge course as well as the facilitation skills essential to sequencing a program to maximize outcomes with participants. Adventure Basics provides an important first step for both understanding the flow and interplay of a group experience and for learning the skills to run an effective challenge course education program.

EE 5120 Advanced Technical Challenge Course: 2 Credits Beyond Basics

An advanced workshop designed to help the adventure practitioner acquire the requisite skills to effectively facilitate a low and high challenge course program. Emphasis will be on developing a deeper understanding of challenge course systems and cultivating a critical eye

for safety. Some of the specific skills covered in this workshop are as follows: knot-tying, proper use of equipment, belay techniques, leading edge climbing, and basic rescue procedures.

EE 5130 Building Your Repertoire 2 Credits

Participants will complete three of the following one-day workshops: Games for Any Space; No Props No Problem; Metaphors for Change; 10 Props, 100 Activities; or Teachable Moments, and complete a resource book of activities and facilitation tools that fit their professional practice. These workshops present a variety of experiential based activities focused on problem solving, communication skills development, asset building, and reflection. Participants should also gain an understanding of the foundations of experiential education and the philosophy of learning and community building through play.

EE 5140 Experiential Education and Differentiated 2 Credits Instruction

This course gives teachers new perspectives, tools, and techniques for recognizing the varying learning styles and needs of their students, enabling them to design lessons that better engage all of the learners in their classroom. In an interactive collaborative learning environment participants will explore their own learning styles, how learning style impacts outcomes, and work with peers to develop differentiated lesson plans for their classrooms. Teachers will gain ideas, tools, and specific activities for empowering students to take more control over their learning.

EE 5150 Experiential Group Facilitation: Beyond Basics 2 Credits

This workshop offers educators and group facilitators from diverse settings an opportunity to gain practical skills in group facilitation and to develop and refine their facilitation style. In a co-creative environment facilitators will explore the art of facilitation and practice their facilitation skills. Participants will leave with a variety of practical activities, strategies, and tools that will enhance their practice as a facilitator. Through hands-on program design and implementation practice, reflection, and input from peers, facilitators will gain new insights and resources, and tap into their strengths as an educator. Participants will leave with practical tools to enhance their practice as facilitators.

EE 5160 The Experiential Learning Cycle 2 Credits

In this series of interactive workshops—Adventures in Learning and Teaching, Activities for Academic Success, and Teachable Moments—educators will explore tools and ideas for engaging learners in three critical aspects of experiential learning: creating a positive environment for learning, engaging learners in meaningful experiences that relate to core academic content, and reflective learning. Participants will earn two credits through completion of the three workshops and an experiential curriculum design project that relates to their professional practice.

EE 5170 Introduction to Low Challenge Course 2 Credits Elements

The course is designed as an introductory experience intended to model a condensed but carefully sequenced challenge course curriculum. Participants will learn both the technical skills of operating a low challenge course as well as facilitator skills essential to the operation of an experiential education program. Provides an important first step for both understanding the flow and interplay of a group experience and for learning the skills to run an effective adventure learning and challenge course program.

EE 5180 Managing an Adventure Program 2 Credits

Designed to help adventure professionals manage an adventure education program and its many facets and details. The course is intended for anyone who has primary responsibility for the management of a challenge course site or adventure education programs at their school, camp, or business setting. In addition to helping the challenge course professional learn essential management skills, the workshop also focuses upon improving one's analysis and judgment capabilities.

EE 5190 Independent Study 1-3 Credits

Enrichment of the background of students in education through the pursuit of a special topic in the area of experiential education theory, research, inquiry, or implementation pertinent to their interests and abilities. A chance for an in-depth study of a problem in the field of Experiential Education. Consent of a faculty supervisor and the associate vice president for the College of Graduate Studies is required.

Elementary Education

EL 5100 Assessing Children's Growth and 3 Credits Development

Provides the pre-service elementary education classroom teacher with knowledge of theories of children's growth and development for the purpose of building capacity for developmentally appropriate decisionmaking ("habit of mind") throughout the career. Examines the characteristics and needs of children, and the multiple interacting influences and the interrelated domains of development—physical, cognitive, social, emotional, linguistic, and aesthetic. Reviews child development knowledge base, research, and theoretical perspectives. Introduces a multitude of means for assessing children's growth and development in schools, including, but not limited to: observation and record keeping, informal and formal classroom assessments, district-wide standardized test data, interviews with families and/or caregivers, children's selfassessment, and testing done to determine the presence or absenceand nature of—an "educationally handicapping condition," as defined by federal special education law. Requires 10 field hours of observation, teaching, or interview.

EL 5200 Curriculum Design for Social Studies, 3 Credits Health and Sciences

Prepares pre-service elementary education professionals to design curricular units of study in the content areas. Familiarizes candidates with state and national standards for children's learning in the social studies, sciences, and health education, and the integration of the Common Core Standards into content-area instruction. Introduces a curriculum design model that utilizes the alignment of learning goals and assessments as the anchor for instructional practices. Students are required to design a content-rich unit of study for an elementary classroom. *Requires 10 field hours of observation, teaching, or interview.* Prerequisite: ED 5270.

EL 5300 Differentiating Instruction, Assessment, 3 Credits and Environment

Designed for both pre-service educators, as well as practicing teachers, the course introduces differentiation in the elementary classroom as a means to educational equity and excellence. Introduces cognitive frameworks of differentiation including student characteristics

(readiness, interest, learning profile) and curricular elements (content, process, products). Examines the process of planning instruction and assessment that affords all children with access to learning. Considers the impact of differentiation applied to the learning environment and supports teachers to "unlearn" classroom management in favor of learning classroom leadership. *Requires 10 field hours of observation, teaching, or interview.* Prerequisites: ED 5270 and EL 5100.

EL 5400 Inclusive Supports and Accommodations 3 Credits

Introduces to pre-service elementary education professionals, and renews in practicing teachers, the values of inclusive education, and the belief that all children can learn. Provides basic information about special education laws and systems, and outlines the role of the classroom teacher in the identification, instruction, and evaluation of children with disabilities. Considers the current deficit-driven categorical framework for special education, and introduces the concept of neurodiversity in its place. Supports candidates to understand and implement a menu of classroom supports and accommodations for children with and without disabilities, teachers, related service providers, and families, including but not limited to: Universal Design for Learning, assistive technology, educational specialists and related service providers, peer and adult supports, and social relationships. *Requires to field hours of observation, teaching, or interview.* Prerequisite: ED 5270.

EL 5600 Teaching Children Mathematics 3 Credits

Prepares the pre-service elementary educators to teach mathematics to all children in K-8 public school settings. Teaches mathematical concepts and pedagogical skills via active engagement and self-reflection in learning concepts such as fractions, ratio and proportion, Geometry, and measurement. Familiarizes students with national and state math standards for elementary educators. Thoroughly examines the Common Core Standards in Mathematics for K–8 learners. Considers the developmentally appropriate use of technology in math education. Finally, considers the differentiation of "scripted curriculum" so that all children—regardless of their diverse learning needs—can access mathematical learning opportunities in the classroom. *Requires to field hours of observation, teaching, or interview.* Prerequisite: ED 5270.

EL 5700 Elementary Reading and Writing Instruction 3 Credits

Provides the pre-service elementary education classroom teacher with the foundations and framework for designing and implementing literacy instruction, with an emphasis on curriculum, methods and materials for the primary grades. Introduces foundations of reading and writing instruction taught in the context of one another, and thoroughly examines the Common Core Standards for Language Arts for K-8 learners: literature, informational text, foundational skills, writing, speaking and listening, and language, including visual literacy and visual representation. Focuses on word study, phonemic awareness, phonics, fluency, vocabulary, comprehension, core reading programs and stages of writing development in a balanced reading framework. Considers the differentiation of language arts instruction, assessment and environment so that all children-regardless of their diverse learning needs—can access language arts learning opportunities in the classroom. Requires 10 field hours of observation, teaching, or interview. Prerequisite: ED 5270.

EL 5960 Student Teaching in Elementary Education 1-6 Credits

This culminating field-based teaching experience for elementary certification candidates affords the candidate with an opportunity to apply theory to practice, and to build upon the dispositions, understandings, knowledge and skills developed thus far in the program. The successful candidate does not leave the experience knowing fully "how to teach", but instead has a strong and balanced practice, and knows *how to learn to teach*—an important distinction given the dynamic nature of the field, and of our times. The successful candidate will demonstrate competence in all state and national initial teacher certification standards for elementary education professionals and document these competencies in a professional portfolio.

Candidates will work with a University supervisor and field-based mentor teacher to determine a schedule for the experience that includes observation, co-teaching, and solo teaching. Four observations will be conducted by the University supervisor. The mentor teacher provides daily feedback. Both will complete formal midterm and final evaluations of candidate's teaching. Participation in an online seminar is required of all student teachers.

There are three (3) options for scheduling 300 hours of student teaching experience:

- I Full academic-year relationship (minimum two hours per month) with a mentor teacher and a focused 300 hour (I2 weeks) fulltime public school placement approved by the Office of Teacher Certification.
- 2 Full academic-year relationship with a mentor teacher (minimum two hours per month) and a part-time (minimum 2 days per week) public school placement totaling 300 hours approved by the Office of Teacher Certification.
- 3 Full academic-year relationship with a mentor teacher and 300
 hours integrated into the work responsibilities of an employed elementary education paraprofessional or professional, per approval of the employing school district and the Office of Teacher Certification.

Candidates must submit passing Praxis II test scores to the University prior to registration. Prerequisite: All courses with the exception of EL 5300, per coordinator approval.

English

EN 5000 Teacher Action Research 3 Credits

This course is designed to provide a background in qualitative class-room-based research. Students design a research project in which they find and frame a research question that they will investigate through interview, observations, participant observations, or analysis of artifacts. Students will write up and present the results of this limited study.

EN 5050 Theory And Practice in the Teaching of 6–9 Credits Writing Middle/Secondary

This is a summer institute for teachers of grades K–16 sponsored by the Plymouth Writing Project. Teachers work on their own writing, conduct research into an aspect of teaching writing, participate in reflective practice, and in critical teaching demonstrations. This is an intensive, full-time, summer experience. Available through application only.

EN 5100 Using Film to Teach Literature in 3 Credits Secondary Schools

The study of the basic elements and techniques of filmmaking and the exploration of methods through which the study of film might be used in the literature class, primarily with the visual elements inherent in literature. The course will culminate with each student teaching a session on a scene from a film.

EN 5230 Teaching Literature: The Memoir 3 Credits

This course will focus on the memoir as a literary form. Students will read and discuss memoirs and devise a memoir unit for their classes.

EN 5240 Study of Language and Grammar 3 Credits

Selected reading and research in the nature and development of language, history of the English language, dialects, levels of uses, and purposes of language. The structure of American English is also discussed, as well as recent developments in language study.

EN 5300 Poetry Workshop for Teachers 3 Credits

This course is designed to help teachers develop their own poetry and to learn ways of working with poetry with their students. Students will compile a portfolio of original poetry and design a poetry-writing program for use in their classes. They will also learn techniques for integrating the study of poetry throughout the curriculum.

EN 5320 Teaching Literature: The Short Story 3 Credits

This course focuses on critical reading of short fiction and how to approach discussion of story elements.

EN 5330 Writing Project Practicum 3 Credits

This course is the culminating experience in the teacher consultant certificate program. It is intended to provide learning and professional experience relating theory to practice for plymouth writing project fellows in providing professional development to other teachers as they assume leadership positions in the writing project. Students undertake the planning and development of materials and implementation of 40 hours of professional development activity for the plymouth writing project under the supervision of the project director or one of the codirectors. Prerequisite: en 5050 and en 5450.

EN 5360 Fiction Writing Workshop for Teachers 3 Credits

This course is designed to help teachers develop their own fiction and to learn ways of working with their students. They will compile a portfolio of their own original fiction and design a fiction-writing program for use in their classes. They will also learn techniques for integrating the study of fiction throughout the curriculum.

EN 5370 Writing Across the Curriculum 3 Credits

In this course for teachers of all disciplines at all levels, we will examine a variety of techniques for integrating writing into all classes. Teachers will adapt the practices demonstrated to their subject area and grade level and gather student writing samples. We will analyze student writing samples, and discuss implications for teaching K–12. At the same time we will respond to students' writing, write about our teaching, and explore the implications for our practice.

EN 5380 Open Institute for Teachers of Writing 3 Credits

The aim of the open institute is to allow participants the time, space, and optimal conditions to work on their own writing, explore theory and research in the teaching of writing, and to transform learning into practice for teaching. The institute is divided into two interwoven sections: Theory and Research Into Practice (TRIP) and Writing and Reflective Practice (WRP).

EN 5400 Journalism Workshop

3 Credits

Students will learn how to edit and put together a small newspaper or magazine. They will learn how to edit and tailor stories to different news outlets. They will work to understand and to help their students understand how the news media shapes how they and their students think about the world.

EN 5450 Leadership in Writing 3-6 Credits

This is an advanced course for teachers who are ready to assume leadership positions relative to staff development in the teaching of writing. The course will provide an in-depth background in the teaching of writing, including process based teaching, planning for instruction, assessment, writing across the curriculum, staff development, and how to help teachers become reflective practitioners in all areas of the teaching of writing. Available by application only.

EN 5500 Topics in Teaching Literature 1–3 Credits

This course focuses on various topics in literature at the graduate level not covered in other English courses and may be repeated with different topics.

EN 5560 Topics in Teaching Writing 1-3 Credits

This course focuses on various topics related to the teaching of writing not covered in other English courses and may be repeated with different topics.

EN 5600 Technical Writing Across Disciplines 3 Credits

This course is designed to encourage critical thought and to teach students to analyze and write for an audience whose technical understanding is less than the writer's own.

EN 5620 Promising Practices in the Teaching 1-3 Credits of Writing

An introduction to various promising practices in the teaching of writing. Participants will attend workshops and follow-up sessions after applying promising practices in their classrooms. They will then write a culminating paper in which they reflect on their experience and what they have learned from implementing the practices with their students.

EN 5630 Writing Workshop for Teachers 3 Credits

Structure and implementation of classroom writing workshops, including conferences and portfolio assessment. Students will study writing process history and theory, and work with their own writing. They will create a personal literature anthology exploring their relationship to various literary genres. Analysis of student writing samples, evaluation criteria for writing, and their implication for teaching will be discussed.

EN 5640 Theory and Practice: Teaching 3 Credits Writing at The Secondary Level

An introduction to methods and philosophies of the teaching of writing, with a focus on grades 5–12. Students will explore philosophical elements of a process/environmental approach to teaching writing for

responsive teaching in a democratic and pluralistic society. They will use constructivist learning theory to set up and practice writing conferences and in-depth assessment of student writing, and have practiced using that assessment to guide instruction. Observation and participation in secondary or middle schools required.

EN 5710 Writing and Thinking

1-3 Credits

The aim of this course is to provide all participants with a background in the theory and practice of writing in the content areas. Through their own writing and through inquiry related to their individual professional goals, educators will relate theory and practice in terms of using writing for learning, and more process-based writing in their disciplines. They will become familiar with the basics of what research has demonstrated about writing across the curriculum, assessment, how writing intersects with content material.

EN 5720 Writing Our Communities 1-3

1-3 Credits the history, cul-

This course will explore how to use writing to examine the history, culture and ecology of the place in which we live. Participants will develop educational units appropriate to their teaching situations, explore the use of artifacts in their lives and in our history and culture, and examine how these reflect relationships of power.

EN 5750 Advanced Writing Workshop for Teachers: 3 Credits Editing and Publishing

This course is designed for teachers with some experience teaching writing using a process methodology, or those who have had training in that area. The course provides an opportunity for them to work at their own writing and to learn about the compilation of a literary anthology.

EN 5800 Internship In The Secondary School 3 Credits

This course involves the planning and implementation of a specific unit of study involving the teaching of writing in the secondary school. Students will design and implement the unit of study, which will end in a culminating event such as a public reading, a literary magazine, an oral history, or travel writing project. Students should begin this course with a specific idea to develop into a unit with their classes.

EN 5830 Teaching Literature for Cultural 1–3 Credits Understanding

This course provides an introduction to the use of multicultural literature appropriate for K–12 classes to increase cultural understanding. Students will apply a spectrum of intercultural sensitivity as a guide for working with their students. The course involves the planning and implementation of a unit of study involving the teaching of multicultural literature in the K–12 school and integrating writing and the arts.

EN 5870 Teaching Literature in Secondary School 1–3 Credits Instructional methods and materials used in teaching literature at the secondary (5–12) level. Observation and participation in local schools is required.

EN 5910 Independent Study

1-3 Credits

Enrichment of the background of students in education through the pursuit of a special topic pertinent to their interests and abilities. A chance for an in-depth study of a problem in the field of English. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Educational Leadership

EP 7020 Collaborative Leadership 3 Credits

Students will explore major concepts related to developing partnerships and communities of learners. Course topics include the change process, forms of school and community governance, school culture, the concept of collaboration, and agencies and organizations involved in community programs and initiatives. Special attention is focused on planning and implementing system-wide and building-level networks. Students will develop and evaluate a framework for collaboration and demonstrate systems thinking. Typically the first course completed in the CAGS program.

EP 7030 Transforming the Educational Agenda 3 Credits

This course focuses on the development of a self-renewing capability inherent in professionals and organizations. Students will discuss the notion of transformation in the context of knowledge base, self-reflection, and the socio-professional processes in educational change. Students will explore the integration of ecological perspectives within a changing society and the demand for greater tolerance of human behavior in the context of learning. Students will demonstrate an understanding of the need to keep student learning and development as the central core of educational change. Prerequisites: EP 7020 and EP 7040.

EP 7040 Planning in Education and Human Services 3 Credits

The purpose of this course is to develop effective collaborative planners. This course presents the major stages in the process of developing a strategic plan, including forming a mission statement, crafting and implementing the plan, and evaluating plan performance. It provides a theoretical and practical overview of the skills, strategies, and resources required through each stage of the systemic planning process. Prerequisite: EP 7020.

EP 7050 Qualitative Methodology and Applied 3 Credits Research

This course addresses qualitative research methodologies with a particular emphasis on constructing grounded theory. Candidates will engage in the process, design, and critique of qualitative inquiry and research. Organizational and community issues will be explored and discovered through the analysis of patterns of beliefs, attitudes, and behaviors within interpersonal and intercultural contexts. The course includes theory and practice related to initiating an inquiry; gathering, recording, and analyzing data; and evaluating a study. Prerequisites: eligibility for post-master's CAGS-level coursework, and a graduate level course in research design.

EP 7060 Legal Issues in Policy Making 3 Credits

This course presents a discussion of ways institutions and their communities must deal with the legal and political environment in which they exist. Topics include current legal issues and how the stakeholders in society can use the law as a tool for social change. Institutions must advocate for positive change through the development of thoughtful legal policies and practices.

EP 7070 Contemporary Social Trends 3 Credits

Contemporary social, economical, political, and educational issues are the core of the course. They are identified in a forum that provides opportunities for the students to research current methodology together

to address problems that relate to the specific roles of the course participants in their work inside or outside of the educational field. Working collaboratively, course candidates explore short-range and long range problem-solving strategies directed toward increasing their awareness of community perception and expectations, techniques for facilitating institutional change, and responding to the nature and culture of internal and external political systems and environments as they apply to their work sites.

EP 7090 Critical Perspectives for Arts Advocacy 3 Credits

To be an advocate of the arts must mean in some degree to have given thought to the very nature of the arts and their function in human development and culture. This course attempts through reading, discussion, writing, and forms of "doing art" to broadly circumscribe the nature of the arts and their function within the human experience. The readings will help facilitate seminar discussions designed to explore a variety of views about how the arts, once identified and defined within human experience and culture, contribute to human flourishing by opening up a more encompassing range of choices and possibilities. To be an advocate for the arts in this sense is to realize the intimate connections that the arts evoke, as well as to encourage the expansion of social vision through public forms of conduct and communication.

EP 7100 School Labor Relations, Negotiations, 3 Credits and Personnel Management

Focus on policies and procedures affecting personnel management in the schools. Discussion of staffing, program and personnel evaluations, office procedures and recordkeeping, decision making, and negotiations. Emphasis on collective bargaining statutes, case law, grievance processing, mediation, employee relations boards, union security provisions, scope of bargaining, and the administration of the negotiated contract.

