Plymouth State University
College of Graduate Studies
2006-2008 Graduate Catalog

Visit the CollegeSource Online website at http://www.collegesource.org
Copyright & Disclaimer
Information


CollegeSource digital catalogs are derivative works owned and copyrighted by CollegeSource, Inc. and Career Guidance Foundation. Catalog content is owned and copyrighted by the appropriate school.

While CollegeSource, Inc. and Career Guidance Foundation provides information as a service to the public, copyright is retained on all digital catalogs.

You may:

- print copies of the information for your own personal use,
- store the files on your own computer for personal use only, or
- reference this material from your own documents.

CollegeSource, Inc. and Career Guidance Foundation reserves the right to revoke such authorization at any time, and any such use shall be discontinued immediately upon written notice from CollegeSource, Inc. and Career Guidance Foundation.

Disclaimer

CollegeSource digital catalogs are converted from either the original printed catalog or electronic media supplied by each school. Although every attempt is made to ensure accurate conversion of data, CollegeSource, Inc. and Career Guidance Foundation and the schools which provide the data do not guarantee that this information is accurate or correct. The information provided should be used only as reference and planning tools. Final decisions should be based and confirmed on data received directly from each school.

This means you may NOT:

- distribute the digital catalog files to others,
- “mirror” or include this material on an Internet (or Intranet) server, or
- modify or re-use digital files

without the express written consent of CollegeSource, Inc. and Career Guidance Foundation and the appropriate school.
Through our graduate programs, we have the opportunity to reflect on past and present experiences, on who we were, who we are, and WHO WE CAN BE as professionals, educators and scholars. Our programs and coursework provide the skills, knowledge and drive to be creative and to make changes, to want to succeed and help others reach success.

Barbara Lopez-Mayhew, Ph.D.
DEPARTMENT CHAIR,
ASSOCIATE PROFESSOR OF SPANISH
Overview

Founded in 1871, Plymouth State University of the University System of New Hampshire is accredited at the national, regional and state levels and has been recognized as one of the “Best in the Northeast” by the Princeton Review. Plymouth State is located in the Lakes and White Mountain Regions of New Hampshire, two hours from Boston, Mass., and Portland, Maine.

The College of Graduate Studies at Plymouth State University offers master’s and post-master’s degrees, professional certificates and educator certifications in the arts, sciences, business and education. Doctoral study is available through unique partnerships with accredited institutions. Coursework in areas such as best practices in education, curriculum and assessment, leadership and literacy is offered online, on campus or in a combination of summer study and specialized courses held at your school.

Approximately 2,000 part-time graduate students, ranging in age from 21 to 79, are enrolled in over 75 diverse programs. Our faculty members are distinguished leaders and researchers in their fields, and many of our students and alumni have received state and regional awards for teaching and leadership.
Welcome from the President of Plymouth State University

Dear PSU Graduate Student,

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

This is a very 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, design an interdisciplinary program, enter one of many exciting master’s programs, earn a Certificate of Advanced Graduate Studies, or participate in our new collaborative Doctor of Arts degree, we have opportunities for you.

As a graduate student at PSU, you 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
Table of Contents

Overview of the PSU College of Graduate Studies 1
Welcome from the President of PSU 2
Table of Contents 3
Graduate Degrees and Areas of Study 7
Graduate Program Coordinators and Advisors 10
Academic Calendar 16
Plymouth State University Introduction 17
   Accreditation 17
   Mission 18
   Values 18
   Vision 19
   History of Plymouth State University 19
   The Main Campus 20
   Off-Campus Sites 21
Graduate Faculty 21
USNH Policies and Protocols 21
   A Fair and Safe Learning Environment 21
   Non-Discrimination 21
   Sexual Harassment 21
   Privacy and Disclosure of Education Records 22
   Drug-Free Environment 22
   Smoking 22
   Right to Know about Toxic Substances 22
PSU Graduate Academic Policies and Procedures 22
   Academic Integrity 22
   Graduate Course Schedule 22
   Graduate Course Enrollment and Course Load 23
   Course Registration and Payment 23
   Overdue Account and Collection Policy, PSU Graduate Student 23
   Course Add, Drop and Withdrawal Policy 24
   Course Registration Refund Policy 24
   Grading System 24
   Incompletes and Extensions 25
   Overload 25
   Independent Study 25
   Individual Enrollment 25
   Internships/Graduate Practicum 25
   Class Cancellation 26
Graduate Program Completion and Degree Conferral 26
   Graduate Commencement Ceremony 26
   Academic Support and Student Services 27
      Banner Information System 27
      Vehicle/Parking Permits 27
      Identification Cards 27
      Student Handbook 27
      Housing 27
      PASS 27
      The Writing and Reading Center 27
      Math Activities Center 28
Scholarly Societies 28
General Financial Information 28
   2006–2008 Tuition and Fees 28
   Statement of Financial Responsibility 28
   Residency Status 28
Financial Aid 29
   Preferred Filing Date 29
   Application Process 29
   Satisfactory Progress 30
   Other Recipient Responsibilities 30
   Return of Federal Stafford Financial Aid 31
   Appeals 31
   Scholarships 31
Graduate Assistantships, Teaching Fellowships and Research Assistantships 31
Graduate Course Policies 32
   Inactivity or Withdrawal from Graduate Program 32
   Program of Study 32
   Advising 33
   Graduate Council 33
   Graduate Study Opportunities for Undergraduate Students 33
Master of Arts in Teaching 34
M.A.T. in Art Education (K–2) 34
   Program Objectives 34
   Admission Requirements 35
   Application Process 35
   Program of Study 35
M.A.T. in Science Education 35
   Program Objectives 36
   Admission Requirements 36
   Application Process 36
   Applicants from Foreign Countries 36
   Program of Study 36
Master of Business Administration 37
MBA Program Highlights 37
Admission to the MBA Program 38
Application Process 38
Types of Admittance 38
Admission Regulations 38
Applicants from Foreign Countries 39
Common Professional Component 39
Course Policies 39
Audits 39
Transfer Credits 39
MBA Grading System 40
Program of Study 40
Required Functional Core Courses 40
Elective Areas 40
Accounting 40
Economics 40
General Management 40
Health Care Administration 40
Human Resources 40
Marketing 40
Certificate/Concentration Programs 41
Health Care Administration 41
The Human Side of Enterprise 41
Investment and Finance 41
Organizational Communication 41
Small Business and Entrepreneurship 41
Strategic Marketing Management 41
Master’s Research Project Option 42
Small Business Institute 42
Twelve Month Program 42
Degree Requirements 42
Completion Deadlines 42

Master of Education 42
Curriculum 43
Program Goals 43
Conceptual Framework for Teacher Education 43
International Outreach 46
Graduate Courses at Area Schools 46
Program Content 46
Admission to Master of Education Program 46
Grading System 48
Degree Requirements 48
Thesis Option 48
Transfer Credits 48
Course Audits 49
M.E.D. DEGREE PROGRAMS AND CONCENTRATIONS 49
M.Ed. in Athletic Training 49
Admission 49
Prerequisites 49
Program of Study 49
Entry-Level Concentration 50
Advanced Master’s: Higher Education Concentration 50
Advanced Master’s: Sports Medicine Concentration 50
M.Ed. in Counselor Education 51
Concentrations 51
Screening and the Extended Admission Process 51
School Counseling Concentration K–12 certification 53
Mental Health Counseling Concentration 53
School Psychologist Concentration 53
Self Designed Concentration 55
Counselor Education Certificate Programs 55
Conflict in Families Certificate 55
Parenting Education Certificate 55
Play Therapy Certificate 56
M.Ed. in Educational Leadership 56
School Principal Concentration (with certification) 57
Special Education Administrator Concentration (with certification) 57
Athletic Administration Concentration 58
M.Ed. in English Education 58
Secondary (5–12) Teacher Certification 58
Teaching of Writing Concentration 59
Plymouth Writing Project 59
M.Ed. in Environmental Science 61
M.Ed. in Health Education 61
School Health Concentration 61
Health Promotion Concentration 62
Eating Disorders Institute 63
Self Designed M.Ed. in Health Education, Eating Disorders Institute 63
Self Designed M.Ed. Counselor Education, Eating Disorders Institute 63
PATH: Paths and Approaches to Transformation and Healing 64
PATH Institute Certificate 64
M.Ed. in Health Education with PATH Institute 64
M.Ed. in Heritage Studies 64
M.Ed. Integrated Arts Programs 65
M.Ed. in Mathematics Education 5–8 or 7–12 certification 67
M.Ed. in Music Education 68
Instrumental Music Education Concentration 68
Music Educator K–12 Certification 68
M.Ed. in Reading and Writing Specialist 69
M.Ed. Elementary, Secondary or K–2 Self-Designed Programs
  Adult Learning and Development 71
  Adventure Learning 71
  Athletic Administration 71
  Curriculum and Instruction 71
  Middle Level Education 71
M.Ed. Special Education Programs 72
M.Ed. in K–12 Education: General Special Education Concentration 72
Emotional Handicaps K–12 Certification 72
Educational Leadership: Special Education Administration 73
Learning Disabilities Specialist K–12 Certification 73
Graduate Certificate in Positive Behavioral Interventions and Support (PBIS) 74
Teacher Preparation and Certification Programs 75
M.Ed. in K–12 Education 75
Art Education Certification 75
K–12 Art Certification (without master’s degree) 76
Computer Technology Educator Certification 76
French Education Certification 77
Health Education Certification 77
Library Media Specialist Certification 77
Physical Education Certification 78
Spanish Education Certification 78
Special Education Certification 79
TESOL K–12 Educator Concentration 79
M.Ed. in Elementary Education 80
Early Childhood Education 80
K–8 Elementary Education Certification 80
M.Ed. in Secondary Education 80
Biology Education: 7–12 Education Certification 80
General Science Education: 5–9 Certification 81
Physical Science Education: 7–12 Certification 82
Social Studies Education: 5–12 Certification 82
EDUCATION AND SPECIALIST CONVERSION PROGRAMS 83
Educator Certifications 83
  Educator Certification Policies 83
  Teacher Certification Options 84
  Specialist Certification Options (post master’s) 84
Certificate Programs and Institutes 84