EP 7110 Arts and Learning 3 Credits

This course is designed to provide candidates with the arts leadership skills necessary for designing, implementing, assessing, and sustaining arts integration models in diverse school settings. The course will focus on the multiple roles of the arts as mediation tools offering languages for learning and methods for instructions. This course will provide candidates with theoretical and applied knowledge of comprehensive interdisciplinary multi-arts integration supporting learning in, with, and through the arts. Candidates will be introduced to the research based Integrated Instructional Model, which incorporates the components of community, problem-based learning, and arts integration. Candidates will explore the use of the arts and artistic methods through hands-on activities modeling arts-infused learning and instruction. Candidates will apply individual and group understandings to considerations of site-specific school change and sustained systemic professional development.

EP 7120 Appreciative Inquiry 3 Credits

Learn to leverage change initiatives and improvement processes by discovering the positive core of an organization, team, or process. Beginning from a positive vantage point will: empower an organization, and encourage motivation and positive action, while increasing commitment and creating sustainable success. This method has been used by the Dalai Lama, the U.N., the U.S. Navy, and a variety of major corporations, hospitals, and educational institutions. Appreciative Inquiry

was originally conceived as a method for large-scale organizational development change initiative; it is now used in the following ways: as a method to improve relationships and team performance, as a program assessment tool, as a research method, and for building communities. This will be a hands-on learning experience. During the course we will cover some foundational theory and conduct an appreciative inquiry. This class will provide skills and knowledge that can be directly applied professionally or personally.

EP 7121 Designing and Leading Healthy 3 Credits Organizations

The course is designed as an intensive introduction to the theories, methods and tools for building wellness concepts into the strategic planning process of organizations. The class will define the future of wellness in the workplace evolving beyond mechanistic approaches to individual wellness and developing holistic principles leading to organizational health. At the completion of the course, students will have an understanding of ways to institute a new wellness paradigm into organizational design.

EP 7130 Shaping Policies and Practices in Arts 3 Credits Education

This course is designed to provide candidates with the arts leadership skills necessary to effect and sustain changes in current educational settings toward a greater emphasis on improving the quality of arts education. Candidates will explore major concepts related to shaping policies and practices in arts education, while examining current educational systems with an eye toward systemic change. Connections will be made to the importance of sustaining and developing curriculum, sustaining arts advocacy projects and programs, and transforming educational systems to embrace learning with, about, in, and through the arts.

EP 7200 School Buildings and Transportation 3 Credits

The role of the school administrator in planning school construction projects, maintaining school facilities, and overseeing the transportation of students is the focus of the course. Also emphasizes the relationship of facilities and transportation to meet the program needs of the students while complying with state and federal regulations.

EP 7300 The Superintendency and School District 3 Credits Leadership

In-depth studies of essential knowledge bases and best practice skills required to effectively execute the responsibilities of the district-level administration, including the roles of the public school superintendent and assistant superintendent. Attention will be given to balancing three sometimes conflicting roles: instructional, managerial, and political, in an era of standards-based accountability. Prerequisites: six credits of CAGS core courses.

EP 7560 Special Topics in Educational Leadership 1-4 Credits

An in-depth study of a particular topic, contemporary issue, or concern. The course will be taught by a specialist in the field or guest speakers who will meaningfully address the topic. Since topics vary, the course may be repeated with the permission of the instructor.

EP 7800 Practicum in Educational Leadership: 3–6 Credits The Superintendency

A collaborative supervised field experience in one of several cooperating institutions or agencies. The purpose is to gain meaningful work experience as an administrator through applying knowledge learned in coursework to on-the-job situations. It is recommended that this course be taken near the end of the candidate's program.

EP 7810 Leadership and Learning Practicum 3-6 Credits

A collaborative supervised field experience in one of several cooperating institutions or agencies. The purpose is to gain meaningful work experience (leadership in the arts) through applying knowledge learned in coursework to on-the-job situations.

EP 7820 Externship 1–6 Credits

This externship is designed to provide opportunities for advanced level graduate candidates to study and research topics of interest at locations outside the University, often abroad. These externship placements provide candidates with an opportunity to gain new perspectives, sample different career paths, and network with leaders in education and related fields. Candidates are required to spend a minimum of 40 hours per credit hours in the externship placement and develop and present their research project.

EP 7830 Practicum: K-12 Curriculum 1-6 Credits Administrator

This course is designed as the culminating field experience for enrolled advanced graduate students seeking New Hampshire Department of Education (NHDOE) certification as a K-12 Curriculum Administrator. The practicum is a performance-based analysis of the role of the K-12 Curriculum Administrator in practice with emphasis on changes in society and schools as well as with reference to job responsibilities of the position—the art and science of school system leadership. Students enrolling in the practicum are expected to spend time interacting with a practicing curriculum administrator and completing a practicum project to fulfill requirements meeting state certification. Practicum readings and activities are designed to provide experiences relevant to building a required certification portfolio that demonstrates formal knowledge of executive leadership and management, dispositions (using that knowledge to reflect on experiences), and performances (school-based applications) as described in the interstate school leaders licensure consortium (ISLLC) standards for school leaders and New Hampshire education standards for curriculum administrator. Prerequisites: completion of required curriculum administrator coursework and permission of instructor.

EP 7840 Capstone in Arts, Leadership and Learning 3 Credits

The capstone experience is designed to provide an opportunity for CAGS-level graduate candidates to demonstrate their knowledge of leadership and the arts by designing and implementing an art, leadership and learning project within an educational setting. Candidates are required to spend a minimum of 40 hours per credit hour devising and executing their planned project. At the conclusion of the capstone, candidates are expected to share their results in a public setting with faculty and others interested in arts and learning.

EP 7850 CAGS Capstone

3-6 Credits

The graduate capstone is the culminating course in the Certificate of Advanced Graduate Studies (CAGS) in Educational Leadership (non-certification), Curriculum & Instruction concentration. The purpose of this course is for students to apply the knowledge, skills, and understandings they have gained in program coursework to their professional setting. Students will plan approximately 40 hours of work for each credit to be earned in their capstone. Students must submit a Graduate Capstone Project Proposal form with their registration, and the Capstone Project must be approved by the advisor and Associate Vice President for the College of Graduate Studies. Once completed, students must present their capstone product(s) to their advisor, capstone supervisor, and/or other PSU faculty members, as determined in the capstone proposal. Prerequisite: Consent of advisor, and satisfaction of all other program requirements.

EP 7910 Independent Study

1-4 Credits

Enrichment of the background of students in a particular field of study through the pursuit of a special topic pertinent to their interests and abilities through research. Consent of the faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

EP 8000 Emerging Perspectives on Learning and 3 Credits Development

Leaders play an important role in constructing, guiding, and improving learning in organizations. This course explores research-based discoveries and insights about the brain, learning, and development from multiple disciplines. Topics will include current developmental concepts as they are connected to understanding people, organizations, and policy settings.

EP 8010 Program Evaluation: Theory and Practice 3 Credits

This course engages students in understanding and using the theory and practice of program assessment and evaluation, including the effective communication of results. Students work directly with an agency or program to design an evaluation proposal. Various methodologies and approaches are investigated. Students discuss how to use data to inform decisions and to plan and assess programs. Prerequisites: a research design course and a qualitative research course; member of the PSU EdD cohort.

EP 8020 Ethical Leadership and Advocacy 3 Credits

This course focuses on ethical leadership and advocacy with an emphasis on personal and professional standards. Students apply ethical decision-making models to dilemmas drawn from professional contexts. The psychological and moral development needed to effectively advocate for social justice is considered. Students will demonstrate understanding of effective advocacy at the individual, community, and socio-political levels. Prerequisite: Member of the PSU EdD cohort.

EP 8025 Writing a Literature Review 1-3 Credits

This course will provide an organized and collaborative support system for doing the research and writing of the required Review of Literature, which is Dissertation Block One (and becomes Dissertation Chapter Two) as early as possible in the doctoral program. Cohort members will gather on Saturdays throughout the winter and spring terms to collaborate on the writing process, provide feedback and support, and

meet their own goals for researching and writing relative to the review of literature that is incorporated into the dissertation in a later term.

EP 8030 Leadership in a Diverse World 3 Credits

Leaders often find themselves making decisions, facilitating programs, and mediating conflicts that emanate from the many ways in which humans differ, including ethnicity, race, religion, sexual orientation, and cultural beliefs. In this course, attention will be given to central topics and critical issues that address global leadership competencies in working with diverse populations. Students will critically examine the complexity of culture, the building of community, and the promotion of social justice from individual, community, and global perspectives. Furthermore, students will consider and evaluate both reactive and proactive roles for leaders in educational, social, and political settings.

EP 8040 Resource Planning and Stewardship 3 Credits

Leaders are expected to develop policies and implement practices that maximize the financial, environmental, material, technological, and human resources of their organization. Through the investigation of case studies, site visitations, and research, students will explore exemplary practices and potential approaches for the best use of an organization's resources. Topics will include: budgetary practices with high accountability factors, energy programs, recycling resources, employing technology while containing costs, and innovative personnel practices.

EP 8050 Vision: Synergy and Synthesis 3 Credits

Leaders are expected to facilitate the creation of a vision that drives their organization forward. Through readings, responses to interactive lectures, and participation in experiential exercises and group discussions, students will explore opportunities for restructuring organizations to create dynamic workplaces and synergistic organizations. Students will also examine present and emerging paradigms in the areas of behavioral science, psychology, and neuroscience so they may ascertain the impact of these belief systems on individuals and organizations. Prerequisite: EP 8000.

EP 8060 Doctoral Seminar: Writing the Proposal 3 Credits

In this course, candidates are expected to craft a high quality comprehensive and compelling prospectus for their dissertation research proposal that is tailored to their interests and discipline. The seminar topics focus on helping students design a research study and write a dissertation proposal. (Prerequisites: Successful completion of these doctoral core courses: EP 8000, EP 8010, EP 8020, EP 8030, EP 8040, and EP 8050).

EP 8070 Dissertation Block I (Review Of Literature) 3 Credits
 EP 8080 Dissertation Block II (Methodology and 7 Proposal Defense)
 EP 8090 Dissertation Block III (Data Gathering and 7 Analysis, Conclusions, and Dissertation Defense)

These courses serve as culminating experiences in the Doctor of Education program, building on research conducted throughout the coursework and resulting in extensive research and writing on a topic appropriate to a candidate's program, under direction of a project advisor. Candidates' projects demonstrate comprehensive understandings of the knowledge and practices of their selected field of study. These doctoral seminars are organized into a sequence to support the writing of the dissertation and should be taken in order: writing the proposal,

writing the literature review and methods sections, collecting data and analyzing findings, and writing up the results and conclusions or discussions.

EP 8820 Externship 3–6 Credits

The externship represents an important stage in the preparation of doctoral candidates. The externship provides an opportunity to explore and research topics of interest related to the dissertation at domestic and international locations outside the University. Externship placements allow candidates to gain new perspectives, sample different career paths, gather practical experience related to the dissertation, and network with leaders in education and related fields. Candidates work with their instructor to establish the focus and site of the externship placement. Candidates develop and present their research project at the conclusion of the externship to faculty and peers. Students should be aware that a background check might be a requirement of certain externship sites.

Early Childhood Education

ER 5750 Individual Research in Early Childhood 1-3 Credits

Designed so that students may pursue in-depth a personal interest in the field of early childhood. Students working with a faculty advisor carry out the research from design to completion. The final product must be approved by the project director. Offered according to demand.

ER 5910 Independent Study in Early Childhood 1-3 Credits

Enrichment of the background of students in education through the pursuit of a special topic pertinent to their interests and abilities. A chance for an in-depth study of a problem in the field of education. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required. Offered according to demand.

Environmental Science and Policy

ESP 5040 Environmental Consulting 3 Credits

This course is designed to train students on scientific degree tracks to become valuable employees in the environmental consulting industry by introducing them to the technical skills, project planning, and business management skills in demand by environmental consulting firms. The course focuses on the technical aspects in areas such as brown-field redevelopment, natural resources and environmental permitting, environmental compliance, sustainable development planning, etc. Course elements stress the use of industry-standard procedures and state regulations, data and information management, report preparation, development of findings and opinions, and verbal presentations.

ESP 5050 Earth Surface Dynamics 3 Credits

The Earth's near-surface environment, its so-called critical zone, supports almost all known life, holds most of the geologic record, and is the region where all of earth's dynamic systems intersect. Changes in climate, land use, water resources and ecosystems alter the form and function of this critical zone, creating landforms such as river deltas, lakes, beaches, gullies, bogs, dune fields, salt flats and dried lake beds. This course examines recent trends and changes in Earth's most

dynamic system, its critical zone, with emphasis on how these changes affect the very shape of our environment, including both terrestrial and sub-surface features. Although this course incorporates many aspects of glacial and periglacial geology, it goes beyond those remnants of past climate regimes to look at future earth scenarios. Topics range across many disciplines but all are, in essence, geomorphic responses to a dynamic earth. Potential topics: the impacts of changing sea level on river sediment and dissolved loads; ecological and water quality consequences of infilled dams/lakes, soil erosion and land conversion; climate-induced changes in floodplains, permafrost and Arctic shorelines; heightened storm surge from changes in terrestrial sediment budgets and marine currents; consequences of newly deglaciated land on Greenland, Antarctica and high mountain regions.

ESP 5060 Ecological Economics 3 Credits

Ecological Economics (EE) is not a traditional discipline. Often referred to as a "transdiscipline" because it crosses the boundaries of several subjects, many say that ecological economics is the science of sustainability. In this introductory, graduate-level course we will explore EE as a young and evolving field of inquiry. Standard and non-standard economic concepts will be explained along with ecological understanding to describe the challenges that arise in coupled natural-human systems. We will use problem and solution-based inquiry to test out some of the methods advocated by ecological economists. This will include participatory research on ecosystem services in local communities. Specific topics to be covered may include: Abiotic and biotic resources; supply and demand; market failures; economic growth and human well-being; policy instruments; efficient allocation of resources; pricing and valuation of non-market goods; and ecological economics case studies around biodiversity.

ESP 5070 Decision Making in Natural Resource 3 Credits Management

Managing natural resources for multiple objectives, in a sustainable manner is a challenge that both practitioners and researchers face in today's highly complex socio-political environment. Decision analysis skills are highly valued in the field of environmental science. This course will present current theories and applications related to decision making for natural resource management. Students will have the chance to work through local and regional decision making scenarios and compare different tools and theories on the ground.

ESP 5080 Soils and Environmental Change 3 Credits

The purpose of this course is to introduce soil science to environmental science, geology, geography and biology majors. The course's multidisciplinary topics inform students about the relevance of soil studies across a broad spectrum of modern issues. Students will learn the geologic, geographic and climatologic aspects of soil formation, the structural components of soil that impact diverse aspects of soil fertility, drought, and tendency to landslide or erode, the dynamical aspects of soil hydrology and geochemistry, and the biological aspects of soil nutrient availability, nitrification, carbon cycling and biodiversity. This class is integrated with a laboratory that allows exploration of soil science topics through field and laboratory exercises.

ESP 5090 Environmental Chemistry 3 Credits

This course covers the chemistry of Earth's environment, including the natural chemical processes as well as anthropogenic contributions. The environment in this context is divided into the atmosphere, the

3 Credits

hydrosphere, the lithosphere, and anthrosphere. Particular emphasis is given to human influences in each of these "spheres," including the causes, effects, detection, prevention, and mitigation of pollution. Environmental pollution is a global problem, with many technological and cultural causes, and as such requires an understanding of numerous disciplines in order to solve. This course thus involves the integration of concepts from chemistry, biology, geology, ecology, atmospheric sciences, hydrology, toxicology, political science, and others. Major topics to be covered include stratospheric ozone depletion, global climate change and energy, acid rain, waste disposal, organic and inorganic pollutants, and environmental regulation in the United States. The lab component will focus primarily on detection of pollutants in air and water and will include a class research project.

ESP 5210 Forest Ecosystems

3 Credits

The course will be structured around the advanced methods that have enhanced our understating of forest ecosystems. The course will explore concepts and techniques to address the changes in climatic cycles, the implications of wide-scale pollution, fire, and other ecological disturbances that have an effect on forests ecosystems. Topics to be covered include forest water and biogeochemical cycles, forest ecology, forest diversity, and global forest ecology. A field trip to the Hubbard Brook Experimental Forest or another location in the White Mountain National Forest is included. Prerequisite: demonstration of competency in biogeochemistry, chemistry, ecology, and quantitative analysis; or permission of instructor.

ESP 5300 Field Methods in Water Resources 1 Credit

This course will focus on hydrologic and climatic field measurements and computations useful in watershed management and hydrology. It will involve the collection, compilation, and interpretation of data and assessing error, and learning about fundamental hydrologic properties. Course complements Watershed Hydrology.

ESP 5310 Snow Hydrology 2 Credits

This course will look at the role of snow in the hydrologic cycle with emphasize on measurements, atmospheric formation, snow distribution and metamorphosis, snowmelt and accumulation, runoff prediction, snow chemistry, and forest and land-use interaction effects. This is a field- and lecture-based course taught over an intensive period in the winter. Prerequisite: a physical geography, hydrology, or equivalent course, or permission of the instructor.

ESP 5320 Watershed Hydrology 3 Credits

This course will provide a qualitative and quantitative understanding of concepts and physical principles governing the occurrence, distribution, and circulation of water near Earth's surface. Emphasis will be on the physical understanding and parameterization of hydrologic processes, such as how rainfall and snowmelt become streamflow, evapotranspiration, and groundwater. This course is expected to serve as prerequisite to Watershed Management and Snow Hydrology, and co- or prerequisite to Field Methods in Water Resources.

ESP 5330 Watershed Management and Planning 3 Credits

Managing human impacts on watersheds and water resources, and understanding the interrelationships among land use, soil, and water will be addressed. Watershed management will focus on controlling the amount and timing of water yield, stormflow, water quality, and sedi-

mentation, with socio-economic considerations. Human uses of and impacts on water are examined with an emphasis on principles of water resource and watershed planning. Prerequisite: a prior hydrology course or permission from the instructor.

ESP 5390 Travel Study in Environmental Science 2–3 Credits and Policy

Periodically, travel study courses will be offered that explore environmental science and policy topics and methods in different environments. These courses are designed to enhance students' skills and understanding with an emphasis on the transferability of these skills to other regions.

ESP 5420 Applied Hydrogeology

This course provides comprehensive coverage of groundwater hydrology and the role of water in geologic processes from theory (i.e., principles governing the flow of groundwater) to practice with application to issues of groundwater supply, contamination, and resource management. Practical experience is gained through the use of real data sets and by the investigation of real-world problems.

ESP 5500 Special Topics in Environmental 1-4 Credits Science and Policy

An in-depth study of a particular topic, contemporary issue, or concern. The course will be taught by a specialist within the field being studied, or, as an alternative methodology, a faculty member will coordinate a series of guest speakers who will meaningfully address the topic. Since topics vary, the course may be repeated with permission of the instructor.

ESP 5510 Analysis of Limnological Systems 3 Credits

This course will examine the structure and function of freshwater ecosystems. Topics to be covered will include the geology, chemistry, physics, and biology of such systems. Special emphasis will be given to biogeochemical cycles, energy flow and productivity, and relationships of freshwater systems to human existence. Lab work will include studies of both lotic and lentic systems.

ESP 5530 Science-Based Research Design and Data 3 Credits Visualization

This course will focus on the science-based research process from idea generation to project design to communication of results. The first part of the course will focus on the science-based process of constructing a compelling research question and designing a research program to address the question. The middle part of the course will address data visualization as a powerful means of communicating research results. The final part of the course will teach students how to best communicate science-based research or technical ideas through a variety of media types (e.g., presentations, websites, posters, etc.). Prerequisite: Demonstrated competency in sciences and quantitative analysis; or permission of instructor.