Master of Science 85
M.S. in Applied Meteorology 85
  MSAM Program Highlights 85
  Admission to the MSAM Program 85
  Application Requirements 85
  Applicants from Foreign Countries 85
  Types of Admittance 86
  Admission Regulations 86
  Course Policies 86
  MSAM Grading System 87
  Program of Study/Degree Requirements 87
  Completion Deadlines 88
M.S. in Biology 88
  Biology Program Objectives 88
  Admission Standards for M.S. in Biology 88
  Degree Requirements 89
  Program of Study 89
M.S. in Criminal Justice 90
  Program of Study 90
M.S. in Environmental Science and Policy 90
  Program of Study 91
M.S. in Science Education 92
  Objectives 92
  Admission to the M.S. in Science Education 92
  Application Requirements 92
  Applicants from Foreign Countries 93
  Program of Study 93
Certificate of Advanced Graduate Studies 93
CAGS in Educational Leadership 93
  Arts, Leadership and Learning Strand 94
  Administration and Curriculum/Assessment Strand 94
  Counselor Education and School Psychology Strand 95
  School Counseling 95
  Mental Health Counseling 95
  Counselor Education: Self Designed School Psychology 96
  Professional Certification Strands 97
  Reading and Writing Specialist 97
  Superintendent of Schools 97
  Special Education Administration 98
  School Principal 98
  Doctoral Program Partnerships 98
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Courses and Descriptions</td>
<td>100</td>
</tr>
<tr>
<td>Administration and Educational Leadership</td>
<td>100</td>
</tr>
<tr>
<td>Arts and Integrated Arts</td>
<td>104</td>
</tr>
<tr>
<td>Athletic Training</td>
<td>106</td>
</tr>
<tr>
<td>Business and Economics</td>
<td>109</td>
</tr>
<tr>
<td>Counseling and Psychology</td>
<td>114</td>
</tr>
<tr>
<td>Computer Education</td>
<td>119</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>121</td>
</tr>
<tr>
<td>Education and Special Education</td>
<td>122</td>
</tr>
<tr>
<td>English</td>
<td>132</td>
</tr>
<tr>
<td>Health Education</td>
<td>135</td>
</tr>
<tr>
<td>Heritage Studies and Social Science</td>
<td>139</td>
</tr>
<tr>
<td>Language and Linguistics</td>
<td>142</td>
</tr>
<tr>
<td>Library Media</td>
<td>143</td>
</tr>
<tr>
<td>Mathematics</td>
<td>144</td>
</tr>
<tr>
<td>Music and Theatre</td>
<td>146</td>
</tr>
<tr>
<td>Reading and Writing</td>
<td>147</td>
</tr>
<tr>
<td>Sciences</td>
<td>149</td>
</tr>
<tr>
<td>Outreach and Partnerships</td>
<td>162</td>
</tr>
<tr>
<td>Directories</td>
<td>164</td>
</tr>
<tr>
<td>PSU Administration</td>
<td>164</td>
</tr>
<tr>
<td>Graduate Faculty and Adjunct Faculty</td>
<td>165</td>
</tr>
<tr>
<td>USNH Board of Trustees</td>
<td>179</td>
</tr>
<tr>
<td>Index</td>
<td>180</td>
</tr>
<tr>
<td>Campus Map</td>
<td>184</td>
</tr>
</tbody>
</table>
Plymouth State University
Graduate Degrees and Areas of Study

MASTER OF ARTS IN TEACHING
ART EDUCATION K–12

SCIENCE TEACHING
• Biology Education 7–12
• General Science Education 7–12
• Physical Science Education 7–12

MASTER OF BUSINESS ADMINISTRATION
GENERAL MANAGEMENT
• Health Care Administration
• Investment and Finance
• Organizational Communication
• Small Business and Entrepreneurship
• The Human Side of Enterprise
• Strategic Marketing Management

MASTER OF EDUCATION MAJORS
AND CONCENTRATIONS
ATHLETIC TRAINING
• Entry Level
• Advanced Master’s in Higher Education
• Advanced Master’s in Sports Medicine
• Self Designed

COUNSELOR EDUCATION
• School Counseling (with K–12 certification)
• Mental Health Counseling
• School Psychologist (with K–12 certification)
• Self Designed

EDUCATIONAL LEADERSHIP
• Athletic Administration
• School Principal (with K–12 certification)
• Special Education Administrator (with or without certification)
• Self Designed

ELEMENTARY EDUCATION
(with or without certification)
• Computer Technology Education
• Early Childhood Education
• K–8 Elementary Education
• Self Designed (focus areas include curriculum and instruction, early childhood, middle level education and adventure learning)

ENGLISH EDUCATION
• Teaching of Writing
• English Education, 5–12
• Self Designed

HEALTH EDUCATION
• Health Education (with or without K–12 certification)
• Health Promotion
• Self Designed

HERITAGE STUDIES
• 5–12 Social Studies Education (with or without K–12 certification)
• Self Designed

INTEGRATED ARTS
K–12 EDUCATION (with or without K–12 certification)
• Art Education
• Computer Technology
• Emotional Handicap
• French Education
• General Special Education
• Health Education
• Learning Disabilities
• Library Media Specialist
• Music Education
• Physical Education
• Spanish Education
• Self Designed
• TESOL Education

MATHEMATICS EDUCATION (with or without educator certification)
• 5–8 Middle School
• 7–12 Secondary School
• Self Designed
MUSIC EDUCATION
- Instrumental Music Education
- Music Education K–12 certification
- Self Designed

READING AND WRITING SPECIALIST (with or without K–12 certification)

SECONDARY EDUCATION (with or without educator certification)
- Biology Education 7–12
- Computer Technology Educator
- Computer Technology Specialist
- English Education 5–12
- General Science 5–9
- Mathematics Education 5–8, 7–12
- Physical Science Education 7–12
- Social Studies Education 5–12
- Self-Designed

EDUCATOR CERTIFICATION
Art Education K–12
Biology Education 7–12
Computer Technology Education K–12
Early Childhood Education N–3
Elementary Education K–8
Emotional Handicaps K–12
ESOL Education K–12
English Education 5–12
French Education K–12
General Special Education K–12
General Science Education 5–9
Health Education K–12
Learning Disabilities K–12
Library Media Specialist K–12
Mathematics 5–8 and 7–12
Music Education K–12
Physical Education K–12
Physical Science Education 7–12
Social Science Education 5–12
Spanish Education K–12

MASTER OF SCIENCE
- Applied Meteorology
- Biology
- Criminal Justice
- Environmental Science and Policy
- Science Education
  - Biology Education Certification 7–12
  - General Science Education 5–9
  - Physical Science Education 7–12

CERTIFICATE OF ADVANCED GRADUATE STUDIES
EDUCATIONAL LEADERSHIP
Concentrations in:
- Administration/Curriculum and Assessment
- Arts, Leadership and Learning
- Counseling/Human Resources Management
- Mental Health Counseling
- Reading Specialist K–12
- School Counseling K–12
- School Principal K–12
- School Psychology K–12
- School Superintendent K–12
- Self Designed
- Special Education Administration K–12

Doctoral Options (in collaboration with Argosy University of Sarasota, Sarasota, Fla., or Franklin Pierce College in Concord, Lebanon and Portsmouth, N.H.)

PROFESSIONAL AND SPECIALIST CERTIFICATIONS
Requiring a master’s degree
- School Counselor K–12
- School Principal K–12
- School Psychologist K–12
- Special Education Administration K–12
- Reading and Writing Specialist K–12

NON-DEGREE CERTIFICATES
- Athletic Administration
- Conflict in Families
- Eating Disorders Institute
- Emotional and Behavioral Disorders (post master’s)
- Health Care Administration
- The Human Side of Enterprise
- Investment and Finance
- Organizational Communication
- Parenting Education
• Paths and Approaches to Transformation and Healing (PATH) Institute
• Positive Behavioral Interventions and Support (PBIS) Institute
• Play Therapy (post master’s)
• School Psychology (post master’s)
• Small Business and Entrepreneurship
• Strategic Marketing Management
• Teaching English to Speakers of Other Languages (TESOL)

PLYMOUTH STATE UNIVERSITY
COLLEGE OF GRADUATE STUDIES
Location:
23 Avery Street
Plymouth, N.H. 03264

Mailing:
MSC 11
17 High Street
Plymouth, NH 03264-1595
(800) 367-4723

Fax: (603) 535-2572
E-mail: forgrad@plymouth.edu
Advising e-mail: grad-advising@plymouth.edu
Web site: www.plymouth.edu/graduate
Graduate Program Coordinators and Advisors

**MASTERS OF ARTS IN TEACHING ART EDUCATION**

Dr. Cynthia Vasck
Art Education K-12  
*Department Chair, Professor of Art Education*

Dr. Cynthia Vasck
Art Education K-12  
*Department Chair, Professor of Art Education*
cynthiav@plymouth.edu
(603) 535-2649

**MASTERS OF ARTS IN TEACHING SCIENCE**

Dr. Warren Tomkiewicz
Biology Education 7–12, General Science Education 5–9  
*Department Chair, Professor of Natural Science Education*

Dr. Warren Tomkiewicz
Biology Education 7–12, General Science Education 5–9  
*Department Chair, Professor of Natural Science Education*
warrent@plymouth.edu
(603) 535-2573

Dr. Mark Turski
Physical Science Education 7–12  
*Professor of Natural Science Education*

Dr. Mark Turski
Physical Science Education 7–12  
*Professor of Natural Science Education*
markt@plymouth.edu
(603) 535-2749

Dr. Mary Ann McGarry
General Science Education 5–9

Dr. Mary Ann McGarry
General Science Education 5–9
*mccgarry@plymouth.edu*
(603) 535-3209

**MASTERS OF BUSINESS ADMINISTRATION**

**GENERAL MANAGEMENT**

Dr. Trent Boggess
*Department Co-Chair, Professor of Economics*
trentb@plymouth.edu
(603) 535-2414

Mr. Craig Zamzow, MBA, CSBC
*Contract Faculty, Business*
czamzow@plymouth.edu
(603) 535-3020

**MASTER OF EDUCATION**

**ADULT LEARNING AND DEVELOPMENT**

Bernard Keenan  
*Dean of External Programs, Granite State College*

Bernard.Keenan@granite.edu
(603) 447-3970

**ART EDUCATION**

Dr. Cynthia Vasck
*Department Chair, Professor of Art Education*
cynthiav@plymouth.edu
(603) 535-2649

Dr. William Haust
*Professor of Art Education*
bhaust@plymouth.edu
(603) 535-3001

**ATHLETIC TRAINING**

Dr. Marjorie King
*Assistant Professor of Athletic Training*

Dr. Marjorie King
*Assistant Professor of Athletic Training*
making1@plymouth.edu
(603) 535-3108

**BIOLOGY EDUCATION**

Dr. Warren Tomkiewicz
*Department Chair, Professor of Natural Science Education*

Dr. Warren Tomkiewicz
*Department Chair, Professor of Natural Science Education*
warrent@plymouth.edu
(603) 535-2573

**COMPUTER TECHNOLOGY**

Dr. Royce Robertson
*Assistant Professor of Curriculum and Instruction*

Dr. Royce Robertson
*Assistant Professor of Curriculum and Instruction*
rrobertson@plymouth.edu
(603) 535-3002

**COUNSELING EDUCATION**

Dr. Gary E. Goodnough
*Professor of Counselor Education*

Dr. Gary E. Goodnough
*Professor of Counselor Education*
ggoodno@plymouth.edu
(603) 535-2821
EARLY CHILDHOOD AND N–3 CERTIFICATION
Dr. Gerard Buteau
Associate Professor of Education
gbuteau@plymouth.edu
(603) 535-2641