ESP 5540 Master's Thesis Outreach 1 Credit

The Center for the Environment at Plymouth State University includes outreach in its mission. The center works on applied environmental problems and the engagement of local communities and organizations in its work and through the work of the graduate students in Environmental Science and Policy. In order to prepare students to be

better communicators of science, this course will introduce outreach and science communication concepts and help students in developing outreach skills. This course is designed to be taken along with ESP 5900 Master's Thesis Research, and students will be required to complete an outreach project or activity related to their thesis research. Creative methods and activities will be encouraged.

ESP 5560 Independent Environmental Research 1 Credit Outreach

The Center for the Environment at Plymouth State University includes outreach in its mission. The center works on applied environmental problems and the engagement of local communities and organizations in its work and through the work of the graduate students in Environmental Science and Policy. In order to prepare students to be better communicators of science, this course will introduce outreach and science communication concepts and help students in developing outreach skills. This course is designed to be taken along with ESP 5920 Independent Environmental Research, and students will be required to complete an outreach project or activity related to their independent environmental research project. Creative methods and activities will be encouraged.

ESP 5580 Climate Change 3 Credits

This combined lecture and discussion course examines Earth's climate system and the feedbacks that affect it over annual to millennial (thousands of years) timescales. It is a highly interdisciplinary course that integrates information on climate from atmospheric, oceanographic and geologic sciences, and broadens overall comprehension of natural and human-invoked changes in earth's critical zone systems. Students from meteorology, environmental science and policy, and ecology should find this course highly informative and useful. Topics include past and present records of climate change, the various fields of study that contribute to climate knowledge, the effects of scale and frequency on the quality and reliability of climate records, and the state-of-the-art in climate assessment and prediction. Lecture sessions will provide fundamental information, especially with regard to the scientific basis for our current understanding of climate, and will introduce "hot" topics for discussion. Discussion sessions will focus on the most-recent status of these "hot" topics using recently published scientific papers and also online professional-level discussion forums. The role of science in politics and society will be an integral part of many of these discussions, including the obstacles created by declining public proficiencies in science and math and varying perceptions of risk.

ESP 5610 Environment and Society 3 Credits

This course will introduce students to the study of environmental sociology and develop critical thinking skills facilitated by the application of sociological perspectives. Environmental issues and problems are often viewed as technical ones, to be resolved by the application of scientific and technical means alone. This common perception will be critically examined in this class. Environmental problems are problems for society that challenge and threaten our current system of organization, and are also problems of society. This class will examine material, ideal, and practical elements of environmental issues. Current environmental problems and policy issues will be debated, and their connections with society and culture will be the focus of the course. The meanings of nature and wilderness will be discussed. Other topics include environmental justice, the history and workings of the environmental move-

ment, green washing, public attitudes toward the environment, and the idea of sustainability.

ESP 5620 Environmental Law and Policy 3 Credits

This course reflects the legal and political aspects of major environmental issues as embodied in environmental laws. The course will teach learners about the law and the policies that are the basis for environmental laws. Concurrent examination is proposed in order to provide linkage between policy and law as we will discuss real world events and issues. The course will be presented in a form to convey a robust understanding of the bigger procedural and theoretical picture in the formation, implementation, and facets for each topic. Topics include the legal process, the policy process, ownership and property rights, and how these relate to major environmental issues; water, air, waste, wildlife, and forestry. Emerging new issues will also be discussed.

ESP 5640 Methods of Social Research 3 Credits

This course will enable students to become more astute and critical consumers of social research studies through exploring the thinking behind social research and the methods used to collect, analyze, and report the findings of the social sciences. Students will gain knowledge in research design and implement an actual study of social phenomena. Skills to be presented include theory application and construction, operationalizing variables, evaluating strengths and weaknesses of research methodologies, determining causality, sampling, hypothesis formulation and testing, data collection, analysis and depiction, and proposal writing.

ESP 5660 Principles of Environmental Education 3 Credits and Interpretation

This course introduces students to the basic principles and practices of the art and profession of interpretation. After completing this course students will be able to understand and relate a working definition of interpretation; discuss the history, principles, and philosophy of interpretation as it is practiced in natural resource settings; describe the basics of visitor evaluation; illustrate basic skills in interpretive research, oral presentation development, and exhibit development; demonstrate development of interpretive themes, goals, and objectives; and demonstrate competency in making thematic oral presentations and producing interpretive exhibits. For an additional fee to the National Association for Interpretation, students will have an opportunity to become a Certified Interpretive Guide (CIG). This option will be explained in class at the beginning of the semester.

ESP 5680 Social Marketing in Environmental 1-4 Credits Education

Examines effective stewardship or environmental education outreach programs that apply strategic communications, marketing, branding, and evaluation processes that foster sustainable behavioral change toward stewarding natural resources. The course will focus on research studies on effective programs and how the best practices can inform design of new initiatives. Participants will examine prevailing public environmental attitudes and knowledge, explore the issue of motivating people beyond knowledge to action, and review the role of social marketing in behavior change and environmental education.

ESP 5700 Graduate Seminar in Ecology and the 3 Credits Environment

This graduate seminar focuses on how ecological concepts and studies inform scientists, managers, and decision makers about the nature of and solutions to environmental problems. Specific topics, each will clearly demonstrate the central role of ecology in understanding ecosystem function and how ecosystems respond to disturbances at multiple scales. Through readings and discussion, students become knowledgeable and critical of ecological theory and practice. The concepts are fleshed out through case studies taken directly from peer-reviewed literature. Prerequisite: Demonstrated competency in the principles of ecology, including ecosystem ecology, landscape ecology and/or community ecology; or permission of the instructor.

ESP 5710 Science Colloquium Series 1 Credit

This graduate seminar is designed to be a core course in the environmental science and policy program. It will focus on the analysis of contemporary issues in environmental science. Specific topics will vary from year to year and will be tailored to the interests of the students enrolled and faculty interests. The course will create a foundation of knowledge of contemporary issues. It is also expected that it will help students refine their research interests as well as be exposed to new ideas through interaction with others in the course.

ESP 5720 Land Use Planning Seminar 1-3 Credits

Land use planning is a dynamic field that involves the integration of a variety of components to improve communities and places. This graduate seminar will focus on furthering knowledge on specific topics related to planning and explore interrelationships between topics. Topics might include smart growth, low impact design, transportation, energy, sustainable design, drinking water protection, housing, economic development, and community involvement.

ESP 5730 Contaminant Hydrology 3 Credits

This course expands on Watershed Hydrology (ESP 5320) by taking a closer look at the contaminants carried by water as it moves through the hydrologic cycle. Studied contaminants will include water temperature (an EPA recognized contaminant), pH, nutrients, metals, and organic toxics such as pesticides. Participants will study the distribution of these contaminants and the theories necessary to understand their fate and transport in watersheds.

ESP 5740 Ecosystem Management: Principles and 3 Credits Applications

The course will be structured around two major themes in ecosystem management: principles and applications. The theoretical background and current status of science-based knowledge and applications will be studied based on readings from the primary literature and understanding of selected case studies. The objectives of this course are to introduce the basic conceptual and theoretical framework of ecosystem management; the important biological, ecological, and socio-economic components of ecosystem management; and the challenges of implementing ecosystem management in real landscapes. The course intends to provide an interdisciplinary environment, an opportunity to develop open-mindedness and appreciation for diverse viewpoints regarding integrated resource management, and a chance to refine communication skills. Prerequisite: Demonstrated competency in social sciences, ecology, and Geographic Information Systems; or permission of the instructor.

ESP 5750 Environmental Ethics 3 Credits

Ethics help us understand what constitutes a good life and how to live one, as well as address questions of right and wrong. Science can provide us with data, information, and knowledge, but it does not tell us how to live a good life. Environmental ethics apply ethical thinking to our understanding of the natural world and the relationship between humans and the earth. It can help us bridge science and our personal and organizational responsibilities in life. This course will help students develop the skills necessary to recognize the ethics behind environmental problems and issues and the role of these ethics in leadership positions in environmental fields.

ESP 5760 Nature of Environmental Systems 3 Credits

The modern world is characterized by an accelerating fragmentation and specialization of research-based information that hinders linking scientific knowledge and action to offer solutions to environmental problems. Scientists must bring together an understanding of the many components of the environment (e.g., ecological, economic, social, geophysical, etc.). This class outlines a framework that explicitly integrates social, ecological, and geological disciplines to address specific, fundamental questions related to biophysical systems, ecosystem services, and human responses and outcomes. This framework is iterative with linkages and feedbacks between biophysical and social sciences. The class will explore under which conditions an environmental system may shift from simple to complex (e.g., exhibiting surprising responses) by relying on theoretical, empirical, and methodological contributions from ecological, biophysical, and social science disciplines. Prerequisite: Demonstrated competency in social and biophysical sciences, and quantitative analysis; or permission of the instructor.

ESP 5780 Applied Environmental GIS 3 Credits

This is an introductory course designed for students with little or no experience using Geographic Information Systems (GIS). The course is hands-on and will progressively build on a series of GIS skills in preparation for completing a natural resources project utilizing GIS. The course includes five "learning" sessions during the term which will include extensive instruction and repetitive performance of key GIS tasks. The course will meet once a week for the remainder of the term where students will focus on and receive assistance with individual projects.

ESP 5900 Master's Thesis Research 1-5 Credits

Students select a topic in consultation with their advisor and committee. A timeline, proposal, and defense are outlined. A final thesis is prepared in accordance with program thesis guidelines.

ESP 5910 Independent Study in Environmental 1–3 Credits Science And Policy

Independent study provides enrichment of the background of students through the pursuit of a special topic pertinent to their interests and abilities. It is an opportunity for an in-depth study of a problem in environmental science or policy. Consent of a faculty supervisor and the student's advisor is required.

ESP 5920 Independent Environmental Research 1-4 Credits

Students select a topic and project in consultation with their advisor and committee. Collaboration with external organizations and partners is encouraged. A timeline, goals, deliverables, credits, and expected outcomes are outlined for each project.

Environmental Science

EV 5230 Fresh Water Biology 4 Credits

An introduction to the aquatic environment, including the freshwater, marine, and estuarian systems. Special emphasis placed upon physical, chemical, geological, and biological variables. An ecological approach stressing zones of life, habitats, and population-community interactions. Laboratory and fieldwork are important components of the course.

EV 5360 Marine Biology 4 Credits

An introduction to the organisms and their habitats for the coastal marine and estuarine environment of New England. This will be a field and laboratory study of the conspicuous marine plants and animals of the New England coast. Particular attention will be given to the collection, identification, distribution, reproduction, and ecology of intertidal marine groups. Extensive fieldwork is required.

EV 5370 Wetland Community Ecology 4 Credits

This course will introduce students to unique wetland habitats using field observation, research, and the principles of community ecology. It will also examine a variety of wetland communities, paying particular attention to wetlands commonly found in New England, wetland ecological properties, and the physical factors that control these properties, including hydrology, species interactions, disturbance, and succession. Students will discuss the local and national conservation practices, their successes and failures, and complete a writing project.

EV 5560 Special Topics in Environmental Science 1-4 Credits

An in-depth study of a particular topic, contemporary issue, or concern. The course will be taught by a specialist within the field being studied, or, as an alternative methodology, a faculty member will coordinate a series of guest speakers who will meaningfully address the topic. Since topics vary, the course may be repeated with permission of the instructor.

EV 5800 Practicum in Environmental Science 1-3 Credits Education

A supervised field experience in one of several cooperating institutions or agencies. The purpose is to gain meaningful work experience through applying knowledge learned in previous coursework to the onthe-job situation. Commitment includes a negotiated number of hours per week. Supervision is by the institution or agency concerned and by PSU faculty.

EV 5910 Independent Study in Environmental Science 1-3 Credits

Enrichment of the background of students in education through the pursuit of a special topic pertinent to their interests and abilities. An opportunity for an in-depth study of a problem in the field of education. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

French

FR 5910 French Independent Study 1-3 Credits

A course of study to round out the student's background through systematic reading, intensive and extensive, to supplement coursework

in the field. Selection of a reading list or a special project under faculty supervision. Consent of an appropriate faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Geography

GE 5150 Topics In Geography

3 Credits

A methodological study of selected topics such as the geography of tourism, landforms, education, economic activity, and geographic information systems.

GE 5910 Independent Study in Geography 1-3 Credits

Provides students with the opportunity to round out their background in the social sciences through reading and research, supplementing previous coursework in the field. A research paper, periodic conferences, and an oral examination may be required. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Higher Education

HD 7000 Foundations of Higher Education 3 Credits

This course provides an overview of the development and current status of higher education in the United States. Participants will review the historical evolution of higher education and the institutions' roles in American society. Higher education systems will be highlighted through both internal and external perspectives. Twenty-first century opportunities and challenges will be examined.

HD 7010 Legal and Ethical Issues in Higher Education 3 Credits

This course focuses on some of the most persistent legal and ethical issues that confront colleges and universities today. Information and activities associated with this course are designed to assist current and prospective college and university faculty and administrators to recognize the legal parameters around which decisions are made. A variety of topics will be addressed including, but not limited to: matters of academic freedom, intellectual property, and tenure; the authority of schools to discipline students for academic and/or behavioral misconduct; student privacy laws; sexual harassment; legal issues versus policy issues; and legislative, judicial, and executive actions impacting higher education.

HD 7020 Collaboration in Higher Education 3 Credits

In today's fast-paced, complex, and interdependent world it is more important than ever to work toward a common goal in learning organizations. This course embraces a systems view of learning at the organizational level. Students will compare, contrast, and critique theories and models of organizational learning, knowledge creation, and organizational capacity building and apply them to their own organizational settings. Course assignments will provide students with the opportunity to think systemically and develop a comprehensive understanding of the core competencies required to create and build cultures of learning with a shared vision. Special attention is focused on planning and implementing system-wide networks within a collaborative framework.

HD 7021 Practicum in Higher Education Instruction 3 Credits

An internship or practicum provides an important opportunity to develop the skills and dispositions necessary for successful teaching in higher education at the university, college or community college level. A mentored field experience provides a chance apply the knowledge and skills acquired through coursework throughout the degree program in a practical on-the-job environment in the field of higher education. Candidates will have the opportunity to develop their professional roles in the areas of teaching, scholarship, and service, under the guidance of faculty who are successful role models in higher education.

HD 7022 Practicum in Higher Education 3 Credits Administrative Leadership

The practicum/internship is designed to be a culminating experience that engages students in experiential learning in a setting that gives them practical experience in an area of their interest and network with leaders and practitioners in higher education administration. Students will design a practicum or internship that encompasses core principles from foundation courses, creates an experience that develops opportunities for working with interconnected aspects of higher education administration, and challenges them to engage in new settings. Planning for the practicum/internship early in is encouraged and students should be able to commit to a minimum of 150 hours. Students will work with their instructor to establish the focus and site of the practicum/internship placement for optimum opportunities to explore and understand the scope of roles and responsibilities of higher education administrators. Candidates develop and present their research project at the conclusion of the externship to faculty and peers. Students should be aware that a background check might be a requirement of certain externship sites.

HD 7030 Higher Education Administration and 3 Credits Organizational Management

Higher Education Administration and Organizational Management explores leadership and management concepts in higher education environments. The focus will be on factors influences strategic level decision-making such as governance models, organizational structures, human resources, change management, and finances. Topics such as organizational behavior, leadership, communication, culture, and ethics will also be examined in support of student development of a personal management style.

HD 7040 Emerging Trends in Higher Education 3 Credits

This course is designed for higher education administrators and educators or those who aspire to positions in higher education. The economic, social, cultural, demographic and political forces that impact American Higher Education will be explored.

HD 7050 Coaching Innovative Leaders 3 Credits

The course challenges students to evaluate their leadership skills and their role in the development and guidance of leadership talent with each employees. Students will have an opportunity to review their values, current belief systems and expand their current knowledge of self and others. Students will study new coaching and mentoring methods and characteristics of transformational and innovative leadership investigating multiple dimensions of awareness. Emotional intelligence, EQ, intelligence systems-thinking, IQ, and spiritual intelligence, SQ, will be introduced.

HD 7060 Integrating Technology in Higher Education 3 Credits

This course aspires to develop in students the needed concepts and technology skills for successful college teaching. It begins with a comprehensive theoretical and pedagogical foundation for helping instructors make critical decisions about the use of technology within the college curriculum. This practical and much needed resource discusses the relationship between knowledge, learning, teaching, and the nature of media; and demonstrates how this information should inform the use of technology in a teaching environment. This course guides students to formulate a teaching style that capitalizes on their individual personality and talent, integrates new technologies and methodologies in higher educational classrooms, and fulfills the needs of having a diverse instructional delivery for today's learning environments.

HD 7070 Teaching Post-Secondary Learners 3 Credits

Educators in higher education teach populations of students with diverse backgrounds and different levels of preparation. In addition, faculty may be experts in their fields, but may not be experts with regard to how people learn. This course provides an overview of developmental, learning and instructional theories to consider when creating learning experiences for the post-secondary learner.

HD 7080 Curriculum, Instruction, and Assessment 3 Credits

The educational system worldwide has undergone significant changes over the past decade. The classroom is no longer bound by four walls and students can interact with experts in any field via advances in technology. Explore innovations in curriculum, instruction, and assessment.

HD 7090 Teacher Transformation 3 Credits

The course challenges students to reconsider the classroom teaching environment, their teaching styles and explore their capacities as teachers. Students will study new teaching methods, characteristics of effective teachers, and new teaching processes leading to more integrative and experiential learning. This course examines various teaching methods within the classroom and develops professional learning communities within schools. Each student will design/redesign, initiate and complete individual lesson plans or unit plans utilizing new teaching methodologies.

Health and Healing

HH 5180 Exploring Personal and Organizational Health 3 Credits

Exploration of the evolving and emerging paradigms of holistic health and healing, and how the personal and organizational realms interconnect. In addition to examining the traditional wellness models, discussions will include concepts of mind, transpersonal psychology and energetics. Through an examination of personal and organizational contexts, students will explore ways to transform personal and work environments through mindfulness towards good intention, open mind and compassionate heart.

HH 5570 Mindfulness Meditation: Theory and 3 Credits Practice

Examines the theoretical basis for the use of meditation as a healing tool. In a meditative retreat format, participants learn and practice various types of meditation such as body scan, sitting, walking, eating, and music meditation. Extended periods of practice and interspersed with discussion, reflection, presentation, and small group work.

HH 5590 Transpersonal Psychology

3 Credits

Addresses aspects of mind and behavior that transcend individual ego and personal identity. This course considers the dimensions of consciousness, the implications of transpersonal experiences, and the connection between psychology and spirituality. Class members gain an understanding of the fundamental assumptions underlying transpersonal theory and skills in applying theory to facilitate growth, health, and well-being.

HH 5600 Energy, Body and Health

3 Credits

Energy, Body and Health provides an overview of multiple therapeutic approaches by examining such techniques as massage, therapeutic touch, Rolfing, reflexology, Reiki, shiatsu, acupressure, Alexander Technique and other therapies.

HH 5610 Circle of Life: Living and Dying Well 3 Credits

The course is designed to facilitate the learning of individuals who intend to work in professions related to wellness. The topic of death and dying will be addressed in a comprehensive way with an emphasis on the development of compassion for individuals and their life experiences. The course will also address the topic of living well and making choices that may increase happiness and decrease suffering. The course will offer students time to examine their own beliefs and understanding of death as well as learn how the medical profession and caring communities can assist those experiencing the dying process. The course will also offer readings and discussions that will help students to identify ways they would like to be living their own life with an emphasis on increasing their sense of wellbeing regarding their mind, body and spirit.

HH 5620 Spiritual Health

3 Credits

Provides an opportunity to explore the role of the spiritual dimensions of wellness. A process of inquiry will help students better understand the spiritual dimension of self and the relationship of spirit to the health and healing process.

HH 5630 Transformational Inquiry and Research 3 Credits

This course will illuminate the potential of research/inquiry to effect transformation in the research, participants, organizations, communities and cultures. Transformation manifests as meaningful and profound changes in one's attitudes and views of oneself as well as one's view of others and the world at large, which in turn catalyze consequential personal and organizational change and evolution. The transformative potential of research can be optimized through purposeful intention, careful design, and the deliberate inclusion of multiple ways of knowing. Through this course, students will explore and learn to use transformation-fostering research/inquiry approaches alone or in combination with traditional research methods as means for effecting personal and/or organizational transformation, health, and sustainability.