EDUCATIONAL LEADERSHIP
Dr. Marianne M. True
Associate Professor of Education
mtrue@plymouth.edu
(603) 535-2381

ENGLISH EDUCATION – TEACHING WRITING
Dr. Meg J. Petersen
Professor of English
megp@plymouth.edu
(603) 535-2684

GENERAL SCIENCE 5–9
Dr. Warren Tomkiewicz
Department Chair, Professor of Natural Science Education
warrent@plymouth.edu
(603) 535-2573

HEALTH EDUCATION
Dr. Irene Cucina
Assistant Department Chair, Associate Professor of Health and Physical Education
icucina@plymouth.edu
(603) 535-2517

HERITAGE STUDIES
Dr. Stacey Yap
Professor of Anthropology-Sociology
staceyy@plymouth.edu
(603) 535-2333

HUMAN RELATIONS COUNSELING
Dr. Gail Mears
Associate Professor of Counselor Education
gmears@plymouth.edu
(603) 535-2485

INTEGRATED ARTS
Dr. Patricia Lindberg
Professor of Education and Integrated Arts
plindber@plymouth.edu
(603) 535-2647

LANGUAGE AND LINGUISTICS
Dr. Barbara Lopez-Mayhew
Spanish and French Certification K–12
Department Chair, Associate Professor of Spanish
blopezmayhew@plymouth.edu
(603) 535-2834

Dr. Gaye Gould
TESOL Education Certification K–12
Assistant Professor of Linguistics/ESL
gegould@plymouth.edu
(603) 535-2370

LIBRARY MEDIA SPECIALIST
Elaine Allard, MLIS
Associate Professor of Library and Information Science
eallard@plymouth.edu
(603) 535-2458

MATHEMATICS
Dr. Brian P. Beaudrie
Associate Professor of Mathematics Education 7–12
bpbeaudrie@plymouth.edu
(603) 535-3116

MENTAL HEALTH COUNSELING
Dr. Gail F. Mears
Associate Professor of Counselor Education
gmears@plymouth.edu
(603) 535-2485

MUSIC EDUCATION
Dr. Gary Corcoran
Instrumental Music Education
Professor of Music, Band Director
garyc@plymouth.edu
(603) 535-2495

Dr. Jonathan C. Santore
Music Education Certification
Department Chair, Professor of Music
jsantore@plymouth.edu
(603) 535-2232
PARTNERSHIPS
Cheryl Baker, CAGS
Adventure Learning, Middle Level Education, UVTI and other partnerships
Director of Graduate Recruitment and Outreach
cbaker@plymouth.edu
(603) 535-2737

PHYSICAL EDUCATION
Dr. Irene Cucina
Assistant Department Chair, Associate Professor of Health and Physical Education
icucina@plymouth.edu
(603) 535-2517

PHYSICAL SCIENCE EDUCATION 7–12
Dr. Mark Turski
Professor of Natural Science Education
markt@plymouth.edu
(603) 535-2749

READING AND WRITING SPECIALIST
Sandy Tilton
Graduate Adjunct Faculty
tilsm@metrocast.net
(603) 535-2636

Dr. Dennise M. Maslakowski
Associate Vice President for the College of Graduate Studies
dmmaslakowski@plymouth.edu
(603) 535-2636

SCHOOL COUNSELING
Dr. Gary E. Goodnough
Professor of Counselor Education
ggoodno@plymouth.edu
(603) 535-2821

SCHOOL PSYCHOLOGIST
Dr. Leo R. Sandy
Professor of Counselor Education
lsandy@plymouth.edu
(603) 535-2287

SELF DESIGNED
Blakeman H. Allen
Director of Pakistani Institute, Graduate Adjunct Faculty, Self Designed Program Coordinator, Heritage Studies option
ballen@plymouth.edu
(603) 535-2636

Cheryl Baker, CAGS
Adventure Learning, Middle Level Education, UVTI and Partnerships
Director of Graduate Recruitment and Outreach
cbaker@plymouth.edu
(603) 535-2737

Dr. Irene Cucina
Athletic Administration
Assistant Department Chair, Associate Professor of Health and Physical Education
icucina@plymouth.edu
(603) 535-2517

Bernard Keenan
Adult Learning and Development
Dean of External Programs, Granite State College
Bernard.Keenan@granite.edu
(603) 447-3970

Dr. Kathleen Norris
Director of Graduate Programs, Assessment and Admissions
knorris@plymouth.edu
(603) 535-3023

SOCIAL SCIENCE EDUCATION
Dr. Stacey Yap
Professor of Anthropology-Sociology
staceyy@plymouth.edu
(603) 535-2333

SPECIAL EDUCATION, LEARNING DISABILITIES AND EMOTIONAL HANDICAPS
Dr. Marcel Lebrun
Assistant Professor of Curriculum and Instruction
mlebrun@plymouth.edu
(603) 535-2288
Dr. Dennise M. Maslakowski  
Associate Vice President for the College of Graduate Studies  
dmmaslakowski@plymouth.edu  
(603) 535-2636

SPECIAL EDUCATION ADMINISTRATION  
Dr. Dennise M. Maslakowski  
Associate Vice President for the College of Graduate Studies  
dmmaslakowski@plymouth.edu  
(603) 535-2636

TEACHER CERTIFICATION  
Dr. Kathleen Norris  
Teacher Certification 7–12 and K–12  
Director of Graduate Programs, Assessment and Admissions  
knorris@plymouth.edu  
(603) 535-3023

Dr. Kimberly Williams  
Teacher Certification K-8  
Associate Professor of Curriculum and Instruction  
kmwilliams3@plymouth.edu  
(603) 535-3191

MASTER OF SCIENCE  
APPLIED METEOROLOGY  
Dr. James Koermer  
Professor of Meteorology  
koermer@plymouth.edu  
(603) 535-2574

Dr. Lourdes Aviles  
Assistant Professor of Meteorology, Faculty-in-Residence  
lavilesbramer@plymouth.edu  
(603) 535-3189

Brendon Hoch, M.S.  
Meteorology Technical Manager, Graduate Adjunct Faculty  
bhoch@plymouth.edu  
(603) 535-2818

Dr. Eric Hoffman  
Associate Professor of Meteorology  
ehoffman@plymouth.edu  
(603) 535-2321

Dr. Samuel Miller  
Contract Faculty, Meteorology  
stmiller@plymouth.edu  
(603) 535-2811

Dr. Joseph Zabransky  
Professor of Meteorology  
zab@plymouth.edu  
(603) 535-2271

BIOLOGY  
Dr. Len Reitsma  
Department Chair, Professor of Zoology  
leonr@plymouth.edu  
(603) 535-2558

Dr. Christopher Chabot  
Professor of Biology  
chrisc@plymouth.edu  
(603) 535-2864

Dr. Fred Prince  
Professor of Anatomy  
fprince@plymouth.edu  
(603) 535-2253

CRIMINAL JUSTICE  
Dr. David Mackey  
Department Chair, Associate Professor of Criminal Justice  
dmackey@plymouth.edu  
(603) 535-3198

ENVIRONMENTAL SCIENCE AND POLICY  
Dr. Steve Kahl  
Graduate Faculty, Director of the Center for the Environment  
jskahl@plymouth.edu  
(603) 535-3179
Dr. Brian Eisenhauer  
**Assistant Professor of Sociology, Associate Director of the Center for the Environment**  
bweisenhauer@plymouth.edu  
(603) 535-2497

Dr. Mary Ann McGarry  
**Graduate Faculty, Program Coordinator for Environmental Science and Policy**  
mmcgarry@plymouth.edu  
(603) 535-3209

Dr. Kevin McGuire  
**Research Assistant, Professor of Hydrology**  
kmcguire@plymouth.edu  
(603) 535-3180

Dr. Michael Prentice  
**Graduate Adjunct Faculty**  
mlprentice@plymouth.edu  
(603) 535-3249

Dr. Mark Okrant  
**Professor of Geography and Tourism Development**  
mokrant@plymouth.edu  
(603) 535-2364

Dr. Kerry Yurewicz  
**Assistant Professor of Ecology**  
klyurewicz@plymouth.edu  
(603) 535-3197

**SCIENCE EDUCATION**  
Dr. Warren Tomkiewicz  
**Department Chair, Professor of Natural Science Education**  
warrent@plymouth.edu  
(603) 535-2573

**CERTIFICATE OF ADVANCED GRADUATE STUDIES (CAGS)**  
**Program Coordinator:**  
Dr. Leo Corriveau  
**Executive Director for the Certificate of Advanced Graduate Studies Program**  
lcorriveau@plymouth.edu  
(603) 535-3145

**Program Concentration Coordinators:**  
**ARTS, LEADERSHIP AND LEARNING**  
Dr. Patricia Lindberg  
**Professor of Education and Integrated Arts**  
plindber@plymouth.edu  
(603) 535-2647

Dr. Cynthia Vasak  
**Department Chair, Professor of Art Education**  
cynthiav@plymouth.edu  
(603) 535-2649

**ADMINISTRATION AND CURRICULUM ASSESSMENT**  
Dr. Leo Corriveau  
**Executive Director for the Certificate of Advanced Graduate Studies Program**  
lcorriveau@plymouth.edu  
(603) 535-3145

**ATHLETIC ADMINISTRATION**  
Dr. Irene Cucina  
**Assistant Department Chair, Associate Professor of Health and Physical Education**  
icucina@plymouth.edu  
(603) 535-2517

**COUNSELING EDUCATION**  
Dr. Gary E. Goodnough  
**Professor of Counselor Education**  
ggoodno@plymouth.edu  
(603) 535-2821

**COUNSELING – SELF DESIGNED**  
Dr. Gail F. Mears  
**Professor of Counselor Education**  
gmears@plymouth.edu  
(603) 535-2485

**DOCTORAL PROGRAM – ARGOSY UNIVERSITY**  
Dr. Kathleen Norris  
**Director of Graduate Programs, Assessment and Admissions**  
knorris@plymouth.edu  
(603) 535-3023
DOCTORAL PROGRAM – FRANKLIN PIERCE COLLEGE
Dr. Dennise M. Maslakowski
Associate Vice President for the College of Graduate Studies
dmmaslakowski@plymouth.edu
(603) 535-2636

MENTAL HEALTH COUNSELING
Dr. Gail F. Mears
Associate Professor of Counselor Education
gmears@plymouth.edu
(603) 535-2485

SCHOOL COUNSELING
Dr. Gary E. Goodnough
Professor of Counselor Education
ggoodno@plymouth.edu
(603) 535-2821

SCHOOL PRINCIPAL
Dr. Marianne M. True
Associate Professor of Education
mtrue@plymouth.edu
(603) 535-2660

SCHOOL PSYCHOLOGIST
Dr. Leo R. Sandy
Professor of Counselor Education
lsandy@plymouth.edu
(603) 535-2287

SCHOOL SUPERINTENDENT
Dr. Leo Corriveau
Executive Director for the Certificate of Advanced Graduate Studies Program
lcorriveau@plymouth.edu
(603) 535-3145