History

HI 5040 American Beginnings 1600-1800

This course provides an in-depth exploration of early American history focusing on changes in settlement patterns, population, diversity politics, gender, and race relations. It is intended to explore and analyze the meaning of the nation's past while focusing on the creation and consolidation of American nationality.

HI 5260 Historical Archaeology

3 Credits

3 Credits

1-3 Credits

Introduces students to the study of historical archaeology, explores various topics from earliest colonial settlement to artifacts of today, and exposes them to the different techniques and methods used. Field trips and some outdoor classes are part of the course. Concentrates on the New England region. Spring of even years.

HI 5300 New Hampshire and New England History 3 Credits

Studying New Hampshire and New England history allows students to learn more about a particular region and to see how past events and movements at the local level interacted with or were influenced by various events and cultural changes on the national and international levels. Topics covered will create an awareness of the place of New Hampshire and New England in the various events that make up United States history.

HI 5330 New Hampshire and New England: 4 Credits Historical Sites

This purpose of this course is twofold: to introduce students to a variety of locations and historic sites throughout New England; and to allow students to analyze the historical significance of each site and use the knowledge gained to produce papers and projects useful to the student's career while furthering their research and writing skills. Many historical sites are within easy travel distance and convey the nature of change since the earliest settlement in the region. This will allow students the opportunity to explore and interpret the layered historical landscape.

HI 5370 American Maritime History 3 Credits

The development of the maritime aspect of American history from colonial times to present. Examines the growth of merchant shipping, naval developments, and the related economic and political outcomes dealing with maritime history. Students will be exposed to the application of maritime history for educational use in the elementary and secondary grades.

HI 5800 Topics In History

Specialized topics chosen for Graduate Seminar by individual faculty.

HI 5910 Independent Study 1-3 Credits

Provides students with the opportunity to round out their background in the social sciences through reading and research, supplementing previous coursework in the field. A research paper, periodic conferences, and an oral examination may be required. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Health Education

HL 5150 Eating Disorder Clinical 1-3 Credits

This clinical experience is a capstone course for those enrolled in the eating disorders certificate program. Students will be able to choose a focus on awareness, prevention, and education experience or a clinical experience working in an eating disorders treatment facility for 120 hours. Prerequisite: 12 credits of Eating Disorders certificate program. Also offered as CO 5150.

HL 5160 Eating Disorder Awareness and Prevention 3 Credits

The focus of the course will be on increasing the student's knowledge of awareness, education, prevention, and treatment of eating disorders. Discussion will include diagnostic classifications; causes of eating disorders; history, prevalence, and treatment approaches to eating disorders; a discussion of a wellness/holistic approach to medical, nutritional, and psychological therapies; special populations, (e.g., women, children, males, and athletes); prevention programs; resources; the latest research; and information on becoming a coordinator of Eating Disorder Awareness and Prevention Week. Also offered as CO 5160.

HL 5170 Treatment Modalities for Eating Disorders 3 Credits

This course will be an in-depth study of the dynamics of eating disorders followed by an overview of the dominant counseling approaches used in eating disorders treatment and management. The focus will include diagnosis, psychological assessments, psychotherapeutic, and other interventions, as well as clinical issues encountered in treatment. Prerequisite: CO/HL 5160. Also offered as CO 5170.

HL 5180 Nutrition Fundamentals and Counseling 3 Credits in The Recovery of Eating Disorders

This course will focus on nutritional education issues relevant to those interested in health and wellness for the general population, as well as those working with eating disorders clients. Discussion will include basic concepts of nutrition science and nutritional needs, evaluation of weight management methods, investigation of food facts and fallacies, and different diet plans (e.g., vegetarian and sports nutrition). Information will be presented on how the nutritionist, counselor, or health educator applies nutritional information to their clients or students. The course will also include how to present information in nutritional counseling and education for the eating disorder client. Prerequisite: CO/HL 5160 or permission of instructor. Also offered as CO 5180.

HL 5190 Medical and Physiological Aspects of 3 Credits Eating Disorders

The focus of the course will be to increase the student's knowledge of the effects eating disorders have on the body's medical systems and the physiologic function. Discussion will include diagnostic criteria and a multidisciplinary, integrative approach to assessment and management of each disorder. Emphasis will be placed on the evaluation of each body system, as well as prevention and treatment of medical complications. Prerequisite: CO/HL 5160. Also offered as CO 5190.

HL 5200 Aging and Physical Activity 3 Credits

This course will be an examination of neurological, physiological, and psychosocial changes occurring during middle and late adulthood that can affect health, as well as implications for the planning, implementation, and evaluation of physical activity programs for the adult population.

HL 5300 Health Behavior: Theory and Application 3 Credits

Provides graduate students an introduction to health behavioral and social science theories, premising that health behavior and behavior change programs are most beneficial when provided within a theoretical framework. Social and behavioral science theory, research, and practice as related to promoting and maintaining health behaviors will be emphasized.

HL 5560 Special Topics in Health Education 1-3 Credits

An in-depth study of a particular topic, contemporary issue, or concern. The course will be taught by a specialist within the field being studied or as an alternative methodology. A faculty member will coordinate a series of guest speakers who will meaningfully address the topic. Since topics vary, the course may be repeated with permission of the instructor. Offered according to demand.

HL 5750 Individual Research: Health Education 1-3 Credits

Designed so that students may pursue, in depth, a personal interest in the field of allied health. Students, working with a faculty advisor, carry out research from design to completion. The final product must be approved by the faculty advisor or faculty committee. Offered according to demand.

HL 5800 Practicum in Health Education 1-3 Credits

Field experience in an agency or institution involved in the planning and evaluation of health education. Work experience guided by qualified supervisors in conjunction with Plymouth faculty. Periodic written reports, field-based projects, and comprehensive portfolio review. Offered according to demand.

HL 5910 Independent Study in Health Education 1-3 Credits

Enrichment of the background of students in education through the pursuit of a special topic pertinent to their interests and abilities. A chance for an in-depth study of a problem in the field of education. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Health Promotion

HP 5010 Introduction to Health Education and 3 Credits Health Promotion

Provides health educators with the opportunity to interpret concepts, purposes, philosophies, and theories of health education and wellness. Students will investigate physical, social, emotional, and intellectual factors influencing health behavior.

HP 5020 Designing and Implementing Health 3 Credits Promotion Programs

Provides students with the information and resources that will enable them to develop skills in program planning for health promotion. Needs assessment, goal and objective formulation, instructional methods and materials, program implementation, and evaluation will be included. Prerequisite: HP 5010.

HP 5030 Evaluation of Health Promotion Programs 3 Credits

Gives students the tools and skills they need to design and conduct health program valuations. Evaluation purposes, levels, methods, designs, and measurement issues will be covered. Summer of odd years. Prerequisite: HP 5020 and ED 5030.

HP 5070 Community Health Promotion 3 Credits

The focus of this course will be to review basic program planning skills, implementation, and evaluation of community and worksite health promotion programs. The class will plan, implement, and evaluate a health promotion program (e.g., wellness fair or workshop). Students will learn grant writing skills, pamphlet and newsletter development, and will be introduced to the field of wellness/health coaching and facilitator trainings (e.g., smoking cessation).

HP 5090 Mind Body Techniques for Stress and Health 3 Credits

The focus of this course will be to introduce the student to mind-body techniques for stress management and health issues. Some of the techniques will include yoga, breathing, meditation, progressive relaxation, imagery, and massage as well as an introduction to the field of integrative medicine. Some of the therapies discussed will include energy medicine, aromatherapy, and acupuncture. Will be accepted as one credit in stress management.

HP 5110 Wellness Concepts for Educators 2 Credits

An introduction to the teaching of health education in our school systems. Organization of curriculum including content and methodology will be stressed. Fall.

HP 5200 Nutrition 1 Credit

A nutritional education course with a special focus on the issues relevant to students of physical education and health education. A survey of concepts in nutrition science will be applied to the support of general wellness and active lifestyles. Offered spring term of even years.

HP 5210 Fitness Principles 1 Credit

The fitness component is designed to provide the student the opportunity to experience, research, and develop a variety of fitness activities for use in his or her future career as a health educator. The elements of physical fitness and total body wellness will be discussed and applied in diverse ways. Each student will develop and compile fitness methods appropriate for a variety of populations and settings. Offered spring term of even years.

HP 5220 Disease and the Environment 1 Credit

This course will discuss common diseases and disorders and the web of causation and wellness models related to disease and the environment. Diseases discussed will include chronic diseases, communicable diseases, and some mental health diseases. Offered spring term of even years.

HP 5230 Substance Abuse 1 Credit

This course is designed to provide students with an overview of contemporary drug use and abuse. Course content includes the determinants of drug abuse psychological, physiological, societal, and pharmacological aspects of drugs, prevention, and treatment of drug addiction, as well as information about specific drugs.

HP 5240 First Aid and CPR 1 Credit

First Aid and CPR is designed to certify individuals in cardiopulmonary resuscitation and basic first aid. Includes breathing and cardiac emergencies for adults, children and infants, and advanced airway management skills. Students will have the opportunity to be certified in First Aid and CPR at the end of the course. Offered Spring Term of even years.

HP 5250 Consumer Health

1 Credit

The focus of this course is to identify content, resources, materials, and instructional strategies for providing consumer education to various populations. Students will discuss key issues including legal and ethical considerations, curriculum development, and resources for the school and community setting. The relationship of consumerism and health will be the underlying theme of this professional preparation course.

HP 5260 Mental Health And Sexuality 2 Credits

This course is designed to provide students with information relevant to contemporary mental health issues and human sexuality issues. Students will be able to identify resource, personnel, and agencies pertinent to these issues. Current theories of behavioral change will be examined. Offered spring term of even years.

HP 5560 Special Topics In Health Promotion 1-4 Credits

This course will cover various topics in health promotion. May be repeated with different topics.

Historic Preservation

HPR 5100 Principles of Historic Preservation 3 Credits

This course provides a foundation to historic preservation. The course will focus on principles and theories pertaining to preservation and restoration practices; recognition of architectural periods, styles, and construction methods in context of the evolution of cultural landscapes; the definition of significance and integrity in buildings and districts; strategies by which buildings and their settings have been preserved and used; and methods of reading and interpreting the cultural environment.

HPR 5120 American Architectral History 3 Credits

This course traces the evolution of architecture in the British colonies and the United States from settlement to the late twentieth century. The course identifies the major styles and their broad and detailed attributes; changes in technology that had an influence on American buildings and their function; influential theorists and designers. The course will identify major monuments in American architecture but will concentrate on examples that might be encountered in fieldwork and will address vernacular building types.

HPR 5200 Rural Cultural Environment: Architecture 3 Credits and Landscape

This course uses the rural countryside as a laboratory to examine the cultural landscape. It will trace the impact of natural, cultural, economic, and technological forces on the "built" environment. The course studies the evolution of buildings and their settings, with emphasis on settlement and rural industrialization. Subjects to be discussed include the evolution of architectural styles and construction techniques, town planning and land division, the evolution of transportation, and the harnessing of water power. Although the course will use specific locales as examples, it is intended to instill general principles by which any human landscape can be examined and interpreted in relationship to natural resources and human culture.

HPR 5210 Graduate Practicum

3 Credits

A supervised practicum experience in one of several cooperating institutions or agencies in New Hampshire. The purpose is to gain meaningful work experience through applying knowledge learned in previous course work to the on-the-job situation. Supervision is by the institution or agency concerned, and by the faculty. Students anticipating more than three hours of credit should confer early in their program with the department chair to free up sufficient blocks of time. Permission of advisor, department chair and Associate Vice President is required.

HPR 5300 Historic Preservation Methods and 3 Credits Documentation

This course is intended to provide an introduction to the field of historic preservation and to instill basic skills in researching and understanding historic structures, especially buildings and bridges. It will provide instruction in assessing the evolution and condition of structures and in recording them by written, graphic, and photographic methods. The course will also emphasize traditional methods and materials of construction, the behavior of structural components over time, and techniques of determining the original condition and subsequent changes of historic structures.

HPR 5310 Historic Methods and Materials of 3 Credits Construction

This course identifies the traditional materials of architectural and engineering construction and their methods of manufacture and use. The course outlines the tools and techniques employed in construction from the seventeenth through the late twentieth centuries, and demonstrates how to recognize and describe the materials and techniques that were employed in existing structures. The course employs field study supervised by the instructor.

HPR 5320 Building Investigation and Evaluation 3 Credits

This course provides instruction in analyzing the origins and evolution of standing buildings and in preparing reports that document evaluation. The course emphasizes the "historic structures report" format developed by the National Park Service, but discusses shorter reports that meet more limited needs and goals. The course employs field study supervised by the instructor. Prerequistes: HPR 5120 and HPR 5310.

HPR 5400 Historic Preservation Planning and 3 Credits Management

Once ignored in civic and urban planning, historic preservation is now seen as integral to the definition and protection of the cultural land-scape. Historic preservation planning and cultural resource management (CRM) are accomplished through the identification, evaluation, documentation, registration, treatment, and ongoing stewardship of historic properties. This course examines the processes of preservation planning and management that have been established by the U.S. National Park Service and by comparable agencies in other countries, and illustrates the application of these standards at the federal, state, and local levels.

HPR 5500 Cultural Property Law 3 Credits

This course examines the international, national, and state legal frameworks for the protection and movement of cultural property. Archaeological site looting, transnational antiquities trafficking, and armed conflicts threaten global cultural heritage. The international and

American governments' responses to such threats have resulted in the development of major treaties as well as the enforcement of criminal laws and customs regulations. Topics for discussion include the 1954 Hague Convention, the 1970 United Nations Educational, Scientific, and Cultural Organization (UNESCO) Convention, the International Commission of Museums (ICOM) Code of Ethics, the National Stolen Property Act, and the Cultural Property Implementation Act. The course also introduces students to important national heritage laws such as the Archaeological Resources Protection Act and the rules governing shipwrecks. State statutes and the common law regulating cultural property are also reviewed.

HPR 5560 Special Topics In Historic Preservation 3 Credits

Examines specialized areas, topics or issues in historic preservation. Taught by a specialist from within the field being studied or as an alternative methodology. Course topics may range from architectural styles, trends or types of construction, to current preservation challenges and developments such as code compliance for historic buildings or "right-sizing" historic sites and case studies of specific endangered properties in the region. Since topics may vary, the course may be repeated with permission of the instructor.

HPR 5600 Archaeological Methods

3 Credits

Students will be exposed to archaeological field and laboratory techniques, and will learn the types of research questions that archaeologists ask while reconstructing past cultures. The course will draw upon prehistoric and historic examples; there will be many opportunities to handle artifacts in the classroom, and both terrestrial and underwater sites will be featured. There will be a minimum of two required field trips to archaeological sites and to demonstrate equipment and techniques in the field. A significant part of the course will be devoted to demonstrating that archaeology is a preservation-oriented field, focused not just upon learning about the past but geared toward protecting and conserving the physical remains of the past for future generations to enjoy.

HPR 5700 Sustainability and Historic Preservation 3 Credits

What is the connection between preservation and sustainability? This course examines the role of preservation in the reassessment of the built environment to create a sustainable future. Topics to be addressed range from historic examples of sustainable cultural practices to current trends of smart growth planning, LEED standards and energy conservation in historic buildings.

HPR 5910 Independent Study In Historic Preservation 1-3 Credits

Provides a more intense background in some aspect of historic preservation through reading and research, supplementing previous courses or broadening the student's knowledge in some subject area not presently covered by HPR courses. Consent required of the instructor who will supervise the independent study and the Department Chair and the Associate Vice President is required.

HPR 5950 Thesis Research

1-6 Credits

Students will develop and present a thesis research proposal, conduct detailed research, write a thesis and defend the research before a faculty committee. Signature of the faculty supervisor and the MA Historic Preservation graduate program coordinator is required.

Heritage Studies

HS 5100 Heritage Studies: Foundations 3 Credits

Designed for those interested in bringing heritage studies to areas such as schools, museums, and historical societies. Relevant concepts and techniques used in history, geography, English, anthropology, and sociology will be presented so participants may create models for class exercises, build museum exhibits, and incorporate heritage studies methodology into their work. Participants will learn methods of social science interpretation and inference about historical events, structures, artifacts, settlement patterns, and various ideologies of the past. Multidisciplinary techniques will be used in interpretations of nearby history and in the development of materials that may be used in educating the general public and students in the classroom.

HS 5200 World Heritage Studies 3 Credits

In this course, the European origins and international conventions of the world heritage movement are examined. Several international sites are studied in depth through slides and discussion. Sites in the United States are also considered, as are issues of natural versus cultural sites and cultural resource management. Two field trips are required.

HS 5560 Special Topics in Heritage Studies 1–4 Credits

An in-depth study of a particular topic, contemporary issue, or concern. Taught by a specialist within the field being studied or as an alternative methodology. Since topics may vary, the course may be repeated with permission of the instructor.

HS 5620 Archaeological Field Methods: Prehistory 2-9 Credits
HS 5630 Archaeological Field Methods: Historical 2-9 Credits
HS 5640 Archaeological Field Methods: Nautical 2-9 Credits

Depending on the investigative circumstances, provides an opportunity to acquire field experience—survey, mapping, excavation, material analysis—at land or underwater sites from either the prehistoric or historical periods.

HS 5710 Internship in Heritage Studies 1–4 Credits

Advanced students and teachers in heritage studies with at least 15 graduate credits can start their internship placement. Individual placement with an organization or institution must be arranged through the heritage studies program coordinator the term before starting work. The type of work will be determined by the interest of the individual and the needs of the organization. Creation of outreach programs, field trips, tours, displays, exhibits, workshops, theme interpretations, or research utilizing resources of the organization or institution to educate the public on any topic in heritage studies. Prerequisite: 15 graduate credits or more in heritage studies.

HS 5910 Independent Study 1-3 Credits

Provides students with the opportunity to round out their background in the social sciences through reading and research, supplementing previous coursework in the field. A research paper, periodic conferences and an oral examination may be required. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Integrated Arts

IN 5100 Educational Theatre: Process to Performance 3 Credits

Students will gain experience in the process of creating and presenting a community-based educational theatre piece for family audiences. Each practicum is individually tailored to meet student needs and expectations. Students will have an opportunity to work with a variety of theatre practitioners invested in the educational theatre process.

IN 5200 Multidisciplinary Art Experiences for Children 3 Credits

Students will gain knowledge and experience developing quality arts experiences for children through participation in a major integrated arts project based either at the University or in the community. Following this experience, students will have the opportunity to develop an integrated arts project within their own classrooms or organizations using visual arts, music, movement, and drama to bring the curriculum to life. Class dates and times will be individualized for each student in order to ensure maximum participation.

IN 5210 Graduate Practicum in Integrated Arts 3 Credits

A supervised practicum experience in a candidate's school, employment setting or at one of several cooperating institution or arts organizations in New Hampshire where additional experience in integrated arts can be gained and practiced. Commitment includes a negotiated number of hours per week and a series of journals, a portfolio, and meetings with the faculty supervisor.

IN 5300 International Arts and Culture Institute 3 Credits

The institute is an opportunity for students to explore a given culture through travel and participation in a specified integrated arts project. Institutes vary from year to year in the country visited and the specific project undertaken. Past projects have involved performing at an arts festival in Wakefield, England, participating in a collaborative theatre project with Lithuanian and American youth, and performing throughout South Africa with a project based on writings from all over the world on peace and justice. Following the institute, students will use the knowledge gained to design an integrated arts project for their classroom or organization.

IN 5400 Imagination, Creativity and Innovation 3 Credits

Understanding the Imagination, Creativity and Innovation Continuum and its place in education and the work place, plays an increasingly important role in the success of learners and workers in our society. The ability to imagine or conceive of something new, leading to the creation of new realities and possibilities that advance current practice in our classrooms, businesses and organizations in new and innovative ways is an essential skill set needed in the 21st century. Whether in a classroom of learners, a non-profit organization or the boardroom of a major corporation, imagination, creativity and innovation are an essential component of success, leading to increased engagement, ownership, and vision in all that human beings touch. This course is an exploration of the important role imagination, creativity, and innovation play in our everyday lives, seeking to demystify and honor the creative process, unlocking the power of possibility in each one of us.