SPECIAL EDUCATION K–12 AND SPECIAL EDUCATION ADMINISTRATION K–12
Dr. Dennise M. Maslakowski
Associate Vice President for the College of Graduate Studies
dmmaslakowski@plymouth.edu
(603) 535-2636
Academic Calendar 2006–2008

**FALL TERM 2006**

Term begins: September 1
Labor Day holiday (no classes): September 4
College of Graduate Studies – Open House: September 30
Deadline to petition to graduate on December 31, 2006
Deadline to petition to graduate on December 31, 2006
Columbus Day holiday (no classes): October 9
Veterans Day holiday (no classes): November 10
Thanksgiving Recess: November 22–24
Classes resume: November 27
Term ends: November 30

**WINTER TERM 2006–2007**

Term begins: December 1
Fall Term grades due to Registrar’s Office: December 7
Winter Holiday (no classes): Dec. 25–Jan. 1
Deadline to petition to graduate on May 12, 2007
Classes resume: January 2
Martin Luther King Jr. Day (no classes): January 15
Term ends: February 28

**SPRING TERM 2007**

Term begins: March 1
Winter Term grades due to Registrar’s Office: March 7
Spring Break (no classes): March 19–23
Classes resume: March 26
Deadline to petition to graduate on August 31, 2007
Graduate Commencement (10 a.m.): May 1
Memorial Day holiday (no classes): May 28
Term ends: June 30

**SUMMER TERM 2007**

Term begins: July 1
Independence Day holiday (no classes): July 4
Spring Term grades due to Registrar’s Office: July 9
Term ends: August 31

**FALL TERM 2007**

Term begins: September 1
Labor Day holiday (no classes): September 3
Summer Term grades due to Registrar’s Office: September 10
Deadline to petition to graduate on December 31, 2007
Columbus Day holiday (no classes): October 8
Veterans Day holiday (no classes): November 12
Thanksgiving Recess begins: November 21–23
Classes resume: November 26
Term ends: November 30

**WINTER TERM 2007–2008**

Term begins: December 1
Fall Term grades due to Registrar’s Office: December 7
Winter Holiday (no classes): Dec. 24–Jan. 1
Deadline to petition to graduate on May 10, 2008
Classes resume: January 2
Martin Luther King Jr. Day (no classes): January 14
Term ends: February 29

**SPRING TERM 2008**

Term begins: March 1
Winter Term grades due to Registrar’s Office: March 7
Spring Break (no classes): March 17–21
Classes resume: March 24
Graduate Commencement (10 a.m.): May 10
Memorial Day holiday (no classes): May 26
Term ends: June 30

**SUMMER TERM 2008**

Term begins: July 1
Independence Day holiday (no classes): July 4
Spring Term grades due to Registrar’s Office: July 8
Term ends: August 31

Please note that courses in the M.S. and the M.Ed. in athletic training programs are scheduled predominately on the undergraduate semester schedule.
An Introduction to Plymouth State University

Plymouth State University (PSU), located in New Hampshire’s White Mountains and Lakes Region, is a comprehensive regional university with an established reputation for high academic standards. PSU provides meaningful, student-centered learning opportunities for undergraduate and graduate students. The University is also a “partner of choice” that works closely with local and regional businesses as well as school districts, communities and organizations to create enriching joint opportunities that move our society forward.

With an enrollment of approximately 4,000 full-time undergraduate students and over 2,000 full- and part-time graduate students enrolled in Master of Arts in Teaching (M.A.T.), Master of Business Administration (MBA), Master of Education (M.Ed.), Master of Science (M.S.), Certificate of Advanced Graduate Studies (CAGS), and Educator and Specialist Certification programs, Plymouth meets a wide variety of academic and professional needs.

Founded in 1871 as a small teacher training college, over the years Plymouth 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, Plymouth combines an attractive, contemporary campus design and a dynamic educational environment.

Plymouth has been providing high-quality graduate education for students in education since 1948, and in business since 1974. The Certificate of Advanced Graduate Studies began in 1997 and the Master of Arts in Teaching was approved in 2004. In 2005 the Master of Science was introduced as a new degree program. PSU offers educator and professional certification programs, and articulation agreements exist with other universities for doctoral studies. An overwhelming majority of alumni look back on their education with pride and satisfaction. The faculty, who have rich and varied backgrounds in field settings, are committed to maintaining a vigorous, stimulating and action-oriented experience for students.

ACCRREDITATION

Plymouth State University is accredited by the New England Association of Schools and Colleges (NEASC). This accrediting body is the nationally recognized, non-governmental organization whose mission is to evaluate the quality and integrity of educational programs. A committee of college and university administrators and faculty from throughout New England spend considerable time evaluating schools seeking this accreditation. Institutions earning this accreditation are judged to be providing educational experiences that can be transferred to any other accredited college or university within the nation.

The professional education programs at Plymouth State University are accredited by the National Council for Accreditation of Teacher Education (NCATE), 200 Massachusetts Avenue NW, Suite 500, Washington Dc 20036; phone (202) 466-7496. This accreditation covers initial teacher preparation programs and advanced educator preparation programs. NCATE is 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. Plymouth is also accredited by the New Hampshire State Board of Education. Program-specific accreditations include the following:

- Social Work program by the Council on Social Work Education
- Health Education program by the Society for Public Health Education and the American Association for Health Education
- Athletic Training program by the Commission on Accreditation of Athletic Training Education (CAATE)
- Master of Business Administration and undergraduate degrees in business by the Association of Collegiate Business Schools and Programs (ACBSP)
- The University is currently seeking accreditation from the Council for Accreditation of Counseling and Related Educational Programs.
LOCATION
Plymouth State University’s campus is located at the gateway to New Hampshire’s Lakes Region and the White Mountains, in a setting that invites students to conveniently enjoy the state’s great outdoors. The campus is situated in the town of Plymouth, close to many tourist attractions, national forests and recreation areas. PSU features an outdoor landscape that provides students and faculty alike with four distinctive seasons of recreational and educational adventure. The University uses the outdoors as a natural laboratory and classroom for learning as well as sporting activities.

PSU 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 Plymouth offers classroom courses in many locations around New Hampshire as well as online.

MISSION
As a public regional university, Plymouth State University serves the state of 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, Plymouth State University has a special commitment of service to the North Country and Lakes Region of New Hampshire. As a Carnegie Master’s I University, Plymouth State confers a comprehensive range of bachelor’s degrees as well as master’s degrees and Certificates of Advanced Graduate Studies in selected areas.

The mission of the College of Graduate Studies is to prepare exceptional practitioners in a variety of disciplines through excellence in academic programs. The goal of the graduate program is to be a recognized leader in developing new concepts, best practices and scholarly research. The College of Graduate Studies’ commitment extends beyond the New England region 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, investigation of advanced subject matter in depth and breadth; mastery of scholarly techniques and developmental research; and cultivation of an atmosphere of intellectual discipline that facilitates faculty and student scholarship and research that contributes to the knowledge base of our professionals and improves society’s understanding of the systems in which people, organizations and communities thrive.

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 collaborations, art exhibits, symposia and service-based partnerships. The College of Graduate Studies 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 individual adult learners. This commitment is demonstrated by:
• Responding to students’ needs
• Helping students meet their personal and professional goals
• 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, the College of Graduate Studies encourages students to grow and serve as scholars and professionals. The College of Graduate Studies recognizes the contributions of our faculty and students to disciplinary and interdisciplinary best practices. The College of Graduate Studies offers courses year round, including winter and
summer sessions, on a term schedule to meet the needs of the adult learner.

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 these hallmarks:
- Leadership and advocacy
- Scholarship and action/application
- Reflection and innovation
- Professionalism and service
- Global awareness and social responsibility

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

VISION
The educational philosophy of the University is based on the concepts of learner-centered teaching, experiential learning and academic excellence. The Plymouth State University 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 to 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 OF PLYMOUTH STATE UNIVERSITY
Plymouth’s history begins in 1808 with the Holmes Plymouth Academy, a pioneer institution for teacher training. As early as 1836, Rev. Charles Brooks lectured before the legislature of New Hampshire and throughout the state on the subject of normal schools. An “act for the establishment and management of a state normal school for the better training of teachers” was passed in 1870.

The Board of Trustees located the New Hampshire State Normal School in Plymouth in 1871; the town of Plymouth had offered the Holmes Plymouth Academy and other support to the new school. In 1874, at least 20 years before the system was attempted in any other normal school in the country, the grade and high schools of Plymouth were organized as training schools under the supervision of the normal school. A new school building, Rounds Hall, and a new dormitory were built in 1890.

In 1927, the American Council of Teacher Colleges evaluated Plymouth Normal School and rated it a Grade A teachers’ college—a rating it has held ever since. In 1937, the state legislature officially recognized the increased stature of the institution by changing its designation to Plymouth Teachers’ College and, in 1963, to Plymouth State College of the University System of New Hampshire. This development established Plymouth as a multi-purpose institution allowing it to grant degrees in the liberal arts, as well as in business and teaching. The first four-year class to receive degrees in the liberal arts with majors in subjects such as English, music, history, biology, mathematics and business administration received their degrees in 1968 on the lawn of Mary Lyon Hall.

In 1948, the Board of Education authorized the Department of Education and the teachers colleges at Plymouth and Keene to offer a Master of Education degree. The joint program was initially designed primarily for graduates of liberal arts colleges and secondary teacher preparation programs, wishing to prepare for elementary teaching.

The first full-year graduate program to be offered on campus during the regular academic year at the New Hampshire Teachers Colleges was inaugurated at Plymouth Teachers College in September 1950. After the graduate program gathered strength and underwent several changes during the Hyde administration, the State Department of Education gradually withdrew from participation in the Master of Education programs at Keene and Plymouth.

At this time, the degree ceased to be granted jointly, and was now fully authorized to be granted by Plymouth
Teachers College. The graduate programs continued to flourish as time passed and the institution became Plymouth State College in 1963, adding an MBA degree in 1974. In the fall of 2001, a special task force of the College Planning Committee recommended changing the institution’s name once again, saying, “Our institution has, for at least a decade, been performing the role of a small university. For a number of good reasons, the task force believes that it is time to recognize that reality by renaming the institution.” In the spring of 2003, the New Hampshire State Legislature voted to change the institution’s name to Plymouth State University.

Today, Plymouth proudly offers M.A.T., MBA, M.Ed. and M.S. degrees. Also offered are the Certificate of Advanced Graduate Studies and a variety of concentrations and professional certification programs. Articulation agreements exist with other universities for doctoral studies.


THE MAIN CAMPUS

In the midst of the Lakes Region and the foothills of the White Mountains, Plymouth’s main campus is located in the picturesque town of Plymouth, N.H., and is 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. Frost House is where poet Robert Frost lived from 1911 to 1912 while he taught education and psychology at Plymouth. Holmes’ Rock marks the site of Holmes Plymouth Academy, established in 1808, the first training school for teachers in New Hampshire.

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 supplier of sporting goods. The World Champion Red Sox visited the factory in 1916, which was memorialized by a now-classic 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, was once the site of a stop on the Underground Railroad for slaves escaping to Canada. 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, a multipurpose black-box studio theatre, as well as classrooms and practice facilities for music, theatre and dance students.

A multi-million dollar renovation to our science facility, the Boyd Science Center, was completed in the fall of 2003. The facility is a resource to the Lakes Region and North Country. The Judd Gregg Meteorology Institute, also established in 2003, is located on the third floor of the Boyd Science Center on the PSU campus. It houses the Plymouth State Weather Center, one of the most sophisticated weather centers in the country, which contains state-of-the-art meteorological equipment. The Center for the Environment, established in 2004, is located on the second floor of Boyd and its mission is to address the science, policies, culture and economics of the natural environment in northern New England through research, education and collaboration. The Center focuses on applied environmental problems and engages local communities and organizations in environmental demonstration projects that integrate the natural and human environments. It maintains a research library focused on environmental literature and on information and newsletters of interest to New Hampshire. From teachers and their students, to community members, environmental organizations and researchers, Boyd Science Center is known as the location to research, experiment and gather information for the natural sciences in central New Hampshire.

The Hartman Union Building (known as the HUB) located in the center of campus, includes a snack bar and café, a 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 in the HUB annually.

The Herbert H. Lamson Library, soon to be the home of the Lamson Learning Commons, houses nearly 350,000 print and non-print items; access to a growing range of digital resources including online databases, full-text electronic journals and e-books; a 60-desktop computer cluster; exhibition space; classrooms; meeting rooms and group study rooms. The new Lamson Learning Commons will incorporate information technology services, academic support services and extended hours of these
services in one convenient and accessible location. There are computers available for PSU student use, along with a Multimedia Presentation Center with technical and research assistance to provide support in developing multimedia presentations. The Lamson Learning Commons Information Desk will be staffed seven days a week. An Internet café will provide a meeting place for students to eat, study and socialize.

**OFF-CAMPUS SITES**

To meet the needs of working professionals, Plymouth collaborates with Granite State College, Keene State College, Southeastern Regional Education Service Center (SERESC) and other educational facilities around the state to offer graduate programs at convenient locations. Plymouth State University has strong relationships with the Hubbard Brook Experimental Forest and Squam Lakes Association, which provide students the opportunity for action-based research and education. PSU also partners with Humboldt Field Research Institute in Maine, which provides opportunities in the summer to study the natural sciences.

**Graduate Faculty**

Over 300 faculty, both full time and adjunct, teach in the graduate programs at Plymouth State University. The majority of the faculty hold doctoral or other terminal degrees from various distinguished institutions of higher education. Plymouth faculty and graduate adjunct faculty are active in their respective fields, attending conferences, presenting workshops and seminars, conducting research, working as consultants, performing in and directing plays and concerts, and writing books, articles and grants. Each graduate student is assigned a faculty member as an advisor who assists the student in planning coursework to meet personal and professional goals. See the list of graduate faculty beginning on page 65.

**USNH Policies and Protocols**

Everyone at Plymouth State University is subject to both the obligations and the protections of University System of New Hampshire policies. Some key policies are listed below. For information on additional policies and procedures, please refer to the PSU Student Handbook available online at www.plymouth.edu/stulife/handbook/handbook.html

**A FAIR AND SAFE LEARNING ENVIRONMENT**

Plymouth takes seriously its responsibility to provide a safe and fair place in which to learn. As such, it is the responsibility of all staff members to deal honestly, fairly and respectfully with students, co-workers and all other individuals associated with the University. PSU actively supports these policies. For more information or to discuss any of these policies, please call your Program Coordinator (see list beginning on page 10).

**NON-DISCRIMINATION**

Plymouth State University adheres to a policy of non-discrimination in all areas. Complaints will receive prompt and impartial consideration under our Affirmative Action policy. For details about complaint procedures, refer to the University process on resolution of complaints and grievances in the student handbook available online at www.plymouth.edu/stulife/handbook/handbook.html.

**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 Plymouth State’s policy, as well as state and federal law. Any faculty, staff 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, or
- 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. Here are some 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 you 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 your 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 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.

**PRIVACY AND DISCLOSURE OF EDUCATION RECORDS: THE BUCKLEY AMENDMENT**

The Family Educational Rights and Privacy Act (FERPA), also referred to as the Buckley Amendment, affords students certain rights with respect to their education record. An explanation of these rights can be found at www.plymouth.edu/stulife/handbook/rights/ferpa.htm.

**DRUG-FREE ENVIRONMENT**

Plymouth State is fully committed to ensuring a drug-free environment. As a student, you are required to comply with the drug-free policy, which states that you are prohibited from the unlawful manufacture, distribution, dispensing, possession or use of any controlled substance or alcohol in or around the campus or classroom.

**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 Plymouth State University 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.

**RIGHT TO KNOW ABOUT TOXIC SUBSTANCES**

You have a right to know if you are exposed to toxic substances in the course of your learning experience.

**PSU Graduate Academic Policies and Procedures**

**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 policy by prosecuting all cases of violations 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. For more information on University policies and procedures on academic integrity, please refer to the Student Handbook available at www.plymouth.edu/stulife/handbook/handbook.html.

**GRADUATE COURSE SCHEDULE**

Graduate courses are scheduled on a term structure with the exception of courses offered in the Master of Science degree programs and the Master of Education Athletic Training program that offer courses along 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
General Session: July 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 or online to allow working professionals to both work and complete their graduate degree program. Some programs, such as Educator Certification, Counseling and Athletic Training, have specific residency requirements and undergraduate course requirements unique to these areas of study.

**GRADUATE COURSE ENROLLMENT AND COURSE LOAD**

Students who are registered for at least three (3) credits in a term are considered to be enrolled as half-time graduate students. Those who are registered for at least six (6) credits are considered to be enrolled as full-time graduate students. Graduate students enrolled for more than 12 credits in one term are considered to be enrolled in an overload. Permission of the Associate Vice President for the College of Graduate Studies is required to register for overload credits.

<table>
<thead>
<tr>
<th>Term</th>
<th>Half-time Credits</th>
<th>Full-time Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>3 credits</td>
<td>6 credits</td>
</tr>
<tr>
<td>Fall</td>
<td>3 credits</td>
<td>6 credits</td>
</tr>
<tr>
<td>Winter</td>
<td>3 credits</td>
<td>6 credits</td>
</tr>
<tr>
<td>Spring</td>
<td>3 credits</td>
<td>6 credits</td>
</tr>
</tbody>
</table>

**TERM 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. Registration start dates are provided in the following table by term.

<table>
<thead>
<tr>
<th>Term</th>
<th>Registration Begins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>April 1</td>
</tr>
<tr>
<td>Fall</td>
<td>July 1</td>
</tr>
<tr>
<td>Winter</td>
<td>September 1</td>
</tr>
<tr>
<td>Spring</td>
<td>January 1</td>
</tr>
<tr>
<td>General Session</td>
<td>July 1</td>
</tr>
</tbody>
</table>

Current students may register online using Web Reg in the myPlymouth portal. Web registration is available during specific timeframes. Registrations needed outside of these timeframes must be submitted to the administrative office of the College of Graduate Studies for processing. Registrations can also be mailed or faxed, and students are always welcome to register in person at 2 Avery Street in Plymouth, next to Speare Memorial Hospital.

<table>
<thead>
<tr>
<th>Term</th>
<th>Web Reg Availability (approximately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>April 1–June 30</td>
</tr>
<tr>
<td>Fall</td>
<td>July 1–August 31</td>
</tr>
<tr>
<td>Winter</td>
<td>September 1–November 30</td>
</tr>
<tr>
<td>Spring</td>
<td>January 1–February 28</td>
</tr>
</tbody>
</table>

Students can pay tuition and fees by personal check, credit card, cashier’s check, money order, purchase order or awarded financial aid. The student identification number must be written on personal checks. Students will not be allowed to register if they owe money to the University.

**PSU GRADUATE STUDENT OVERDUE ACCOUNT AND COLLECTION POLICY**

Tuition and fees for graduate courses are to be paid at the time of course registration. Plymouth State University miscellaneous charges (i.e. library overdue fees, parking citation fees, etc.) are to be paid within 30 days from the date 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, educator certification awards and statements, conferral of degree, etc.

A monthly e-mail message will be sent to the student’s Plymouth State University e-mail account reminding the student to check his/her account online for new charges as PSU no longer sends out paper bills. 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.
Payments for outstanding balances are payable to “Plymouth State University” and should be mailed to:
Plymouth State University
Bursar’s Office – MSC 19
17 High Street
Plymouth NH 03264-1595

COURSE ADD, DROP AND WITHDRAWAL POLICY

Students may add a course with the permission of the instructor after the course has started. An administrative fee of $25 will be assessed for each course added.

A course may be dropped from the first to the fourth class meeting or online session in the term. Dropped courses will not appear on the student’s transcript. A $25 fee will be assessed for each course dropped.

After the fourth class meeting or online session in the term, students can withdraw from a course. The course will remain on the student’s transcript with a withdrawn code of “W” for the grade. An administrative fee of $25 will be assessed for each course withdrawn during the scheduled term.

Requests to withdraw from a course after its scheduled term has ended will be reviewed on a case-by-case basis and assessed a $100 fee per request. There is no refund for a course withdrawal.

Students receiving Department of Veterans Affairs benefits under the Montgomery G.I. Bill are limited to an add/drop period that does not exceed thirty (30) days [38CFR21.420(1)]. Veterans who have questions about this policy should contact the Associate Registrar at the College of Graduate Studies for assistance.

COURSE REGISTRATION REFUND POLICY

With the exception of weekend or week-long residential courses, which require additional advance notice to drop, students will receive a 100 percent refund of tuition if the course has been dropped prior to or on the first day of class or online session. The refund is 75 percent if a course has been dropped by the second or third day of classes or online sessions. The student will be refunded 50 percent if the course is dropped on the fourth day of class or online session. After the fourth class or online session the student can withdraw from the course. There is no refund for a course withdrawal. Changes or adjustments to this policy must be submitted for consideration to the Associate Vice President for Graduate Studies.

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 graduate program recognizes C– as the lowest passing grade. Students in the program must attain a grade of B– or better in core courses.

Graduate students who receive a grade of F will be notified by the College of Graduate Studies and asked to meet with their respective advisor and program coordinator to address the issue. Students will be barred from future coursework unless and until they initiate an appeal process by contacting their advisor. Students may not voluntarily retake courses and extraordinary permission may only be granted by petition to the Associate Vice President for Graduate Studies. Students should request a review of their status to determine (1) if they may retake the failed course and (2) if they will be allowed to continue with their program. The status review is performed by a program review group, including the student’s advisor, the professor who assigned the grade and the Associate Vice President for the College of Graduate Studies. In certain cases, the students may be asked to meet with this group as well.

If a course is retaken (after review of status), the 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.