IN 5560 Special Topics In Integrated Arts 1–4 Credits

An in-depth study of a particular topic, contemporary issue, or concern. Taught by a specialist within the field being studied or as an alternative methodology. A faculty member will coordinate a series of guest speakers who will meaningfully address the topic. Since topics vary, the course may be repeated with permission of the instructor. Falls, springs, and summers.

IN 5700 Integrated Arts Curriculum Development 3 Credits and Assessment

Curriculum that integrates across the disciplines assists students in developing habits of mind necessary for success in the 21st century and opens pathways towards becoming lifelong learners. Integration also creates communities of learners among students and the teachers working across the disciplines. In this course participants engage in a variety of approaches in developing integrated arts curricula as well as effective assessment strategies. Integrating the arts will be explored from historical, theoretical, and practical dimensions including issues of leadership and advocacy in promoting the arts as a core discipline.

IN 5970 Integrating the Arts 3 Credits

Practicum-based course introduces students to the value and practical application of incorporating the arts into educational, cultural, recreational, and human service settings. In addition to classroom lecture and discussion, a series of workshops with professional artists and teachers will allow students to observe a variety of teaching methods and philosophies. Basic skills and materials will be developed and discussed in creative drama, puppetry, music, theatre, poetry, art, and movement. Winters and summers.

Languages and Linguistics

LL 5003 Language Acquisition 3 Credits

This course will examine the nature of first and second language acquisition and development. Topics include first language acquisition, second language acquisition by children and adults, bilingualism, and their applications to language teaching. The course provides an overview of current theories of language acquisition.

LL 5004 Language and Linguistics 3 Credits

Provides prospective language teachers with an introduction to the study of language. Principal topics include sociolinguistic theories, language variation, and pragmatics; and the classroom implications of phonology, morphology, semantics, and syntax.

LL 5005 Foundations of TESOL Methodology 3 Credits

Participants learn the foundations of communicative language teaching to non-native speakers in multicultural and homogenous classrooms. Topics include content-based instruction, teaching of the four skills, curriculum development, and lesson planning and execution. Participants acquire and practice the skills needed to teach language to students of all ages and abilities.

LL 5006 Language Evaluation Assessment 3 Credits

Participants in this course explore different approaches for creating, evaluating, and scoring both formal and informal language assessment measures for students of different ages and ability levels. Topics include

authentic communicative assessment measures; portfolio assessment, standardized testing, test biases, and testing different skills. This course foregrounds authentic and useful classroom language assessment measures.

LL 5007 ESOL Literacy 3 Credits

Participants in this course examine the theories and practice of second language reading and writing acquisition. Topics include developing literate behaviors, decoding, guided reading, shared reading and writing, and the writing process. The focus of the course is to develop participants' proficiency in teaching reading and writing to students of different ages and ability levels through phonics, whole language, and integrated approaches.

LL 5008 Language Teaching Methodology 3 Credits

Participants deepen and build upon their existing knowledge of language teaching methodology, with particular attention to contentarea instruction, curriculum development, and the use of technology in language education. Course provides an in-depth examination and extensive hands-on application of different ways in which technology can be used in the language classroom to facilitate learning and promote language acquisition. Participants explore the use of a broad range of digital and interactive media, and Web 2.0 technology. Students will create content-area, technology-rich lessons which promote language acquisition for language learners of different ages and abilities.

LL 5009 Intercultural Communication in 3 Credits Multicultural Classrooms

This course examines the importance of cultural perspectives in language education for non-native speakers. Emphasis is placed on understanding the role of acculturation on academic success, and programmatic alternatives and pedagogy for English language learners in a pluralistic society. The course explores the impact of cultural backgrounds of language-minority students and their families, and their adjustment to a new society, on language acquisition and academic achievement.

LL 5010 Practicum In TESOL 6 Credits

This practicum serves as field experience for ESOL certification candidates and for students taking a Self-Designed MEd with a concentration in TESOL but without K–12 certification. A candidate seeking ESOL teacher certification must do the practicum in a New Hampshire public school; a candidate not seeking ESOL teacher certification can do the practicum in any approved setting. Commitment includes regular meetings with the course instructor and the development of a professional portfolio that fulfills all NH required teacher competencies. Supervision will be done jointly by the cooperating institution and Plymouth State University faculty. Permission of instructor is required.

LL 5050 Mainstream Classroom Strategies for 3 Credits English Language Learners

This course is designed especially for mainstream teachers who want to know more about how to better meet the needs of English language learners (ELLs) in their classroom. It provides an in-depth examination of widely-used, evidence-based techniques for teaching non-native speakers of English within the mainstream classroom. In addition to an overview of current theories for teaching English language learners, the course foregrounds strategies and practical hands-on ways for engaging,

teaching and assessing ELLs within the K–12 mainstream classroom. Participants gain a theoretical grounding as well as practice with scaffolding content for language learners, and developing individualized learner strategies. This course includes instruction in using CALLA, the Cognitive Academic Language Learning Approach, and SIOP (Sheltered Instruction Observation Protocol), with ELLs.

LL 5170 Foreign Language Methodology K-12 3 Credits

This course will introduce students to the theories underlying current pedagogical approaches to foreign language instruction; to assist the student in collecting, creating, and adapting instructional materials appropriate to elementary, middle, and senior high school foreign language courses; to assist the student in preparing and implementing individual lesson plans, long-range planning, student assessment, text book evaluation, and the use of technology; and to prepare the student for a successful student teaching experience.

LL 5210 Language Education Teaching Practicum 1-6 Credits

The culminating field-based experience for modern language programs leading to teacher certifications. Students must have completed early field-based experiences and all coursework for certification, including any required undergraduate competencies, before taking this course. It is a continuous, full-time (five days per week) experience during which, after a period of structured observation, students gradually assume responsibility for a full range of teaching activities encountered in a school situation, thereby demonstrating the appropriate professional skills and attitudes essential for successful teaching. Teacher candidates pursuing a practicum will maintain and improve upon the full range of teaching activities they practice every day. This course provides an opportunity for demonstrating the appropriate professional skills, attitudes, and dispositions essential for successful teaching. The teaching field experience is conducted under the supervisory guidance of school and clinical faculty. An online seminar compliments the experience. Certification candidates who are not pursuing the MEd must have submitted passing scores on the Praxis I to the College of Graduate Studies before enrolling. All candidates who will be required to take Praxis II for NH certification must make arrangements for that testing independently.

LL 5500 Special Topics in Language and Linguistics 1-3 Credits

An in-depth study of a particular topic, contemporary issue, or concern related to languages or linguistics. The course will be taught by a specialist or specialists within the field being studied or as an alternative methodology. Since topics, issues, and concerns vary, the course may be repeated.

LL 5910 Independent Study 1-3 Credits

Advanced work in a specialized area, selected, and pursued in consultation with a faculty advisor. Consent of a faculty supervisor, department chair or program coordinator, and the associate vice president for the College of Graduate Studies is required.

LL 5960 Language Education Teaching Internship 1-6 Credits

The culminating field-based experience for modern language programs leading to teacher certifications. Students must have completed early field-based experiences and all coursework for certification, including any required undergraduate competencies, before taking this course. It is a continuous, full-time (five days per week) experience during which,

after a period of structured observation, students gradually assume responsibility for a full range of teaching activities encountered in a school situation, thereby demonstrating the appropriate professional skills and attitudes essential for successful teaching. Teacher candidates pursuing an internship will gradually assume responsibility for a full range of teaching encountered in a school situation. This course provides an opportunity for demonstrating the appropriate professional skills, attitudes, and dispositions essential for successful teaching. The teaching field experience is conducted under the supervisory guidance of school and clinical faculty. An online seminar compliments the experience. Certification candidates who are not pursuing the MEd must have submitted passing scores on the Praxis I to the College of Graduate Studies before enrolling. All candidates who will be required to take Praxis II for NH certification must make arrangements for that testing independently.

Library Media

LM 5010 Learning Resources Centers and Services 3 Credits

This course will focus on the role and functions of technology in K-12 schools. The topics covered will include the problems of organization and management, the types of learning resources and services, and federal and state programs and standards. We will also look at the developments and trends in technology and how it impacts school media centers. This course is cross-listed with CE 5010.

LM 5020 Cataloging and Classification 3 Credits

This course will introduce the principles of organization of information and information retrieval systems. Topics include organization of print and non-print collections, Dewey decimal classification, Library of Congress classification, Library of Congress and Sears subject headings, Anglo-American cataloging rules, and Machine-Readable Cataloging (MARC) records. Emphasis will be placed on cataloging and classification of school library materials. Library automation systems and their management, copy cataloging, and trends in technology will also be covered.

LM 5030 Reference and Research 3 Credits

This course will introduce students to concepts, principles, and current developments in reference and information services for the school library and media center. This will include the most important and used reference materials in both print and electronic format, evaluation of reference sources, the reference interview, bibliographic instruction, and readers' advisory.

LM 5040 Integrating Technology in the School 3 Credits

This course is designed to provide school media specialists and technology integrators with hands-on experience with multimedia technology and its effects on the 21st century learner. Current web and multimedia tools will be explored. Other topics to be covered are collaboration/teamwork with other educators and the role of the library media specialist in integrating technology. This course is cross-listed with CE 5040.

LM 5210 Practicum in School Media 3 Credits

The practicum is to provide the student with a supervised field experience in one of several cooperating institutions or agencies. The purpose is to gain meaningful work experience through applying knowledge learned in previous coursework to the on-the-job situation. Commitment includes a negotiated number of hours per week. Supervision is by the institution or agency concerned and by PSU faculty.

LM 5300 Advanced Children and Young Adult Literature 3 Credits

This advanced literature course will survey fiction and non-fiction books for school age students. Genres to be discussed include picture books, traditional literature, modern fantasy, contemporary realistic fiction, historical fiction, multicultural literature, informational books, biographies and graphic books. Students will also explore new issues and trends in literature including technological advancements. The course is designed to help the educator evaluate and select appropriate literature to develop and maintain school library collections as well as classroom and instructional libraries. During this course, students will critically discuss current issues in children's and young adult literature.

LM 5500 Special Topics in Library Media Studies 1-3 Credits

An in-depth study of a particular topic, contemporary issue, or concern. The course will be taught by a specialist within the field being studied or as an alternative methodology. Since topics vary, the course may be repeated with permission of the instructor.

LM 5910 Independent Study 1-3 Credits

An in-depth study of a particular topic, contemporary issue, or concern. Topic must receive approval by the program coordinator.

Music Education

ME 5120 New England Band Directors Institute 1 Credit

A multifaceted seminar intended to help participants improve upon the musical, educational, and administrative skills involved with public school instrumental music. Emphasis will be placed on new methodologies and material. The staff of guest speakers will include active educators from throughout New England as well as featured speakers whose contributions to music education have gained national or international attention. Since topics will vary, the course may be repeated. Summer.

ME 5260 Instrumental Conducting and Repertoire 3 Credits

The study of instrumental conducting as applied to the public school setting, with emphasis on developing effective teaching and rehearsal strategies, is the focus for this course. Study will include available published methods and pedagogical materials as well as age-appropriate study performance repertoire. On-site observation and advising will involve one or more of the student's ensembles. Attendance at periodically scheduled on-campus seminars will also be required.

ME 5290 Practicum In Instrumental Music Education 6 Credits

This course will focus on the application and documentation of strategies pertaining to the musical, administrative, and pedagogical responsibilities of instrumental music teachers in the public schools. Attendance at periodically scheduled on-campus seminars will be

required. Also a minimum of one year of teaching experience is necessary for this course.

ME 5300 Music Technology for Educators 3 Credits

This course will examine the history and evolution of music technology in music education and how it impacts music curriculum development, music education, culture, and society. It will explore music education; music administration; music notation and music sequencing software; MIDI (Musical Instrument Digital Interface) techniques, synthesis, programs, and equipment that support MIDI; music notation; and music sequencing for the music educator. Students will acquire proficiency in MIDI technology and demonstrate that proficiency by designing a curriculum that integrates music technology into the music classroom. Student must also select to work in either Finale PrintMusic or Digidesign ProTools to demonstrate mastery of MIDI and MIDI software.

ME 5500 Survey of Arts Projects, Programs, and 3 Credits Technologies

An overview of arts projects, programs, and technologies, this survey course acquaints the student with a wide variety of integrated arts experiences that have been successfully implemented into a wide range of educational, cultural, and recreational settings. Commonalities between projects and programs will be examined. Summer.

ME 5560 Special Topics in Music Education 1-3 Credits

An in-depth study of a specialized topic pertaining to contemporary issues and methodologies. The course will be taught by a specialist or series of specialists within the area under study. Since topics will vary, the course may be repeated. Summer.

ME 5600 The Art of Choral Conducting: A Seminar 3 Credits in Conducting Techniques

An exploration of the choral process for choral directors, general music teachers, and performing artists. The role of both gestural and verbal communication in rehearsal and performance will be examined through workshop experience. Approaches to conducting technique, rehearsal design and procedures, score preparation, programming, voice placement, public relations, and recruitment will be examined. Summer.

ME 5910 Independent Study 1-3 Credits

Advanced work in a specialized area, selected and pursued in consultation with a faculty advisor. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Mathematics

A student, with approval from the mathematics program coordinator, may take a maximum of three undergraduate courses for graduate credit (MG 3100 or higher), if a similar course has not been included at the undergraduate level. If deemed appropriate, a project to be determined by the course instructor, in consultation with the student, will be required to obtain graduate credit.

MG 5000 Mathematics Curriculum Implementation 1-4 Credits

Topics in this course vary, but will focus on the implementation of standards-based curriculum materials or other recently developed curriculum materials. Also examines issues in contemporary mathematics education. Students may repeat the course with a different topic as its focus with the permission of the department chair.

MG 5010 Seminar in Mathematics Education 2-4 Credits

The topic for the course is selected by the professor from current developments and issues in mathematics education, such as mathematics for exceptional children, Piaget's research, mathematics assessment, and algebra in the K–12 curriculum. Course may be repeated on a different topic with permission of the department chair.

MG 5100 Teaching School Mathematics in the 3 Credits 21st Century

This course will provide concise, current, and meaningful descriptions of what it takes to be an effective teacher of mathematics in today's classroom. The course content offers a balance of theory and practice, including a wealth of examples and descriptions of student work, classroom situations, and technology usage to assist any teacher in visualizing high- quality mathematics instruction. The course combines up-to-date technology and research to help teachers expand their grasp of curriculum, teaching, and assessment issues as they relate to secondary and middle school mathematics.

MG 5710 Topics In Algebra for Elementary/Middle 2-4 Credits School Teachers

Topics for this course can vary, but may focus on one or more of the following: techniques and content for developing algebraic thinking at the elementary and middle school levels; exploration of underlying themes in algebra; patterns, rates of change, linear, quadratic, and exponential functions; and generalization and equality. Students may repeat the course with a different topic as its focus with permission of the department chair.

MG 5720 Topics In Number Theory for 2–4 Credits Elementary/Middle School Teachers

Topics in this course vary, but may focus on one or more of the following topics traditionally found in a K–8 mathematics curriculum: primes and composites; the LCM and GCD; the Euclidean algorithm; divisibility; and modular arithmetic. Other topics may include perfect, abundant, and deficient numbers, complex numbers, and mathematical induction. A standard text on the topic will be used when appropriate. Students may repeat the course with a different topic as its focus with the permission of the department chair.

MG 5730 Topics In Discrete Math for 2–4 Credits Elementary/Middle School Teachers

Topics in this course vary, but may focus on one or more of the following: logic, proof, set theory, and Venn diagrams; algorithmic thinking; Boolean algebra; mathematical induction; recursion relations; graph theory and networking; and relating those ideas to teaching discrete mathematics in grades K–8. Students may repeat the course with a different topic as its focus with the permission of the department chair.

MG 5740 Topics In Geometry for 2–4 Credits Elementary/Middle School Teachers

Topics for this course can vary, but may focus on one or more of the following: analytic and transformational geometry; properties of plane and solid figures; similarity; tessellations; fractals; projective geometry; and geometry connections with the physical world. Exploration of geometric concepts may be done via hands-on activities, computer software, or calculators. Students may repeat the course with a different topic as its focus with permission of the department chair.

MG 5750 Topics In Statistics/Probability 2-4 Credits for Elementary/Middle School Teachers

Topics for this course can vary, but may focus on one or more of the following: techniques and content for teaching statistics and probability at the elementary and middle school levels; organizing and displaying university data; measures of central tendency, stem and leaf; box and scatter plots; regression analysis; and empirical and theoretical probability. Students may explore ideas through hands-on activities, computer software, or graphing calculators. Students may repeat the course with a different topic as its focus with the permission of the department chair.

MG 5760 Topics In Mathematics for 2–4 Credits Elementary/Middle School Teachers

Topics for this course can vary, but may focus on one or more of the following ideas: problem solving; logic and proof; set theory and Venn diagrams; calculus notions; number systems; and mathematical modeling. A standard text on the topic will be used when appropriate. Students may repeat the course with a different topic as its focus with the permission of the department chair.

MG 5810 Topics In Algebra for 2–4 Credits Middle/Secondary School Teachers

Topics for this course can vary, but may focus on one or more of the following: techniques and content for teaching algebra at the secondary level based on national and state recommendations; standards-based materials; relations and function; data analysis and curve fitting; sequences and series; and pre-calculus concepts' chaos and fractals: groups, rings, and fields. Students may repeat the course with a different topic as its focus with the permission of the department chair.

MG 5820 Topics In Number Theory for 2–4 Credits Middle/Secondary School Teachers

Topics in this course vary, but may focus on one or more of the following topics, which are traditionally found in the middle/secondary mathematics curriculum: prime numbers, mathematical induction, the Euclidean algorithm, divisibility, and complex numbers. Other topics explored may include Peano's postulates, Fermat's last theorem, and the well-ordering principle. A standard text on the topic will be used when appropriate. Students may repeat the course with a different topic as its focus with the permission of the department chair.

MG 5830 Topics in Discrete Mathematics 2-4 Credits for Middle/Secondary School Teachers

Topics in this course vary, but may focus on one or more of the following: logic, proof, set theory, and Venn diagrams; algorithmic thinking; Boolean algebra; mathematical induction; recursion relations; graph theory and networking; and relating those ideas to teaching discrete mathematics in grades 7–12. Students may repeat the course with a different topic as its focus with the permission of the department chair.

MG 5840 Topics In Geometry for 2-4 Credits Middle/Secondary School Teachers

Topics for this course can vary, but may focus on one or more of the following: history of Euclidean and non-Euclidean geometry; Euclidean geometries; non-Euclidean geometries; Euclidean geometries in the plane; polyhedra, analytic, and transformational geometry; projective geometry; fractals; geometry in the real world; and topology. Investigations may use computer software and Internet resources. Students may repeat the course with a different topic as its focus with permission of the department chair.

MG 5850 Topics in Statistics/Probability 2-4 Credits for Middle/Secondary School Teachers

Topics for this course can vary, but may focus on one or more of the following: techniques and content for teaching statistics and probability at the secondary level; organizing and displaying univariate data, stem, and leaf; box and scatter plots; regression analysis, linear programming, random sampling; confidence intervals and tests of significance; experimental design; discrete and continuous probability functions; and experimental and theoretical probability. Students may explore these ideas through hands-on activities, computer software, or graphing calculators. Students may repeat the course with a different topic as its focus with the permission of the department chair.

MG 5860 Topics In Mathematics for 2-4 Credits Middle/Secondary School Teachers

Topics for this course can vary, but may focus on one or more of the following ideas: problem solving; logic and proof; set theory and Venn diagrams; topology; real analysis; complex analysis; and mathematical modeling. Standard text on the topic will be used when appropriate. Students may repeat the course with a different topic as its focus with the permission of the department chair.

MG 5870 Topics In Calculus for Secondary 2–4 Credits School Teachers

Consists of topics from the study of calculus, advanced calculus, or the applications of calculus for the purpose of providing some insight into the importance and use of calculus. With the permission of the mathematics department chair, the course may be repeated for credit if the theme or topics change.

MG 5910 Independent Study 1–4 Credits

An individual study project determined to be of value to students and the mathematics department. Students present a talk concerning some portion of their study to a department colloquium during the term. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Meteorology

MT 5150 Air Quality

3 Credits

Encompasses an extensive overview of the science of air quality. Topics include atmospheric chemistry, air quality meteorology and forecasting techniques, air pollution sources, sinks and effects (atmospheric, environmental), including an examination of historical and current policy issues relevant to each topic. Spring term of even years. Prerequisite: undergraduate degree in Meteorology or Atmospheric Science or permission of the instructor. This course is co-listed as MT 4150 in the undergraduate curriculum.

MT 5200 Transportation Meteorology 3 Credits

Students will learn the various weather systems that affect different modes of transportation. In particular, road weather, aviation meteorology, and oceanic meteorology will be highlighted. Advanced weather analysis and forecasting skills will be applied in order to make forecasts tailored to various industries. Spring term. Prerequisite: undergraduate degree in Meteorology or Atmospheric Science and any computer programming course or permission of the instructor.

MT 5280 Synoptic Meteorology II 3 Credits

Intermediate weather analysis and forecasting techniques are used to understand synoptic-scale weather systems with an emphasis on structure and evolution of extratropical cyclones. Topics include: climatology of mid-latitude surface and upper-air flow regimes and extratropical cyclogenesis; life cycle of extratropical cyclones including frontal evolutions; application of hydrodynamical equations and balanced systems to weather analysis and forecasting; ageostrophic winds; jet streak circulations. Students participate in weekly forecasting exercises culminating in a quantitative precipitation forecasting exercise at the end of the semester. Additional course fee required. Spring term. Co-requisite: MT 5320/4320 or equivalent. This course is co-listed as MT 4280 in the undergraduate curriculum.

MT 5310 Dynamic Meteorology I 3 Credits

This course is an introduction to geophysical fluid dynamics including the development of the fundamental equations governing atmospheric motion, basic approximations, simplified flows, and physical interpretation of the corresponding theory. Fall term. This course is co-listed with MT 4310 in the undergraduate curriculum.

MT 5320 Dynamic Meteorology II 3 Credits

This course will cover advanced topics in geophysical fluid dynamics including circulation theory, vorticity, planetary boundary layer, quasi-geostrophic theory, stratospheric dynamics and introductory numerical modeling concepts. Spring term. Prerequisite: MT 5310/4310. This course is co-listed as MT4320 in the undergraduate curriculum.

MT 5330 Satellite Meteorology 3 Credits

This course will provide the student with a broad overview of the theory and application of satellite data. Course begins with a short history of meteorological satellites. This will be followed by sections on satellite orbits and navigation, and types of currently operating satellites. Later sections discuss radiative transfer theory, meteorological sensor packages and types of data, image interpretation, wind measurements, and

atmospheric soundings. Fall term. Prerequisite: undergraduate degree in Meteorology or Atmospheric Science or permission of the instructor.

MT 5340 Radar Meteorology 3 Credits

This course will provide a broad overview of the hardware and theory behind the application of meteorological radar data. The course will begin with a short history of radar meteorology, which will be followed by a brief summary of the radar hardware and theory applicable to meteorological use and interpretation—beam spreading, ducting, anomalous propagation, etc. The differences between reflectivity, Doppler, and polarimetric measurements will also be discussed. Much of the remainder of the course will be used to cover the different levels of NEXRAD data, the available products for each level, algorithms used to automatically analyze these data, and applying these data to real world problems, such as quantitative precipitation estimates and severe local storms detection. Fall term. Prerequisite: undergraduate degree in Meteorology or Atmospheric Science or permission of the instructor.

MT 5350 Boundary Layer Meteorology 3 Credits

This course is designed to provide the student with the fundamentals of atmospheric boundary layer (ABL) behavior, where the atmosphere is highly influenced by the Earth's surface. The student will develop an appreciation for the role of the ABL in the overall dynamics of the atmosphere. Specifically, students will come to understand the importance of fluxes in the ABL, the general diurnal structure of the ABL, the principles of turbulent flow, including Monin-Obukhov similarity theory, the application of Reynolds averaging, and turbulent kinetic energy (TKE) dissipation. Fall term. Prerequisite: undergraduate degree in Meteorology or Atmospheric Science or permission of the instructor.

MT 5400 Numerical Weather Prediction 3 Credits

Acquaints students with the concepts, procedures, theory, and problems associated with numerical weather prediction through discussion and by writing computer programs to process both real and simulated data. Covers the mathematical basis for various analysis and predictive techniques and their benefits and/or limitations. Students learn about the configuration and capabilities of current operational numerical analysis and prediction models. Fall term. Prerequisite: undergraduate degree in Meteorology or Atmospheric Science, any computer programming course, or permission of the instructor. This course is co-listed as MT 4400 in the undergraduate curriculum.

MT 5410 Atmospheric Physics 3 Credits

This course will provide an application of the basic laws of physics to atmospheric processes. Topics discussed include gravitational effects, properties of atmospheric gases, cloud physics, solar and terrestrial radiation, atmospheric electricity, and optical and acoustical phenomena. Fall term. This course is co-listed as MT 4410 in the undergraduate curriculum.

MT 5420 Tropical Weather and Climate 3 Credits

An in-depth view of various topics related to tropical weather and climate, including tropical climatology, easterly waves, tropical cyclones, monsoons, El Nino, La Nina and the Southern Oscillation (ENSO), and other types of tropical variability. Spring term of odd years. Prerequisite: undergraduate degree in Meteorology or Atmospheric Science or

permission of the instructor. This course is co-listed as MT 4420 in the undergraduate curriculum.

MT 5430 Climate Change

3 Credits

This course will provide an overview of the methods for examining climate change. Included are time series analysis and climate proxies, such as tree-ring analysis, oxygen-18/oxygen-16 ratios, and pollen and carbon-14 dating. Also covered are a variety of possible causal factors such as orbital variations, plate tectonics, volcanic eruptions, CO2 variations, and El Niño. The results of paleoclimatic modeling are also discussed. Spring term of odd years. This course is co-listed as MT 4430 in the undergraduate curriculum.

MT 5450 Advanced Synoptic Meteorology 3 Credits

Use of advanced analytical techniques for multiscale weather systems throughout the globe with an emphasis on synoptic-scale, mid-latitude weather will be discussed. Topics include forecasting applications of the quasi-geostrophic height tendency and omega equations, frontogenesis, Q-vector analysis, isentropic analysis, Hovmoller diagrams, potential vorticity concepts, and the use of dynamic tropopause maps. Weekly weather discussions and forecasting exercises focus on these advanced techniques and areas of current or future applied research topics. Recent articles in the scientific literature are reviewed and used throughout the course. Fall term. Prerequisite: undergraduate degree in Meteorology or Atmospheric Science or permission of the instructor. This course is co-listed as MT 4450 in the undergraduate curriculum.

MT 5470 Micrometeorology 3 Credits

Students will study the processes involving the exchange of momentum, heat, and moisture between the lowest portion of the atmosphere and the underlying surface of the Earth. Topics will include local energy budgets, soil heat transfer, the planetary boundary layer, turbulence, and neutral and diabatic surface layers. Spring term of even years. Prerequisite: undergraduate degree in Meteorology or Atmospheric Science or permission of the instructor. This course is co-listed as MT 4470 in the undergraduate curriculum.

MT 5480 Mesoscale Meteorology 3 Credits

Focuses on the detailed descriptive aspects of mesoscale phenomena and processes with an emphasis on the structure. Defines what is meant by the term 'mesoscale' and to what kinds of systems it applies. Deals with internally generated mesoscale circulations. Examines various mesoscale convective systems. Discusses external force mesoscale systems. Using observational cases, covers terminology, characteristics, and behavior of mesoscale events. Spring Term. Prerequisite: undergraduate degree in Meteorology or Atmospheric Science or permission of the instructor. This course is co-listed as MT 4480 in the undergraduate curriculum.

MT 5550 Topics In Meteorology 3 Credits

Covers material related to a major subdiscipline in Meteorology that is not covered in the regular curriculum. May be repeated with a different topic so that students can receive exposure to a variety of subject areas. Prerequisite: Permission of the instructor.

MT 5600 Computer Applications in Meteorology 3 Credits

This course is designed as an intense introduction to the technological tools and techniques used by professional meteorologists in the analysis and display of meteorological and environmental data. Students will learn programming methodology and become proficient in the use of a number of open source and commercial software packages. Fall term. Prerequisite: undergraduate degree in Meteorology or Atmospheric Science and any computer programming course or permission of the instructor.

MT 5700 Graduate Seminar Meteorology 1 Credit

Provides graduate students with a forum to publicly present and discuss their results from literature reviews, case studies, or research. Interdisciplinary topics will also be presented. This is a required course for all MS in Applied Meteorology students. This course can be repeated for credit three times for a total of three credits. Fall and spring terms.

MT 5800 Thesis Research 1–6 Credits

Students will develop and present a thesis research proposal, conduct detailed research, write a thesis, and defend the research before a faculty committee. Signature of the faculty supervisor and the meteorology program coordinator is required. All terms.

MT 5910 Independent Study/Research 1-3 Credits

Studies undertaken will be defined by students and subject to approval by appropriate staff members. Work may involve reading; conferences; historical, experimental, or theoretical projects; field investigation; statistical surveys; combinations of the foregoing; or other activities deemed appropriate. Students may work in a physical or biological science or in interdisciplinary areas. Students may not be granted more than three credits. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required. All terms.

Music

MU 5540 Piano Performance Studies 1 Credit

Individual and/or group piano study to promote development of technique, repertoire, and musicianship.

MU 5560 Special Topics In Music 1–3 Credits

An in-depth study of a specialized topic pertaining to contemporary issues and methodologies. The course will be taught by a specialist or a series of specialists within the area under study. Since topics will vary, the course may be repeated.

MU 5910 Independent Study 1-3 Credits

Advanced work in a specialized area selected and pursued in consultation with a faculty advisor. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Neurodevelopmental Approach to Teaching

ND 5000 Foundations in Neurodevelopmental 3 Credits Approach to Teaching

Participants will be introduced to core principles and the newest research findings related to the brain and learning. The course will focus on the key brain principles, neural networks (i.e., recognition, strategic, affective) and neurodevelopmental learning functions of the brain (e.g., attention, memory, language) and their impact on learning. It is expected that participants will already have an existing knowledge of child development theories; the neurodevelopmental framework will be layered with these theories to understand what a student can be expected to do at a given age. During the course participants will practice the skill of observing for evidence of learning strengths and weaknesses and linking them to academic performance through a case study. Participants must have access to a student/students on a regular basis as a large component of this course requires observation. This course is appropriate for anyone who works with students (child/adult).

ND 5005 Understanding the Mind of a Learner 2 Credits

This course is designed to build upon participants' existing knowledge of child development theories and to layer these with neurodevelopmental framework to understand what a student can be expected to do at a given age. Participants will be introduced to core principles and the newest research findings related to the brain and learning from the fields of neuroscience, psychology, education and health. The course will focus on the three networks (i.e., recognition, strategic, affective) and eight key neurodevelopmental learning functions of the brain (e.g., attention, memory, language) and their impact on learning. Participants will also practice the skill of observing for evidence of student learning strengths and weaknesses and linking them to academic performance through a case study.

ND 5010 Effective Classroom Practice 2 Credits

This course is designed to build on participants' familiarity with the neurodevelopmental framework through exploration of their own neurodevelopmental profile. Participants will reflect on their own neurodevelopmental strengths and weaknesses, the affect of their learning profile on their ability to learn, and, most importantly, how that particular combination of strengths and weaknesses, together with skill and knowledge, can be used to positively influence their teaching practice.

ND 5020 Instructional Practice 3 Credit

This course will provide participants with a deeper understanding of practical ways to apply a neurodevelopmental approach to teaching and learning by examining the neurodevelopmental demands of curricula, lessons, and assessments. Participants will design and implement activities, lessons, and curricula that take into consideration students' specific learning needs. Prerequisite: ND 5000 or ND 5005.

ND 5030 Collaborative Practices 2 Credits

This course will provide participants with a deeper understanding of practical ways to apply a neurodevelopmental approach to teaching and learning by looking at student work and addressing instructional dilemmas. Through the use of structured protocols, participants will work as a collaborative group to link observable evidence from student work samples to particular underlying neurodevelopmental functions. The process of Looking at Student Work will be used to inform participants

about students as learners and identify specific strategies to support increased student achievement. Prerequisite: ND 5000 or ND 5110.

ND 5040 Authentic Data to Engage Students' Minds 2 Credits

This course will explore the research regarding student motivation and the neurodevelopmental networks and sub-skills that support or undermine a student's achievement with particular focus on the role of attention in learning. If a student's basic needs are not met (physiological, social and emotional) his/her body must expend energy on those first before it can learn. Prerequisites: ND 5000 or ND 5005, ND 5020, and ND 5050.

ND 5050 Attention and Memory in Learning 2 Credits

Attention and memory play key roles in learning. This course will provide an in-depth exploration of the components of attention and memory and specific impacts they have on learning. Participants will be introduced to ways to observe for breakdowns in memory and attention and instructional strategies to support completion of tasks. Prerequisite: ND 5000 and ND 5020.

ND 5060 Collaborative Instructional Practices 2 Credits

This course will provide participants with a deeper understanding of students' different approaches to learning and how to make responsive adjustments to instruction based on observation and ongoing assessment. Participants will also learn about the nature of collaboration through examination of exemplary models. They will participate in guided instruction using protocols designed to enhance the effectiveness of collaborative practices. Participants will then apply this knowledge collaboratively to address their own questions regarding school related issues and student learning. Prerequisite: ND 5000.

ND 5100 Reconsidering Referrals to Support Teams 3 Credits

This course will help educators involved in school-based support teams to engage in critical refinement of their current student referral process, including forms, timelines, meeting protocols, and follow-up procedures using a neurodevelopmental approach. School teams will work collaboratively on creating and implementing student analysis tools and procedures. Teams will examine systems for working efficiently and effectively to identify the needs of all students referred for support, and practical strategies to help them succeed, including ways to leverage student's strengths and areas of interest. Session note: This workshop is designed for teams of three to six educators (including at least one regular classroom teacher and one of the following: administrator, guidance counselor, school psychologist, integration specialist, special educator, study skills teacher, or 504 coordinator). The course consists of a three-day workshop and two additional full days for implementation follow-up, one on site at participants' school.

ND 5110 New Coaches Institute 3 Credits

National School Reform Faculty "Critical Friends" are groups of educators committed to improving teaching practices and student outcomes through collaborative work. Critical Friends Groups (CFGs) can be found in schools throughout the U.S.; in many schools, CFGs serve as an alternative to administrative supervision. The key to the success of CFG work is the development of an intimate yet professional community, where teachers share their dilemmas and push one another to reflect and change. The facilitator or "coach" of the group structures the meeting through carefully selected activities or "protocols" that enable

the "critical" work to occur in an atmosphere that is efficient, productive, and feels safe to each participating member. This workshop is designed to train future CFG coaches through facilitated CFG protocols and practice. Participants will be expected to go back to their home school settings and lead CFG work with their colleagues.

ND 5800 Practicum

1-9 Credits

The practicum will provide master's degree and CAGS candidates with the opportunity to document the implementation of the neurodevelopmental approach into their teaching practice. Note: You may take practicum over multiple terms, minimum 2. When registering, keep in mind how many terms you plan to take to complete the practicum (1, 2 or 3) and only register for that number of credits per term.

Natural Science

NS 5090 Special Topics in Secondary School Science 1-6 Credits

A focused study in one of the science disciplines: life, Earth, or physical sciences. The course could include field, laboratory, computer, and classroom study under the supervision of a faculty member with expertise in the area and can be taken more than once.

NS 5100 Revolution in Science 3 Credits

An inquiry into the way scientific models of understanding nature are reached with particular emphasis on the concept of revolutionary change in explanation. The course will consider what science is capable of knowing and how it differs with technology. Several specific revolutions will be examined, including the scientific revolution of Galileo and Newton, Lavoisier's chemical revolution, Darwin's evolution, continental drift, DNA and genetics, and relativity. Also, the role of women in science will be scrutinized to see if a revolution in the involvement of women has been achieved. Finally, students will attempt to foresee what revolutions might be going on now or might occur in the future.

NS 5110 Earth: Inside and Out 4 Credits

Though the geologic record is incredibly ancient, it has only been studied intensely since the end of the nineteenth century. Since then, research in fields such as plate tectonics and climate change, as well as exploration of the deep sea floor and the inner Earth has vastly increased our understanding of geological processes. This course delves into five questions to understand how our dynamic planet evolved and what processes continue to shape it: How do geologists "read" the rocks? How has Earth evolved? What causes climate and climate change? Why are there ocean basins, mountains, and continents? Why is Earth habitable? In the process, learners will get to know the American Museum of Natural History's Hall of Planet Earth, explore geologic time, and gain an understanding of how scientists study vast Earth systems.

NS 5111 The Solar System 4 Credits

The solar system is our local neighborhood in space, comprising our closest star, the sun, and the matter that surrounds it. This environment provides rich and diverse source material for a seminar on fundamental astronomical concepts like motion, collisions, and scientific investigation. Using the extensive resources available through the American Museum of Natural History, the Rose Center for Earth and Space, and AMNH's partners at NASA, the course will explore a series of questions: How did the solar system form? What can be told by looking at

the surface of solar system bodies? What is an atmosphere, and how do those of different planets vary? Each week will focus on a different scientific project (such as Venus Express and the Mars rovers) to reinforce the essential concept of science as an ongoing search for better understanding of the universe.

NS 5120 The Ocean System 4 Credits

The physical characteristics of the ocean and its related systems have framed its origin, incredible diversification of life, and amazing ecosystems, like coral reefs and mangrove forests. This seminar explores how oceanographers investigate the role that symbiotic relationships and other biological adaptations have in the dynamics of oceans, a dynamic that is being threatened by human activities and consumption.

NS 5121 Water: Environmental Science 4 Credits

Central to all ecosystems, water is essential to life as we know it. It shapes our planet on every level, from the chemical properties of the H20 molecule to its central role in global climate. Poised to be to the 21st century what oil was to the 20th, water is also a critical environmental issue. Where do we find it? Is it safe to consume? Who has access to it? How can we manage this precious resource to provide an adequate supply to all the species that depend upon it? This course will focus on why water is such a critical resource, the effect of human consumption on aquatic and terrestrial ecosystems, and the social, economic, and environmental implications of water management.

NS 5125 Climate Change 4 Credits

This course explores the science of climate change. Students will learn how the climate system works; what factors cause climate to change across different time scales and how those factors interact; how climate has changed in the past; how scientists use models, observations and theory to make predictions about future climate; and the possible consequences of climate change for our planet. The course explores evidence for changes in ocean temperature, sea level and acidity due to global warming. Students will learn how climate change today is different from past climate cycles and how satellites and other technologies are revealing the global signals of a changing climate. Finally, the course looks at the connection between human activity and the current warming trend and considers some of the potential social, economic, and environmental consequences of climate change.

NS 5130 Space, Time, and Motion 4 Credits

Throughout history, humans have grappled with questions about the origin, workings, and behavior of the universe. This seminar begins with a quick tour of discovery and exploration in physics, from the ancient Greek philosophers to Galileo Galilei, Isaac Newton, and Albert Einstein. Einstein's work serves as the departure point for a detailed look at the properties of motion, time, space, matter, and energy. The course considers Einstein's special theory of relativity, his photon hypothesis, wave-particle duality, his general theory of relativity and its implications for astrophysics and cosmology, as well as his three-decade quest for a unified field theory. It also looks at Einstein as a social and political figure, and his contributions as a social and political force. Scientist-authored essays, online interaction, videos, and Web resources enable learners to trace this historic path of discovery and explore implications of technology for society, energy production in stars, black holes, the Big Bang, and the role of the scientist in modern society.