FAIR GRADING POLICY

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

Academic freedom allows instructors to (1) 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 (2) 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, e.g., 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 disadvantage a student. The grade of a student 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:

1. 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
2. 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
3. Allowing any student to perform extra work after final grades have been submitted to improve their grade.

Exceptions to the above example 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. The conditions and time limit for removal of the IC are determined by the course instructor. If either the conditions or the time limit are not met, the instructor changes the IC to a letter grade based on all available evidence of the student’s course performance. Incompletes may be given up to a two-year deadline, as determined by the course instructor in consultation with the Associate Vice President for Graduate Studies.

Certain designated courses, i.e., practica and/or research courses in the M.Ed. program and CAGS foundation courses (EP 7010–7070) may extend longer than one term by a grade of E. The grade of E, which can be renewed each term if necessary, remains until course requirements are completed.

OVERLOAD
Graduate students are in overload when they register for more than 12 credits in one term. Permission of the Associate Vice President for Graduate Studies is required for overload registration.

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. Forms for Graduate Independent Study are available online at www.plymouth.edu/graduate/forms or at the College of Graduate Studies at 23 Avery Street in Plymouth. The completed Independent Study form must be submitted with the registration form.

INDIVIDUAL ENROLLMENT
Individual enrollment allows students to take a course out of sequence or on an individualized basis. To register, an Individual Enrollment application form, available in the College of Graduate Studies office, must be completed and submitted with the registration form. Individual Enrollment forms can be found online at www.plymouth.edu/graduate/forms.

INTERNSHIPS/GRADUATE PRACTICUM
Graduate students may participate in a variety of internships arranged in conjunction with their program of study and with the approval of the Associate Vice President for 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 programs will present their research findings and may have other additional requirements.
Plymouth 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 120 to 150 clock hours for a three-credit internship experience (40 hours per credit hour) depending on the discipline.

Students observing and participating in our local public schools may be asked to complete a form authorizing a New Hampshire criminal records check and pay the fee for the record check. Inquires should be directed to the Office of Teacher Certification.

CLASS CANCELLATION
Notifications of University-wide cancellations due to inclement weather are advertised on WMUR-TV Channel 9, the PSU Web site (www.plymouth.edu), and the College of Graduate Studies Web site (www.plymouth.edu/graduate). You may also call the PSU Storm Line at (603) 535-3535 for the latest updates on weather-related issues. Individual class cancellations are determined by the professor. In the event of an individual class cancellation, students will be sent an e-mail notification to their Plymouth State University e-mail address only. It is important for students to check their PSU e-mail for these and other important University announcements.

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 program. Assuming all undergraduate competencies are met, MBA students can complete their program in just four quarters. The 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 over one to two full years.

There are specific time frames assigned for processing completions and degree conferrals. Graduate programs can be completed and diplomas issued three times per year: May Commencement (second Saturday in May), August 31 and December 31. All students are required to submit a petition for completion of a graduate program and a processing fee of $100.00. Students must submit their petition and fee on time in order to have their program audit completed and degree conferred processed for their anticipated completion date. Petitions and fee must be submitted by the following dates:

<table>
<thead>
<tr>
<th>Anticipated Degree Conferral Date</th>
<th>Petition and Fee Submitted by Student No Later than</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 31</td>
<td>May 1</td>
</tr>
<tr>
<td>December 31</td>
<td>October 1</td>
</tr>
<tr>
<td>May Commencement</td>
<td>December 31</td>
</tr>
</tbody>
</table>

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 $150.00. Below are the final dates for petition acceptance for each conferral date:

<table>
<thead>
<tr>
<th>Anticipated Degree Conferral Date</th>
<th>Petition and Fee Submitted by Student No Later than</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 31</td>
<td>May 31</td>
</tr>
<tr>
<td>December 31</td>
<td>October 31</td>
</tr>
<tr>
<td>May Commencement</td>
<td>April 1</td>
</tr>
</tbody>
</table>

Educator and specialist certification candidates must submit a petition for completion. The processing fee is $100.00. Educator and specialist certification candidates can petition for completion at any time as these certifications can be awarded outside of the official degree conferral dates listed above.

Professional certification also can be awarded at any time as long as the candidate already has a master’s degree. Those seeking professional certification along with their master’s degree will have their certification awarded at the time their master’s degree is conferred.

GRADUATE COMMENCEMENT CEREMONY
All graduates are encouraged to participate in the May Commencement ceremony. Students who complete in December will participate in the May Commencement ceremony in the next year. For example, a student is conferred their master’s degree on December 31, 2006. This student will participate in the May 12, 2007 Graduate Commencement ceremony. Please contact the Graduate Degree Auditor at the College of Graduate Studies if you have any questions regarding completion of a graduate program.
Academic Support and Student Services

BANNER INFORMATION SYSTEM
Banner is Plymouth State University’s information system. Students must have their username and password in order to take advantage of this system. Access Banner Self Service by logging into the myPlymouth portal. The Student Services tab provides many services such as Web Reg, the online course registration system; unofficial academic transcripts; course schedules; and financial information from the Bursar’s and Financial Aid offices.

VEHICLE/PARKING PERMITS
All students must obtain a valid parking permit to park on campus. Visit the IPARQ Web site at www.thepermitstore.com and enter Plymouth as your parking destination to obtain a regular commuter parking permit. Permits may also be purchased at the administrative office of the College of Graduate Studies located at 23 Avery Street in Plymouth, next to Speare Memorial Hospital. Visit the University Police parking Web site www.plymouth.edu/cpolice/ and click on “parking” for the latest information regarding parking permits.

IDENTIFICATION CARDS
A valid Plymouth picture ID card is needed to access services throughout the campus. The ID Center is located on the second floor of the Hartman Union Building. Once a card is obtained, it will be automatically activated each term the holder is enrolled in courses. ID Center hours are posted at the beginning of each term.

STUDENT HANDBOOK
The Division of Student Affairs offers the current Student Handbook online at www.plymouth.edu/stulife/handbook/handbook.html. You may also access this information through the Student Life section of the Plymouth home page www.plymouth.edu or from the student services tab in the myPlymouth portal.

HOUSING
Graduate students may live in PSU on-campus housing (single or double rooms, single or family student apartments), subject to availability, or in off-campus housing. Housing is extremely limited. Early reservations for campus housing are necessary. For information and assistance, please contact the Department of Residential Life – MSC 42, Plymouth State University, 17 High St., Plymouth NH 03264-1595 or (603) 535-2320.

PASS
PASS is a federally-funded program designed to provide individualized academic assistance to students enrolled at Plymouth. 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. Counselors are available to work with students who have documented disabilities. PASS is located in Lamson Learning Commons and is open during the academic year. Please contact the office by calling (603) 535-2270.

SERVICES FOR STUDENTS WITH DISABILITIES
PASS provides services to students who have documented disabilities to ensure that all academic activities and programs are accessible. Through partnerships with students, faculty and staff, PASS promotes self-determination and self-advocacy to provide opportunities for academic success.

TUTORING
Tutoring is available in most introductory level courses and is offered on a one-to-one basis or in small groups depending on tutor availability. Tutors are highly motivated students who have been referred by faculty and who have a minimum of 3.0 GPA.

THE WRITING AND READING CENTER
The Writing and Reading Center, located in Lamson Learning Commons, is a place for all students to improve as writers and develop as college-level readers. Professional and student consultants are available for individualized conferences. Writers frequently visit to get feedback on drafts in progress, but also visit for other reasons, such as to discuss a new assignment or to learn about a type of writing they’ve never done before. Writers of all abilities visit while working on writing for courses from all departments. The Center is also a place to visit while doing assigned reading. Consultants help students figure out their source of college reading difficulties and come up with strategies to improve as readers. The Center promotes a culture of reading and offers opportunities for students to join book groups. The College of Graduate Studies also has a Graduate Writing Assistant available to help you with your writing needs. Please contact the College of Graduate Studies for more information.
MATH ACTIVITIES CENTER
The Math Activities Center is a hub for extra-class activities involving mathematics. During operating hours, students may use the Center for completing assignments, forming study groups and receiving group and/or individual tutorial services. Trained student tutors and faculty dedicated to student success and achievement in mathematics staff the Center, which is located within the Mathematics Department in Hyde, third floor, room 351. The phone number is (603) 535-2819.

Scholarly Societies
Delta Mu Delta (DMD) is an international honor society established to recognize and reward the superior scholastic achievement of students in business administration. The purpose of Delta Mu Delta is to (1) promote higher scholarship in education for business and (2) recognize and reward scholastic attainment in business subjects. Students with the highest academic standing are invited to join. Induction ceremonies are held each year in May. For more information, contact the Business Department at (603) 535-260.

Phi Delta Kappa (PDK), a professional honor society, is a national organization for graduate students in education who exhibit leadership characteristics and show high promise for and commitment to improving educational institutions in society. Contact Dr. Royce Robertson at (603) 535-3002 for more information. An initiation ceremony and reception are held in May to honor students joining PDK.

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. Contact Dr. Mardie Burckes-Miller at (603) 535-2515 for more information.

General Financial Information

2006–2008 TUITION AND FEES
Tuition is subject to change by the University System of New Hampshire. The information listed below is the current per-graduate-credit rate of tuition at the time of publication. Current tuition and fees for graduate courses are kept up to date on the Web site at www.plymouth.edu/graduate.

<table>
<thead>
<tr>
<th>Course #</th>
<th>In-State</th>
<th>Out-of-State</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000–6999</td>
<td>$369</td>
<td>$407</td>
</tr>
<tr>
<td>7000–9999</td>
<td>$389</td>
<td>$430</td>
</tr>
</tbody>
</table>

STATEMENT OF FINANCIAL RESPONSIBILITY
By enrolling in classes at Plymouth State University, students are agreeing to pay all charges incurred. This includes any penalties assessed due to missed deadlines, failure to pay and collection agency costs.

RESIDENCY STATUS
All students attending Plymouth State University will be charged application, registration and tuition at a rate to be determined by their domicile or residency. Students are classified as residents or non-residents for tuition purposes at the time of admission to the University in accordance with the University System of New Hampshire policy guidelines. The residency decisions made by the College of Graduate Studies are based on information furnished on the students’ applications and other supporting data. Plymouth 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 in-state 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 Plymouth, unless they have acquired bona fide domicile in New Hampshire. The burden of proof in all cases concerning residence is on the applicant.

ESTABLISHING/CHANGING RESIDENCY
The residency status of graduate students is determined at the time of admission to Plymouth and may be changed only by applying for reclassification. Graduate students who are currently enrolled may either obtain information from the College of Graduate Studies or read the residency information posted on the residency section of the Registrar’s Web pages at www.plymouth.edu/registrar/residency. 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.

Financial Aid

The financial aid program is intended to assist qualified students who are unable to meet their entire educational expenses from their own and their family’s resources. The major objective is to ensure access to those who may lack the financial resources to pursue a degree.