NS 5140 Genetics, Genomics, Genethics 4 Credits

Since the 1944 discovery that DNA is the universal genetic code, this young science has advanced by leaps and bounds: scientists can now decipher, examine, and modify the blueprints for life. This course emphasizes the relation between the underlying science of genetics, the study of genomes (genomics), and the social, ethical, and legal issues that this work gives rise to (genethics). Learners investigate topics such as the history of genetic discovery and molecular lab techniques, and emerge with an understanding of the science and the technology behind breakthroughs like therapeutic cloning and the sequencing of the human genome. Throughout the course, online interaction, scientist-authored essays, video, and simulations enable students to investigate genetic variation and similarities and develop a structure for thinking about ethical issues.

NS 5150 The Link Between Dinosaurs and Birds 4 Credits

This course examines the evidence linking dinosaurs to modern birds and investigates how scientists study the evolutionary relationships between species. Learners are introduced to the world's largest collection of vertebrate fossils and the American Museum of Natural History's Fossil Halls, exhibiting Saurischian and Ornithischian dinosaurs. This seminar uses the method of classification called cladistics to define characteristics of a group of dinosaurs called theropods. Using anatomical evidence from fossils and living birds, a case is presented for birds being direct descendents of the theropod lineage. The course looks at the process of fossilization and how scientists look for, collect, and analyze fossils. Bird behavior, along with fossil evidence, is used to infer possible behavior (such as nesting and parental care) of extinct dinosaurs. Students examine the characteristics that make a bird a bird, and explore the bird family tree, and the possible origins of flight. The course also examines possible explanations for the extinction of most dinosaurs 65 million years ago. Scientist authored essays, a virtual exhibition tour, video, and Web resources enable students to explore geologic time, investigate clues to the origin of birds, and theorize about possible causes of extinction.

NS 5160 Sharks and Rays—Ecology, Classification, 4 Credits and Evolution

Sharks may be one of the most readily recognized fishes in the water, but did you know that rays are one of their closest relatives? They share a 450 million-year evolutionary history, evolving extraordinarily successful body plans. This course examines these amazing fishes, their adaptations for survival, how they operate as top predators, how they are studied, and why shark conservation is critical. In this life science seminar, students will draw on the fossil record, museum collections, and research by museum scientist Dr. Marcelo de Carvalho to become familiar with the basic biology, ecology, diversity, and evolution of sharks and rays (the elasmobranches). Learners will study their complex sensory systems (hearing, smelling, vision, and electrical sensing), and find out how sharks and rays use them to navigate and detect prey. Drawing on scientist-authored essays, online interaction, Web resources, and videos, the course will also illuminate the tools, techniques, and overall process of research in this field and explain current conservation efforts.

NS 5170 The Diversity of Fishes 4 Credits

With well over 24,000 species alive today, the world's fishes comprise by far the largest and most diverse of all vertebrate groups. This seminar provides an introduction to this incredible diversity and looks at how scientists study fishes. This course takes students into the lab with American Museum of Natural History scientists. Students are led through the steps of an actual investigation of a group of South American catfish (Hypoptopoma). Using the rules of cladistics (a system of classification) students seek to determine if a lab specimen is a new species. Specimen photos from the AMNH Ichthyology Department Collections, scientist-authored essays, video, and Web resources allow students to explore the evolution, ecosystems, and biogeography of this group of animals and examine questions such as the meaning of biological success.

NS 5180 In the Field with Spiders 4 Credits

Spiders were hard at work long before the dinosaurs appeared, and have settled everywhere on the planet except Antarctica. Most live on land, but some spend their lives on or near water. They make their homes everywhere, from treetops to underground burrows, from suburban subdivisions to tropical caves, even 22,000 feet up on Mt. Everest. Spiders are important predators that keep many ecosystems in balance. In this life science course, students explore the concepts of morphology and classification. Learners are introduced to the anatomy of spiders, as well as the composition and use of their silk, webs, fangs, and venom. Lab, field, and collecting techniques are examined. Museum research on Australian ground spiders is also highlighted to gain insight into each of these topics. Scientist-authored essays, online interaction, Web resources, and video help us to look into the lives of spiders as well as the way they are studied through lab techniques, journaling, collection, drawing, classification, and identification. Learners will model these techniques by making their own spider collection.

NS 5190 Evolution 4 Credits

This course draws on the American Museum of Natural History's longstanding leadership in the fields of paleontology, geology, systematics, and molecular biology to tell a modern story of evolution. Students will learn why evolution is the fundamental concept that underlies all life sciences and how it contributes to advances in medicine, public health, and conservation. The course begins by looking at how Charles Darwin developed his groundbreaking views on evolution by observing patterns in nature. Darwin's work and the perspectives of the authoring scientists—a paleontologist and an ornithologist—lay out some of the evidence for evolution. Students then examine the use of molecular and phylogenetic techniques to reconstruct evolutionary history and determine the place of an organism on the Tree of Life, which documents the evolutionary relationships among all species. Mechanisms of evolution and speciation are then covered and are followed by the origin and evolution of humans. The course concludes by examining the practical impact of evolution in the areas of human health, agriculture, and conservation. Course participants will gain a firm understanding of the basic mechanisms of evolution, including the process of speciation, and how these systems have given rise to the great diversity of life in the world today. Students will also explore how new ideas, discoveries, and technologies are modifying prior evolutionary concepts.

NS 5200 Action Research In Science Education 3 Credits

This course is designed to be a core course offering in the MS in Science Education program. It will assist graduate students to design their action research as it relates specifically to science teaching, learning, and curriculum in middle and high school classrooms. This course will help students conceptualize and design a practical and applied classroom research project that could be the basis for presentation as the capstone experience in their graduate program. The course emphasizes a con-

structivist philosophy of education. The emphasis is on the teacher as inquirer actively engaged in the construction of new knowledge about science education. Emphasis is placed on telecommunication networking of teachers who are actively involved in action research projects.

NS 5260 A Forest for Every Classroom 3 Credits

This course will educate middle and high school teachers working in New Hampshire communities about forest stewardship issues, and provide them with tools to develop curricula that meet the state's educational standards and can be implemented using their local land-scape, resources, and community for real world teaching. Prerequisite: teaching.

NS 5300 Astrobiology 4 Credits

This course is an interdisciplinary study centered on the search for life in the universe. Students will participate in inquiry-based activities and discussion in biology, physics, and robotics to explore the science of astrobiology. Students will gain hands-on experience with available online resources and current science technology enabling them to use astrobiology in the classroom to engage students in the scientific process. Prerequisite: teaching.

NS 5400 Marine Education Methods 3 Credits

This is a multidisciplinary marine education methods course that integrates economic, cultural, historical, and ecosystem considerations for learning about the marine environment. The goal is to help educators increase public understanding of critical New Hampshire marine and coastal issues. Special attention will be given to stewardship education of marine resources. Concepts of sustainable harvesting and participatory management will be emphasized. Field trips to visit marine research and education facilities on the coast will be a critical component. Dynamic, interactive Web resources, including virtual fieldtrips, will also be identified. A culminating component of the course will be organizing and advertising a community-based family marine activity night sponsored by the course participants. This event will provide students with firsthand experience in implementing and evaluating hands-on marine science learning for youth, parents, teachers, and other interested environmental educators. All materials will be aligned with national and international education standards across disciplines, including standards in environmental literacy and technology.

NS 5560 Special Topics in Elementary School Science 4 Credits

A laboratory and discussion-oriented content course for K–6 teachers to address specific topics in the Earth, physical, and life sciences. Text readings, research articles, and developing a curriculum unit are required. Since topics vary, the course may be repeated with permission of the instructor. Prerequisite: restricted to those who are currently teaching.

NS 5600 Field Experience in Science Education 3 Credits

This course is one of the core offerings in the MAT in Science Education degree program. It is a supervised placement with a science or environmental agency that offers educational programming with student groups of various ages. Students will be required to assist in the development of programs, and teach and assess participant learning in these settings. Examples of such organizations include the Squam Lakes Natural Science Center, NH Fish and Game, Squam Lakes Association, NH Audubon Society, MindFlight Summer Enrichment Program, NH Department of Environmental Services, and the Mark Sylvestre Planetarium Program.

NS 5700 Science Teaching Middle and High School 3 Credits

This course is designed to be a core course offering in both the MS in Science Education and the MAT in Science Education degree programs. Several major themes such as learning theory, structure of the discipline (curriculum), teaching strategies, and the nature of science and technology applications will be presented throughout the course. The course is structured to help students develop the proficiencies needed to become a successful science teacher. Advanced learners are given a great deal of independence in learning about secondary school science teaching.

NS 5800 Seminar: Current Issues in Science Education 3 Credits

This core course in the MS and MAT in Science Education programs will provide the opportunity for classroom science teachers to identify and discuss practical issues that apply to their classroom as well as address state, national, and international issues. Current research findings will be used as the focus for seminar discussions, papers, and projects.

NS 5850 Capstone Research Project 4 Credits

This course is designed as a core course offering in the MS in Science Education program. The intent of this course is to implement the classroom-based research strategies developed in the action research course to promote improvement of existing teaching and learning strategies in the classroom. A research committee will be formed to assess the effectiveness of the study. A formal presentation will be made to faculty and other graduate students in one of the science colloquia during the academic year.

NS 5910 Independent Study 1–3 Credits

Studies undertaken will be defined by students and subject to approval by appropriate staff members. Work may involve reading, conferences, historical, experimental, or theoretical projects, field investigation, statistical surveys, combinations of the foregoing, or other activities deemed appropriate. Students may work in the physical or biological sciences, or in interdisciplinary areas. Students may not be granted more than three credits. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Organizational Health

OH 5100 Full Spectrum Leadership 3 Credits

This course offers a study of a leadership model based on personal authenticity. The fundamental premise of this model is that effective leadership emerges from the synthesis and synergy of body, mind, heart, and spirit to weave intention and presence into the organizational environment. Through varied learning methods participants will explore ways to foster culture that links knowledge and resources to promote a climate of transformative trust in the service of individual well-being and the organizational mission.

OH 5180 Exploring Personal and Organizational Health 3 Credits

Exploration of the evolving and emerging paradigms of holistic health and healing, and how the personal and organizational realms interconnect. In addition to examining the traditional wellness models, discussions will include concepts of mind, transpersonal psychology and energetics. Through an examination of personal and organizational contexts, students will explore ways to transform personal and work

environments through mindfulness towards good intention, open mind and compassionate heart.

OH 5200 Creating Socially Responsible Organizations 3 Credits

This course examines the role of "positive institutions" in creating and supporting the well-being of its members while maintaining its profitability or non-profit mission. Issues of power, privilege, and prejudice as challenges to the formation of ethical and socially just institutions will be explored. Topics include issues of diversity, equity, ethics, and social justice.

OH 5300 Work as a Personal Journey 3 Credits

This course offers an exploration of the personal, interpersonal, and transpersonal elements of work and personal growth. Through varied learning methods, participants will attend to the ways in which occupations transform us and work is transformed to support personal development. Learning will extend to the ways in which students, as followers and leaders, can cooperate to support these synchronous and reciprocal processes creatively and with intention.

OH 5400 Evolutionary Change for a Sustainable Future 3 Credits

The 21st Century is a time of unprecedented change in which long-standing institutions are failing or deconstructing and the human race is facing enormous challenges. Such a time calls upon individuals and organizations to become activists for change and architects of new social constructions. Within this context, evolution and transformation are foundational processes for meaningful and contributory personal and organizational change. This course guides and assists participants in contextualizing change efforts in an awareness of global interconnectedness and concern for the long-term viability of humanity's partnership with the planet and in developing the habits of mind and heart which will enable them to lead with an open mind, compassionate heart, and good intention. Participants will explore emerging paradigms for leadership and change and use their learning to enhance organizational effectiveness, well being, and sustainability.

OH 5820 Women as Leaders 3 Credits

This course challenges women to consider the cultures, climates, and contexts that limit and support their capacities as leaders. Students will explore personal leadership styles, characteristics of effective leaders, and strategies for developing themselves as leaders.

Project Adventure

PA 5560 Special Topics 1–4 Credits

An in-depth study of a particular topic, contemporary issue, or concern related to adventure-based programs. Topics include adventure in the classroom, leadership skills, advanced skills and standards, adventure-based counseling, approaches to prevention and early intervention, adventure programming, community partnerships, and expedition training.

Physical Education

PE 5560 Special Topics

1-4 Credits

This course will cover various topics in physical education. Since topics vary, the course may be repeated with permission of the instructor.

PE 5600 Athletic Administration

3 Credit

Problems and standards connected with the administration of school and college athletics are considered, as well as the relationships with state and national athletic foundations and with conferences for athletics. The course is designed to prepare the graduate student to organize and administer a program of intramural sports or athletics at the public school level.

PE 5610 Sport Law

3 Credits

This course is designed to provide knowledge and understanding of the laws pertaining to physical education, athletics, and sport, and the factors important to schools, colleges, and sport organizations concerning liability of physical educators, coaches, and administrators.

PE 5620 Sport Finance, Budgeting, and Marketing 3 Credits

This course will cover the basic theories and principles of sport finance, budgeting, and marketing—from sport and recreational facilities to professional and amateur sports. This course will also reveal how to study and understand the market; develop a marketing and finance strategy; clarify a sport organization's needs and goals; and implement marketing plans through sponsorship, licensing, pricing, promotions, advertising, broadcasting, and sales. Case studies that translate several professionals' experiences into learning scenarios will be used. In addition, observations of future trends in the field will be discussed.

PE 5630 Sport Psychology 3 Credits

This course is designed to provide the student with the theory basis of human behavior in sport settings with an emphasis on the mental aspects of behavior. Areas to be discussed are sport personology (including personality, motivation, achievement, and attributions), anxiety/ arousal, attentional focus, and social/cultural manifestations of sport, including humanism, youth sport, aggression, cooperation/cohesion, and leadership.

PE 5640 Sports, Society, and Cultures 3 Credits

This course is designed to raise awareness about the sociology of sport and how cultural practices in the world of sports can have significant social, economic, and political consequences. Specific attention will be paid to gender, racial, class, and ethical issues, as well as to the history of sport, media and sports, money and sports, and sports violence. There will also be analysis and discussion concerning youth sports, international sports, and the commercialization of sports. This course will give future sport managers a broad understanding of how sport impacts different groups of people in different ways throughout this country and beyond.

PE 5910 Independent Study

1-3 Credits

Limited to students who have demonstrated their ability to do superior work in courses sponsored by the Department of Health and Human Performance, and who are considered able to do independent work. Before registering for the independent study, students should consult with the advisor concerning a program of study. Students are expected to work independently with tutorial guidance. Evidence of progress is demonstrated by papers and discussion. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Physics

PH 5910 Independent Study

1-3 Credits

Studies undertaken will be defined by students and subject to approval by appropriate staff members. Work may involve reading, conferences, historical, experimental or theoretical projects, field investigation, statistical surveys, combinations of the foregoing, or other activities deemed appropriate. Students may work in the physical or biological sciences or in interdisciplinary areas. Students may not be granted more than three credits. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Political Science

PO 5130 Topics in Political Science

3 Credits

Various approaches to the study of politics, particularly functional, geographical, or theoretical problems and issue areas will be selected from time to time. These will serve as the topics to provide intellectual focus for advanced application of the political science method to the study of man.

PO 5910 Independent Study

1-3 Credits

Provides students with the opportunity to round out their background in the social sciences through reading and research, supplementing previous coursework in the field. A research paper, periodic conferences, and an oral examination may be required. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Psychology

PS 5910 Independent Study

1-3 Credits

Advanced readings and research with conferences and oral examinations provide advanced students with background and specialized knowledge relating to an area in which an appropriate course is not offered, or in which they have a special individual interest. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Reading and Writing

RL 5014 Reading, Writing, and Literature 3 Credits

This course is designed as an active and reflective experience of reading and process writing. Students will be immersed in literature and process writing as they develop a portfolio of their own work as lifelong readers and writers. They will review theory and practice regarding process writing, writing to learn, and writing across the curriculum. They will work in the format of the reading/writing connection to explore a range of non-print and print genres, including but not limited to fiction, nonfiction, poetry, fantasy, timed writing to a prompt and multicultural literature. Further topics to be examined in this course are the development of practical classroom applications of creating a literate environment, supporting the reading/writing connection in the classroom, exploration of the question "What makes good writing?", assessment in the reading/writing workshop, the mechanical aspects of writing, and the needs of diverse learners. This course is recommended for students in the Reading and Writing master's program and the certification program, as well as for any other students who teach reading and writing in the elementary, middle, and secondary schools.

RL 5110 Research in Reading and Writing 3 Credits

An investigation into the significant research theory and principles on the development of reading and writing, the teaching of reading and writing, the assessment of reading and writing, and the implications of this knowledge that enrich our understandings and refine our practices. From historical perspectives to current trends and issues, we will explore the transformation of the reading and writing landscape. In doing so, we will discover what research in reading and writing is; how it is used; the value of reading and writing research; how it is applied to improve practice, understanding, and reflective thought; and its role in determining best institutional practices.

RL 5170 Content Area Literacy 3 Credits

To provide literacy instructors with practical suggestions, approaches, and tools to engage all K–12 students, including adolescents themselves, in focusing on improving student reading, writing, thinking, and listening. A three-tiered model will examine the areas of student motivation, integrating literacy and learning, and sustaining literacy development. The final product will be the formation of a differentiated instructional plan in the content area demonstrating the use of strategies presented in the course. Participants will be using their own existing school curricula or be planning to use the strategies with future students. A district-wide presentation can be developed from the culmination of all students' artifacts.

RL 5560 Special Topics in Reading, Writing, 1–3 Credits and The Language Arts

An in-depth study of a particular topic, contemporary issue, or concern. The course will be taught by a specialist within the field being studied or as an alternative methodology. A faculty member will coordinate a series of guest speakers who will meaningfully address the topic. Since topics vary, the course may be repeated with permission of the instructor.

RL 5710 Advanced Diagnostic Testing and the 3 Credits Improvement of Reading and Writing

Diagnostic and instructional issues presented include reading and writing development; factors related to reading and writing disabili-

ties; varied approaches to individual diagnosis and proven emergent reading, corrective, and standardized tests; and authentic assessments currently used in reading and special education programs. Students will demonstrate skills in the understanding of the statistical characteristics, administration of formal and informal diagnostic reading tools, the development of individual reading intervention goals and objectives for remediation and the use of formative, summative and progress monitoring tools in assessing growth and designing interventions. This course may be repeated with the permission of the instructor.

RL 5760 Linguistic Principles and Methods of 3 Credits Teaching English as a Second or Other Language

In this course, participants will examine the nature of language, language systems, and language in context. The focus will be on the relevance of linguistic and sociolinguistic knowledge to teaching languages, the nature of language development, and the theory and practice of various teaching methods for different age groups and classroom situations.

RL 5770 Developing Language and Literacy for 3 Credits Diverse Learners

In this course students will study the foundations of language/literacy processes and instruction. Topics include the psychological, cultural, and linguistic theoretical foundations; current practices, research, and historical developments; reading and writing language development related to their acquisition as well as cultural and linguistic diversity; major components of reading curriculum; major components of writing instruction; reading and writing instructional strategies and curriculum materials. The course will be in an interactive seminar/workshop format with an online component.

RL 5820 Literacy Practicum 1–3 Credits

This practicum focuses on leadership, collaboration, and coaching. Discussion of literacy program planning, operation, management, budget, curriculum, and evaluation. Emphasis on the role of the reading and writing specialist as researcher, leader, and change agent. Study of collaborative consultative skills, supervisory skills, staff development services, and community activities. Field-based experiences at the elementary, middle, and high school. This is the capstone course for students in the reading and writing specialist program. Winter and summer.

RL 5822 Reading and Writing Practicum 2 Credits

The Reading and Writing Practicum provides the student with a supervised field experience in one or several cooperating institutions or agencies. The purpose is to gain meaningful work experience through applying knowledge learned in previous course work to the on-the-job situation. This course requires 75 hours of supervised field experience. Supervision is by an on-site supervisor and by a professor from the Plymouth State University faculty.

RL 5830 Practicum in Reading Diagnosis and 1–3 Credits Remedial Reading

Analysis of the factors contributing to reading disability. Diagnosis, teaching, curriculum planning, and use of informal and formal assessments with small groups of readers in K–12 settings and supervised tutorial situations. Discussions with literacy professionals and paraprofessionals, and participation in professional development workshops.