Many students in the Master of Science programs have the option of receiving grant funding to support their graduate studies. Because these students will have a program advisor before they enroll, the details of grant funding for stipends and tuition payment should be worked out at the department level, not with the College of Graduate Studies or the Financial Aid office.

Graduate students may be eligible for up to $8,500 in subsidized (need-based) Stafford loans. They may also qualify for $10,000 in non-need-based, unsubsidized additional loans for a maximum of $18,500 for the academic year.

Plymouth graduate students may be eligible for Stafford subsidized or unsubsidized loans. A subsidized loan is awarded on the basis of financial need; the federal government will subsidize the interest during eligible periods. An unsubsidized loan is not awarded on the basis of need. Students will be charged interest from the time the loan is disbursed until it is paid in full. With an unsubsidized loan, if you allow the interest to accumulate, it will be capitalized—that is, the interest will be added to the principal amount of your loan and additional interest will be based upon the higher amount.

Students are required to apply for financial aid directly through PSU’s Financial Aid office in the Speare administration building. Students are encouraged to file their FAFSA (Free Application for Federal Student Aid) directly online (www.fafsa.ed.gov). Students will need to reapply for aid for each academic year, which begins July 1.

Financial aid applications are processed at PSU upon receipt of the information from the federal processor as a result of the student filing the FAFSA. Graduate students must have their FAFSA filed at least one month prior to the term for which financial aid is needed. You also must be admitted to a degree or certificate program at PSU before your financial aid application will be considered.

Generally, students who receive financial aid are eligible for assistance from July 1 through June 30. Students must have their FAFSA completed one month prior to the start of the term for which they desire financial aid. The enrollment period for financial aid will be equal to the term of enrollment.

PREFERRED FILING DATE

To be eligible for financial aid a student must be fully accepted into the graduate program the term before they wish to enroll in graduate courses. Students who are admitted and accepted into the program are generally eligible for aid for the following term. Therefore, if you will need loans to pay for your classes you must file for financial aid and seek admittance and acceptance into the graduate program the term before enrolling in classes. Generally, students who receive financial aid may be eligible for assistance from the summer term through the spring term within an academic year.

<table>
<thead>
<tr>
<th>Term</th>
<th>Filing Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer (July, August)</td>
<td>June 1</td>
</tr>
<tr>
<td>Fall (September through November)</td>
<td>August 1</td>
</tr>
<tr>
<td>Winter (December through February)</td>
<td>November 1</td>
</tr>
<tr>
<td>Spring (March through May)</td>
<td>February 1</td>
</tr>
</tbody>
</table>

APPLICATION PROCESS

The maximum annual subsidized amount available for a fully-accepted graduate student is $8,500. The maximum annual unsubsidized additional amount that is available based upon eligibility is $10,000. To be considered for financial aid, applicants must complete the FAFSA for federal, state and University aid, and the appropriate PSU application requirements.

If possible, federal tax returns should be completed prior to filing the FAFSA, for accuracy. Signed copies of student federal income tax returns, W2 forms or non-tax filer forms should only be submitted upon the request of the Plymouth Financial Aid office.

The Financial Aid office determines eligibility based upon cost of attendance. The cost of attendance is determined, in
part, by the number of credits applicants have projected for each graduate term. Stafford 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/courses per graduate term and notify the Financial Aid office of any enrollment changes.

Aid eligibility for a graduate student is determined annually based upon the cost of attendance for that year (July 1 through June 30). The cost of attendance includes tuition, fees, books, supplies and living expenses for periods of enrollment.

SATISFACTORY PROGRESS
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 Plymouth, 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 Plymouth’s graduate program requirements with a 3.0 cumulative grade point average required for graduation. Continuing students’ quantitative progress (earned credits) will be reviewed once a year prior to the award/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 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 1 and June 30), and that they earn these credits toward their degree/certification program. The number of enrolled credits will also include dropped courses.

STANDARDS OF SATISFACTORY PROGRESS FOR GRADUATE AND POST-GRADUATE DEGREE SEEKING STUDENTS
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.

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 not be allowed to continue based on weak academic performance. 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, loans and/or work study employment.

OTHER RECIPIENT RESPONSIBILITIES
• Complete an entrance counseling session: Before receiving a Stafford loan, recipients must complete an entrance loan counseling session. This session shows how to manage a student loan. There are five easy steps to completion:
  1. Visit www.mapping-your-future.org online.
  2. Click on the Online Student Loan Counseling icon.
  3. Click on the Stafford Entrance Counseling icon.
  4. Complete steps one through five and submit the test after reviewing the content.
  5. Print the confirmation page, or note the confirmation number.
• Regular contact with advisor: Loan recipients must contact their advisor at the beginning of each term for which financial aid is received.
• Notification of withdrawal: Students must inform the Financial Aid office, their instructor and their graduate program advisor of any course or program withdrawals or changes.
• Stafford Loan Disbursements: Stafford Loans are disbursed by graduate term. Graduate loan proceeds are disbursed at the beginning of each graduate term. This is contingent upon registration, having the proper number of credits and contacting their advisor at the beginning of each term. If an account has a credit balance because of financial aid, a check will be available the Friday after the loan is posted to the account, and eligibility is verified.

Contact (603) 535-2338 or finaid@plymouth.edu for more information.
RETURN OF FEDERAL STAFFORD FINANCIAL AID
If a student is receiving Federal Financial Aid and withdraws within 60 percent of the enrollment period, a portion of the awarded federal aid must be returned. The determination of the amount to be returned is calculated by the Bursar’s and Financial Aid offices, normally within 10 days of the determination of the withdrawal date. The calculation may result in the student owing a balance to Plymouth and/or the Federal Stafford Program. Sample Return of Stafford Fund Worksheets are available for review in the Financial Aid office.

APPEALS
Appeals of the refund policies may be submitted in writing to the Associate Vice President for Graduate Studies.

SCHOLARSHIPS
The College of Graduate Studies annually presents a limited number of Graduate Scholarships. The Admissions Advisory Group makes recommendations for awarding these funds. Graduate Scholarships may be awarded for any term. Scholarship awards are usually payable in amounts of $250 or $1,100 per term.

Applicants should complete a Graduate Studies Scholarship Application, available in the College of Graduate Studies office, and submit one letter of recommendation that includes supporting information of the candidate’s qualifications for the scholarship. There is no specific form to be used for this recommendation. It may be written on any appropriate stationery.

Applications for the scholarship should be returned to the administrative office of the College of Graduate Studies by April 15 for the upcoming academic year. Each recipient is asked to confirm acceptance of an award in writing to the College of Graduate Studies. Awards are made as soon as possible after June 1. It is advantageous to submit applications early, as awards are not judged on a “need” basis only.

Graduate Assistantships, Teaching Fellowships and Research Assistantships
A limited number of graduate assistantships and teaching fellowships are available to graduate students who are fully accepted in a graduate program at Plymouth State University. Assistantships and fellowships are awarded on a fiscal-year basis beginning no earlier than July 1 and ending no later than June 30. Students holding probationary status are not eligible.

The Master of Science programs award Research Assistantships that are grant funded. Students in the science programs should consult with their program advisors to learn more about Research Assistantships.

Graduate assistants and fellows are expected to enroll in and complete at least one course during each graduate term of their award. Graduate assistants/fellows failing to meet this requirement risk losing their award. In no case may an awarded course be taken beyond the fiscal year for which it was awarded.

Graduate assistants and teaching fellowship recipients may enroll in additional courses per term at their own expense providing they can maintain their commitment to their graduate assistantship or teaching fellowship.

Duties of graduate assistants and teaching fellowship recipients are determined by designated departments and communicated to the Associate Vice President for Graduate Studies.

The following graduate assistantships and teaching fellowships are available:

FULL GRADUATE ASSISTANTSHIP
• Four graduate terms
• $1,000 stipend per term for a maximum total of $4,000
• One course tuition remission per term
• Student is expected to work 20 clock hours per week and complete one course per graduate term for a total of four courses in an academic year.

THREE QUARTER GRADUATE ASSISTANTSHIP
• Three graduate terms
• $1,000 stipend per term for a maximum total of $3,000
• One course tuition remission per term
• Student is expected to work 20 clock hours per week and complete one graduate course per term for a total of three courses within three terms of study.

HALF GRADUATE ASSISTANTSHIP
• Two graduate terms
• $1,000 stipend per term for a total of $2,000
• One course tuition remission per term
- Student is expected to work 12 clock hours per week and complete one course per term for a total of two courses within two terms of study.

**QUARTER ASSISTANTSHIP**
- One graduate term
- $1,000 stipend per term for a total of $1,000
- One course tuition remission per term
- Student is expected to work 12 clock hours per week and complete one course per term for a total of two courses within two terms of study.

**FULL FELLOWSHIP**
(awarded on an undergraduate semester basis)
- Requires 15 clock hours of service per week during the undergraduate semester for which the fellowship is awarded
- $2,000 stipend during each semester of service
- Nine credits tuition remission per semester of service
- Credits may not be carried beyond the fiscal year in which the fellowship is awarded (fiscal year begins July 1 and ends June 30).

**HALF FELLOWSHIP**
(awarded on an undergraduate semester basis)
- Requires 7.5 clock hours of service per week during the undergraduate semester for which the fellowship is awarded
- $1,000 stipend during each semester of service
- 4.5 credits tuition remission per semester of service
- Credits may not be carried beyond the fiscal year in which the fellowship is awarded (fiscal year begins July 1 and ends June 30).

In addition to these Graduate Assistantships and Teaching Fellowships, the sciences programs also award a Research Assistantships funded by grants. Students should work directly with their advisors to learn more about Research Assistantships.

**Graduate Course Policies**

All courses at Plymouth 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 5040. Mathematics courses numbered MG 3XXX, 4XXX, may be taken for graduate credit.

**INACTIVITY OR WITHDRAWAL FROM GRADUATE PROGRAM**

1. Applicants to a graduate program have an obligation to show progress toward their degree. Students who do not take at least one course during any two-year period will be considered inactive and informed of this in writing. Once notified of their inactive status, students must request reactivation in writing and submit a Graduate Continuation Fee. 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 (PSU’s portal, which includes e-mail privileges, access to student information and the library) and his or her student ID will be inactivated.

2. After three years of inactivity, students are automatically withdrawn from the program. They will be notified in writing of the withdrawal. At that time, all of the student’s enrollment documents will be destroyed unless the student immediately submits a written request for continuation and the Graduate Continuation Fee. If, at a later date, the student decides to re-enroll in the program, new application materials must be submitted for the admissions board to review for readmission.

3. Any student who chooses to withdraw from the program must notify the College of Graduate Studies in writing.

**PROGRAM OF STUDY**

All graduate students are required to have a written program of study on file in the office of the College of Graduate Studies within the first term after acceptance. 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. It is drafted by the student and advisor shortly after acceptance and requires signatures by the student, the advisor and the Associate Vice President for the College of Graduate Studies. Changes may be made only with the approval of the advisor and
the Associate Vice President. Program of Study forms and Program Change forms are available from the advisor and the College of Graduate Studies office. The Associate Vice President of the College of Graduate Studies oversees all programs of study and also serves as an advisor for all programs.