Seminars promote reflection on instructional practices and the range of services available for readers across the developmental continuum.

RL 5910 Independent Study in Language Arts 1–3 Credits and Literacy

Enrichment of the background of students in education through the pursuit of a special topic pertinent to their interests and abilities. An opportunity for an in-depth study of a problem in the field of education. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

Special Education

SE 5181 Collaborative Action Research in 3 Credits Special Education

A course for special education teaching practitioners in which a school-based problem is examined from the standpoint of how it can be best addressed given what is known about evidence-based practices in the field of special education. A blueprint for solving the problem is prepared including a statement and purpose for the action research (including essential definitions), what is known about the issue in the special education literature, the scope, assumptions and limitations of the project, and research questions and hypotheses. Course culmination will include collection of data, analysis of that data, conclusions and recommendations based on the impact on students with disabilities and student outcomes.

SE 5190 Educational Testing 3 Credits

This course will focus on administering, scoring, interpreting, and reporting on achievement, special skill, and diagnostic tests used in special education and school psychology. The emphasis will be on diagnosis and prescriptive writing. It is restricted to special education and school psychology students.

SE 5300 Special Education Law 3 Credits

This three-credit course will give participants a greater understanding of both federal and New Hampshire special education law. Time will be spent on Section 504 of the Rehabilitation Act of 1973. This course is designed and intended for teachers and special education administrators. You do not need to be a law student to succeed in this class. There is a heavy emphasis in this course on theory to practice, "practical news you can use" the next day in your profession. Students will review the most current cases and trends in special education law, analyze cases, and learn how to research both statutory and case law.

SE 5400 Classroom Interventions and Special 3 Credits Education Strategies

Analysis of models and dynamics involved in planning, teaching, and evaluating environments for special needs students. An overview of special education, characteristics of individuals with disabilities, individualized educational plans, functional behavior assessment, practical teaching strategies, and the New Hampshire special education process and policies. An observation component of 15 hours will be required of all students not presently in a school or teaching situation.

SE 5560 Special Topics in Special Education 1–3 Credits

An in-depth study of a particular topic, contemporary issue, or concern. The course will be taught by a specialist within the field being studied or as an alternative methodology. A faculty member will coordinate a series of guest speakers who will meaningfully address the topic. Since topics vary, the course may be repeated with permission of the instructor.

SE 5561 Identification of Emotional Behavior 3 Credits Disorders

This course provides an in-depth examination and general overview of the study of behavior disorders of children and youth in educational, clinical, and social settings. The focus of this course will be on the development and implementation of strategies for children and youth with emotional and behavioral concerns associated with atypical behaviors. Information will be presented regarding parent counseling, precision teaching, and other strategies. Basic concepts include the nature, extent, and history of the problem, and conceptual approaches to it; the identification and assessment of the problem(s) at hand; causal factors; the distinct features and elements that define and distinguish disordered emotions and behaviors; and effectively teaching students with emotional and behavioral disorders.

SE 5562 Functional Assessment 3 Credits

The purpose of this course is to develop comprehensive knowledge, skill level, and proficiency in the use and interpretation of functional assessments. The course will discuss at length behavioral support plans, interventions, and a series of resources available for implementing the behavioral plans.

SE 5563 PBIS: School-Wide Approaches for all Students 3 Credits

This course provides an in-depth examination of Positive Behavioral Interventions and Support (PBIS) with emphasis on school-wide approaches designed to enhance school climate and the emotional well-being of all students. Students will learn how to create and nurture a leadership team of stakeholders who are responsible for school-wide implementation as well as evidence-based strategies for improving behavior and academic achievement. Topics include developing school-wide expectations, creating a behavior matrix, designing teaching scripts to address pro social behaviors, creating a school-wide reinforcement system, determining office versus classroom referrals, designing a data-based system for behavior, evaluating the universal system using data-based decision making, and utilizing data for improving practice.

Se 5564 PBIS: Comprehensive Approaches for 3 Credits Students with Intense and Chronic Needs

This course exposes students to comprehensive, multi-system approaches designed to enhance the emotional well-being and reduce the problem behavior of students with intense and chronic needs, including those identified as emotionally disturbed under the Individuals with Disabilities Education Act (IDEA). Using the Positive Behavioral Interventions and Support (PBIS) approach to systems change, students will learn how to develop and implement, in collaboration with families and community partners, a process for addressing the behavior and functioning of students who are not experiencing success with universal and targeted interventions. Topics include wraparound planning for multiple life domains, interagency coordination, family involvement, community involvement, methods for changing behavior,

affect and cognitions, and evaluating the intensive system using databased decision making.

SE 5565 PBIS Summer Institute 3 Credits

Intensive weeklong institute of workshops and presentations from the training team at CEBIS, and experts in the field of emotionally behavior-disordered students. The purpose of the 40-hour institute is to continue the ongoing professional development activities of the participants on processes and strategies involved in PBIS.

SE 5566 PBIS: Targeted Approaches for Students 3 Credits at Risk

This course addresses targeted methods designed to enhance the emotional well-being and reduce the problem behavior of students who are at risk for school failure but who do not necessarily qualify for special education services. Using the Positive Behavioral Interventions and Support (PBIS) approach to systems change, students will learn how to create and nurture a problem-solving team of professionals who are responsible for developing evidence-based strategies for improving the behavior and academic achievement of students for whom universal, school-wide approaches have been insufficient. Topics include completing functional behavioral assessments of targeted students, creating behavior intervention plans based on functional behavioral assessments, designing and implementing targeted group interventions aimed at reducing problem behavior and increasing pro-social behavior and academic achievement of targeted students, and evaluating the targeted system using data-based decision making for improving practice.

SE 5568 PBIS: Facilitation Specialist as Coach and 3 Credits Resource Person

This course provides students with the collaboration and consultation skills necessary to enhance the emotional well-being and reduce the problem behavior of all students in schools, including those identified as emotionally disturbed under the Individuals with Disabilities Education Act (IDEA). Within the context of a Positive Behavioral Interventions and Support (PBIS) model, students will learn how to be a school-based PBIS coach in order to support the systems change process in their schools. Topics include the process of systems change, collaboration with families and community agencies, team development and building, data-based decision making, and nurturing the PBIS initiative.

SE 5570 Autism and Spectrum Disorders 3 Credits

This course will deal with the specifics of cognitive impairment focusing on mental retardation, autism, Asperger, PDD, communication disorders, and all their subgroups. Specific definitions, special education rights and legislation will be discussed in terms of these special populations. Assessment of intellectual functioning, assessment procedures, classroom adaptations, behaviors, causes and prevention, developing curriculum and goals, independent life skills, transitions to career, and functional life skills will be discussed in detail.

SE 5571 Identifying Students with Autism and 3 Credits Spectrum Disorders

The learner will gain knowledge related to the needs of students with Autism Spectrum Disorder, and will collaborate with teams to assess students to determine the existence of Autism Spectrum Disorder. Learners will incorporate the results and recommendations of edu-

cational assessments and develop appropriate treatment plans and a system for monitoring case management of students with Autism Spectrum Disorder.

SE 5572 Developmental Goal Writing and Evidence-Based Teaching with Strategies for Students with Autism

Learners will gain knowledge related to developmental theory and the use of empirical developmental intervention as a means of collecting data. The learner will develop measurable goals, create easy-to-use data collection sheets, and organize data efficiently. The learners will increase their understanding of evidence-based teaching strategies and interventions designed to positively affect the learning outcome of the student with autism and will incorporate this knowledge into applied teaching strategies.

Se 5573 Data Analysis for Autism and Spectrum 3 Credits Disorders

The learner will analyze and interpret raw data collected and use analyzed information to formulate new developmentally appropriate goals and objectives.

SE 5581 Technology for Diverse Learners 3 Credits

This course provides an overview of two federal laws (IDEA and NCLB) and examines the relationship between the Universal Design for Learning model and assistive technology. Students will be provided a hands-on experience on the assistive technology tools and online resources that can provide students with learning disabilities a set of effective learning strategies for reading, writing, organizing, note taking, researching, and presenting. Opportunities will be provided for students to develop classroom activities and curriculum planning guidelines for integrating assistive technology tools into a standards-based curriculum.

SE 5600 Language and Learning Disabilities 3 Credits

This introductory course will cover the following areas: definition of LD, reading problems, language deficits both oral and written, mathematics underachievement, social skills deficits, attention and behavioral problems, academic achievement, and co-morbidity with other disabilities, prevalence, environmental factors, standardized, criterion referenced, informal reading, curriculum-based measurement, and testing. Educational approaches such as explicit instruction, content enhancement, and placement alternatives will be explored. Current issues and future trends in the field of LD will be discussed.

SE 5601 Advanced Psycho Educational Assessment of 3 Credits Learning Disabilities and Exceptionalities

This course is designed to provide the student with advanced diagnostic skills in learning disabilities. Participants are expected to have some prior knowledge of standardized assessment practices, learning challenges of children, teaching methods, and curriculum in general and special education. A profile of specific learning disability characteristics will be presented with corresponding assessment methods including formal assessment, responsiveness to intervention models, diagnostic prescriptive teaching, and remedial programs. This course will present the above topics paying special attention to focusing on placing them within the context of the NCATE/CEC standards below. Specific evaluation methods to include standardized assessment (e.g.,

Woodcock-Johnson Psychoeducational Battery III, Wechsler Individual Achievement Test II, Responsiveness to Intervention, Curriculum Based Measurement, Visual Aural Digit Span Test, Jordan Left-Right Reversal Test, Test of Written Language 3, and Comprehensive Test of Phonological Processing (CTOPP).

SE 5750 Individual Research in Special Education 1-3 Credits

Designed so that students may pursue in-depth a personal interest in the field of special education. Students, working with a faculty advisor, carry out the research from design to completion. The final product must be approved by the project director.

SE 5760 Collaboration, Consultation, and Leadership 3 Credits in Special Education

This course is designed to assist participants in examining the nature of collaboration in organizations, the consultation process, and essential leadership skills in special education. Students will learn about the nature of collaboration and examine examples of effective collaboration skills, as well as participate in guided practice of those skills. Emphasis will be given to concepts of intervention, management models, and an analysis of the variety of special education needs. Prerequisites: SE 5300, SE 5400, SE 5600, SE 5770 and SE 6040.

SE 5765 Working with Families and Children: Ethical 3 Credits and Legal Issues

Focuses on the ethics of special education laws, regulations, and policies. Students will use case studies that pose ethical dilemmas in order to understand the complex issues underlying such issues as inclusion, labeling, IDEA, least restrictive environment (LSE) compliance, due process, parent involvement, awareness of ethical responsibilities, ethical decision making, confidentiality, record keeping, and informed consent. The spirit versus the letter and the morality of special education will also be explored. A special focus will be on transacting an ethic of care in school best practices that promote democratic decision making, advocacy, and the empowerment of parents.

SE 5770 Behavioral Disorders in School-aged Children 3 Credits

This course is designed to provide teachers with increased understanding of the needs of children who display maladaptive behaviors associated with conduct disorders in school settings. Students will investigate specific causes, diagnosis, assessment methods, interventions, etiology, co-morbidity, subtypes, pharmacotherapy, the role of the classroom teacher, and possible resources.

SE 5800 Practicum in Special Education 1–6 Credits

A supervised field experience in one of several cooperating institutions or agencies. The purpose is to gain meaningful work experience through applying knowledge learned in previous coursework to the onthe-job situation. Commitment includes a negotiated number of hours per week. Supervision is done by the institution or agency concerned and by PSU faculty.

SE 5821 Internship Seminar 1–9 Credits

A supervised field experience in one of several cooperating institutions. The purpose is to gain meaningful work experience through applying knowledge learned in coursework to the on-the-job situation. Commitment includes 12 hours per week within the school environment over three days, and one three-hour seminar per month.

Supervision is done by the cooperating school and overseen by PSU faculty.

SE 5910 Independent Study in Special Education 1–3 Credits

Enrichment of the background of students in education through the pursuit of a special topic pertinent to their interests and abilities. A chance for an in-depth study of a problem in the field of education. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

SE 6040 Curriculum Development in Special 3 Credits Education

This course is designed to assist candidates in acquiring the skills, knowledge, and competencies necessary for curriculum development as it relates to special education and the general education curricula. Each participant will have the opportunity to examine models of curriculum-based assessment designed to generate better educational programs for students with disabilities. Each student will demonstrate an understanding of the instructional process with emphasis on students with disabilities. Keys to this unerstanding will include management considerations, instructional practices, and evaluative and collaborative activities.

SE 7800 Special Educational Leadership Practicum 3-6 Credits

A collaborative supervised field experience in one of several cooperating institutions or agencies. The purpose is to gain meaningful work experience as a special education administrator through applying knowledge learned in coursework to on-the-job situations.

Social Studies Education

SSE 5010 Issues in Social Studies 3 Credits

Students will examine and apply common connections between multicultural and global education, needed to be successful in a culturally diverse society. The focus will be on developing global citizens through understanding underlying values and communication styles of cultural groups as well as on the interconnectedness of all individuals and groups and to understand how to develop interculturally competent global citizens.

SSE 5020 Technology in Social Studies 3 Credits

To utilize new technologies effectively, teachers need proficient training in technology and to be versed in the effective integration of technology into their instruction. Students will develop projects to demonstrate how to best leverage technology to support pedagogical approaches in the social studies classroom.

SSE 5030 Advanced Pedagogy in Social Studies 3 Credits

Addresses the challenges facing social studies educators in the 21st century with focus on advanced curriculum design and methods such as: facilitating classroom discussions, concept formation, classroom simulations, authentic intellectual work and social studies literacy. Special attention is given to design principles for instruction and the development of multiple forms of assessment.

SSE 5040 Theory and Research in Social Studies 3 Credits

Focuses on current research in the field of social studies education. Particular attention will be given to research methodologies used by leading scholars in social studies education through critical review of exemplary research. Students will develop annotated bibliographies to produce a literature review and theoretical framework for future research.

SSE 6010 Guided Inquiry in Social Studies 3 Credits

Formally and systematically, students investigate the questions, interests, concerns, problems, and challenges in the production of a Masters Thesis. During the course, the student will prepare the questions, rationale, methods, findings, and implications of the study. At the end, students will develop a proposal for their individual study.

SSE 6800 Social Studies Thesis 3 Credits

Guides the student through the production of a Masters Thesis. During the course, the student will finalize a draft of the thesis comprised of questions, rationale, methods, findings, and implications of the study. Prepares students to defend their thesis.

Sociology

SO 5140 Special Topics

Specialized topic chosen for Graduate Seminar by individual faculty. Scheduled as needed.

3 Credits

SO 5910 Independent Study 1–3 Credits

Independent study provides students with the opportunity to round out their background in sociology through reading and research that supplements previous coursework in the field. A research paper, periodic conferences, and an oral examination may be required. Consent of a faculty supervisor, the department chair, and the associate vice president for the College of Graduate Studies is required.

Spanish

SP 5910 Independent Study 1–3 Credits

A course of study to round out the student's background through systematic reading, intensive and extensive, to supplement coursework in the field. Selection of a reading list or a special project under faculty supervision. Consent of an appropriate faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

School Psychology

SY 6010 Introduction to School Psychology 3 Credits

This survey course will introduce students to the areas of assessment, treatment, and prevention of learning, behavior, and emotional problems in school-age children. Students will become familiar with a variety of psychological issues within a school environment. Students will become familiar with testing inventories as well as alternative ways of assessing children with difficulties. Ethical topics and procedures will be discussed. Students will be required to demonstrate professionalism, academic and personal integrity, and become familiar with the diverse roles and responsibilities of school psychologists. The iWebfolio will be introduced, and students will address the state standards for school psychology through the iWebfolio. The course has a 25-hour pre-practicum requirement.

SY 6200 Behavioral Assessment, Analysis, and 3 Credits Intervention

This course is designed to provide students with a clear, balanced presentation of the behavioral technology including theoretical paradigms, assessment methods, intervention planning and techniques, and the application of behavioral methodologies designed to increase prosocial effective behaviors and decrease and/or eliminate socially ineffective behaviors within the school setting. Prerequisite: SY 6010.

SY 6300 Social/Emotional/ Behavioral Assessment 3 Credits

To provide a clear, balanced presentation of the learner's social/emotional characteristics. The student will be introduced to the areas of assessment of behavior by interview, observation, and norm-referenced techniques. Functional behavior assessment will also be addressed. Objective and projective techniques will be introduced, and the student will have the opportunity to learn about the history and practical administration of these instruments. Prerequisite: SY 6010.

SY 6400 Administering Indivdual Intelligence Tests 3 Credits

Students will learn about the history and theories of intelligence testing. They will develop the skill to administer two norm-referenced intelligence tests (Child and Adult Editions of Wechsler Scales), interpret the results, and write and present cogent results of their findings as it relates to the child adolescent and their learning. This course prepares school psychology candidates for the internship where they will gain proficiency in assessing cognitive ability. Prerequisites: SY 6010 and admittance to the School Psychology program.

SY 6500 Educational Assessment and Consultation 3 Credits

This course prepares the school psychology student to become proficient in educational assessment, instructional interventions, and consultation. School psychology candidates will acquire skills in academic assessment, consultation, and prevention and intervention strategies. Students will learn to administer and interpret normative and criterion measures; prepare comprehensive case studies, which include the assessment, interpretation, intervention, and program monitoring of school-age children; conduct an evaluation of published curricula and utilize curriculum-based measurement techniques. Students will also become knowledgeable about ethical standards and principles related to assessment. Prerequisite: SY 6010.

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Sy 6700 Practicum I: Assessment, Intervention, 3 Credits and Consultation

This is a three-credit course involving 50 clock hours at a field site under the supervision of a certified school psychologist. It is intended for candidates to practice their skills in assessment, consultation, counseling, and prevention and intervention. An on-campus seminar will be given for candidates to demonstrate their skills and share their experiences. Typically, candidates would take SY 6400 Administering Individual Intelligence Tests concurrently with Practicum I. Candidates should arrange their practicum placement prior to the beginning of the course to ensure a full semester experience.

Sy 6710 Practicum II: Integration and Case Studies 3 Credits

This course involves 50 hours at a field site under the supervision of a certified school psychologist. It is intended for candidates to develop a comprehensive and holistic perspective that combines early intervention, prevention, counseling, assessment, consultation, community resources, and systems interventions as they relate to individual case studies. Candidates will follow two or more children encompassing the entire special education process from the pre-referral stage to placement progress monitoring, and documenting the entire sequence including the extent to which those children have demonstrated specific measurable outcomes. An on-campus seminar will be given for candidates to discuss their experiences during the steps of their case studies and to supplement their practicum experience with related readings and discussion. This practicum will accommodate both models of special education identification (traditional assessment and response to intervention). Candidates will also present videos of their consultation skills and demonstrate knowledge of the ability to plan, coordinate and implement a psychological services delivery model within a school setting that includes assessment, pre-referral problem solving, crisis intervention, mental health intervention, functional skill training, collaboration, consultation, referral and counseling. Candidates should arrange their practicum placement six months prior to the beginning of the course to ensure a full semester experience.

Sy 6800 School PsychologyInternship and Seminar 6-12 Credits

As the culminating component in the school psychology program, this field experience will be done in a public school setting under the supervision of a certified school psychologist. Students will also attend a seminar on campus to discuss their experiences, present psychological evaluations and interventions, and engage in mutual problem solving relative to dilemmas and issues encountered in the field experience. Prerequisites include completion of all required courses and permission of the internship instructor. Students are required to take the Praxis II exam.

SY 6910 Independent Study in School Psychology 1–3 Credits

Enrichment of the background of students in school psychology through the pursuit of a special topic pertinent to their interests and abilities. This course is an opportunity for an in-depth study of a technique or problem in the field. Consent of a faculty supervisor, the department chair, and the associate registrar for the College of Graduate Studies is required.

Theatre

TH 5910 Independent Study

1-3 Credits

Advanced work in a specialized area, selected and pursued in consultation with a faculty advisor. Consent of a faculty supervisor, department chair, and the associate vice president for the College of Graduate Studies is required.

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