ADVISING
Every admitted graduate student is assigned an academic advisor with whom they must meet to develop a program of study within the first term after admission. Students may request to change their program advisor through the College of Graduate Studies. Students are responsible for maintaining contact with their advisor throughout the program. Students may obtain advising assistance by mail, e-mail, online chat, telephone or fax, or by scheduling appointments with their program advisor or coordinator. Evening and weekend hours are available on and off campus by appointment. Please contact the College of Graduate Studies to schedule an off-campus advising session. Online chats are regularly scheduled to assist with advising needs.

GRADUATE COUNCIL
The Graduate Council acts in an advisory capacity to the Graduate Faculty in all graduate matters. Its primary responsibilities are to screen potential graduate faculty members, set and/or revise admission and degree requirements, approve program and curriculum revisions, and review and/or approve the recommendation of new programs. For more information please see the Graduate Faculty Bylaws available on the College of Graduate Studies Web site.

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 total (graduate and undergraduate) credits taken by a qualified senior in any one semester may not exceed 15 credits.

The PSU 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 there are three degree options:

MASTER OF ARTS IN TEACHING (ART EDUCATION OR SCIENCE EDUCATION)
- Students who hold a baccalaureate degree with a GPA of 3.0 or higher may apply to the M.A.T. program.
- Art Education: For PSU B.F.A. students who fulfilled 12 credits of Art Education within their B.F.A. degree. Successful graduates will be certified as K–12 Art Educators by the State of New Hampshire. For additional information, e-mail matarted@plymouth.edu.
- Science Education: For PSU graduates with baccalaureate degrees in biology, general science or physical science who are interested in becoming a science teacher. Successful graduates of this program will be certified by the State of New Hampshire. For additional information, e-mail matscienceed@plymouth.edu.

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 0-course program can be completed in as little as 0 months.
- Graduate students may also pursue a certificate of concentration in Investment and Finance; Strategic Marketing Management; Organizational Communication; The Human Side of Enterprise; Small Business and Entrepreneurship; or Health Care Administration.
- For additional information, e-mail mba@plymouth.edu.

THE MASTER OF EDUCATION (SELF DESIGNED)
- Students who hold a baccalaureate degree with a GPA of 3.0 or higher may apply to the M.Ed. program.
- Students may complete the 33-credit requirement within one year.
- Students may pursue a wide range of disciplines within the Self Designed program.
- 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.
- For additional information, e-mail medselfdesign@plymouth.edu.
Master of Arts in Teaching

The M.A.T. curriculum is designed to promote excellence of teaching, research and scholarship, and dedication to service. Underlying this excellence is the set of professional standards and competencies that form the foundation for continued growth and development in all areas of education. The program is designed around a professional core of education and content courses that provide a foundation and framework in learning theory, philosophy, pedagogy and research while integrating content. The capstone experience provides the opportunity to demonstrate the translation of theory into practice in a supervised educational setting. Students are expected to develop competencies in critical thinking, collaboration, diversity, leadership research and applied use of technology.

M.A.T. in Art Education (K–12 Certification)

Program Coordinator: Dr. Cynthia Vascak
(603) 535-2649, e-mail: cynthiav@plymouth.edu

The M.A.T. in Art Education has two concentrations. The fifth year concentration is an extension of the PSU B.F.A. degree. The standard certification concentration is for adult students who already have a bachelor’s degree in fine arts, visual arts, studio art or graphic design, and wish to become certified as an art educator.

The fifth year M.A.T. consists of 33 graduate credits. The capstone experience integrates coursework, prior experience and research. The 33 credits are based on students fulfilling nine (9) credits of Art Education within their B.F.A. degree: Foundations of Art Education, Methods and Materials in Art Education, Instructional Planning and Pedagogy in Arts Education and Curriculum Assessment in Art. If not completed, additional coursework in Art Education will be required to fulfill these equivalencies.

The standard M.A.T. certification concentration requires the 33-credit core. Students in this concentration will also be 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 and will be determined on an individual basis.

PROGRAM OBJECTIVES

The M.A.T. in Art Education addresses the following NCATE Art Education competencies, which ensure that as a result of successfully completing the professional program in Art Education students will:

- Acquire knowledge, understanding and appreciation of the visual arts in diverse contemporary and past cultures with an emphasis on the relationship of the visual arts to the culture in which it was produced and its influence on subsequent 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 from that portfolio in accordance with professional artistic and technical standards
- Complete a supervised observation and student teaching with pupils of both elementary and secondary levels
- Have a knowledge of comprehensive programs of visual arts education, procedures for organizing, promoting, managing a comprehensive visual arts education program, 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 knowledge of 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
1. Must have 3.0 or higher GPA
2. Application and acceptance to the College of Graduate Studies
3. Portfolio review (by Coordinator of Art Education)
4. Passing scores in Praxis I exam (only if student anticipates they will need their certification awarded prior to being conferred the M.A.T. in Art Education)

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

APPLICATION PROCESS
Applications are submitted to the College of Graduate Studies. The non-refundable application fee is $75 and must accompany the application. A complete application package includes the following:

- Completed application form
- Application fee
- Official transcripts of undergraduate degree
- Official transcripts for additional coursework (if any) that may be important for consideration
- Three recommendations on the forms provided
- Official GRE scores for the quantitative, verbal and analytical writing components or the Miller’s Analogies Test (MAT) scores
- Résumé
- Statement of interest

All applications for admission become part of the permanent records of Plymouth State University and will not be returned. Access to this material is limited under the Family Rights and Privacy Act 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: Plymouth is under no obligation to accept more than 12 credits taken at Plymouth State University prior to admittance into a degree program. Courses older than six years at the time of admittance may not be counted toward a degree.

PROGRAM OF STUDY

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Master's Core Component</strong></td>
<td></td>
</tr>
<tr>
<td>ED 5000</td>
<td>3</td>
</tr>
<tr>
<td>ED 5010</td>
<td>3</td>
</tr>
</tbody>
</table>

- OR -

Learning Theory Component

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5060</td>
<td>3</td>
</tr>
<tr>
<td>ED 5570</td>
<td>3</td>
</tr>
</tbody>
</table>

Content Area Component

(Choose 9 credits from the following)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR 5560 ST: Arts in Education Summer Institute</td>
<td>3</td>
</tr>
<tr>
<td>AR 5560 Studio Topics in Art</td>
<td>3</td>
</tr>
<tr>
<td>AR 5300 The Arts in Society</td>
<td>3</td>
</tr>
<tr>
<td>AR 5910 Independent Study: Studio</td>
<td>1–3</td>
</tr>
<tr>
<td>IN 5560 Special Topics in Integrated Arts</td>
<td>1–4</td>
</tr>
<tr>
<td>IN 5970 Integrating the Arts</td>
<td>3</td>
</tr>
<tr>
<td>AE 5560 Special Topics in Art Education</td>
<td>1–3</td>
</tr>
</tbody>
</table>

Internship

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE 5410 Teaching Internship in Arts Education</td>
<td>9</td>
</tr>
</tbody>
</table>

Minimum Total for M.A.T. in Art Education (with certification)

33

M.A.T. in Science Education

Program Coordinator: Dr. Warren Tomkiewicz
(603) 535-2573, e-mail: warrent@plymouth.edu

The Master of Arts in Teaching in Science Education program will enhance the science content knowledge and further develop the scientific process and inquiry skills of middle and high school science teachers. The program will provide the opportunity for a beginning teacher to gain the knowledge and skills to make informed decisions necessary for the development, implementation and assessment of meaningful science programs in their school district. These efforts will help ensure that science teachers in this program will be 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.
The M.A.T. in Science Education is designed to promote science learning for teachers by doing science 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.

PROGRAM OBJECTIVES
The general objectives of the M.A.T. in Science Education program are:

- Increase the science knowledge and skills of teachers, including the use of technology, through study in biology, chemistry, meteorology, biotechnology, Earth systems or the physical sciences
- Introduce and update the candidate’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
- Introduce and develop the candidate’s understanding and application of the national and state science education standards to classroom science teaching and learning
- Provide both formal and informal educational experiences for the candidate with middle and high school students
- Provide a pathway for candidates to obtain certification as a science teacher.

ADMISSION REQUIREMENTS
The College of Graduate Studies considers applications on a rolling admission basis. Students may apply at any time of the year. Students may take up to 12 graduate credits before being officially admitted to the program.

APPLICATION PROCESS
Applications are submitted to the College of Graduate Studies. The non-refundable application fee is $75 and must accompany the application. A complete application package includes the following:

- Completed application form
- Application fee
- Official transcripts of undergraduate degree
- Official transcripts for additional coursework (if any) that may be important for consideration
- Three recommendations on the forms provided
- Official GRE scores for the quantitative, verbal and analytical writing components
- Resumé
- Statement of interest.

All interested candidates are encouraged to contact the chair of the Department of Chemical, Earth, Atmospheric and Physical Sciences for an in-person or phone interview before submitting their applications.

APPLICANTS FROM FOREIGN COUNTRIES
In addition to the above documentation, international students must provide the following information:

- Notarized copies (translated into English) of transcripts of their undergraduate degree, evaluated for institutional equivalency and any other institutions you have attended
- Most recent Test of English as a Foreign Language (TOEFL)
- Certified or notarized Affidavit of Support form (U.S. Immigration form I-134), which is required before an I-20 can be issued for F-1 status. This serves as evidence that all financial requirements for a year of tuition and living expenses can be met.
- Proof of country of citizenship and birth, which is required before an I-20 can be issued for F-1 status.

All applications for admission become part of the permanent records of Plymouth State University and will not be returned. Access to this material is limited under the Family Rights and Privacy Act 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: Plymouth is under no obligation to accept more than 2 credits taken at Plymouth State University prior to admission into a degree program. Courses older than six years at the time of admittance may not be counted toward a degree.

PROGRAM OF STUDY

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5570 Classroom Intervention and Special Education Strategies</td>
<td>3</td>
</tr>
<tr>
<td>ED 5060 Theories of Learning and Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>ED 5960 Internship in Teacher Education *</td>
<td>9</td>
</tr>
<tr>
<td>NS 5700 Science Teaching in the Middle and High School</td>
<td>3</td>
</tr>
</tbody>
</table>
NS 5800  Seminar: Current Issues in Science Education  3
NS 5600  Field Experience in Science Education **  3
Three Individualized Science Content Courses ***  12

Total for M.A.T. in Science  36

* Supervised student teaching in a public school setting  
** A supervised placement with a science or environmental agency dealing with student groups. Examples include Squam Lakes Association, Squam Lakes Natural Science Center, N.H. Department of Fish and Game, N.H. Audubon Society, PSU Mindflight Summer Program, N.H. Department of Environmental Services, PSU Meteorology or Planetarium Programs.  
*** Satisfied by successfully completing courses and/or institutes in biology, chemistry, environmental, biotechnology, Earth systems or physical sciences.

Master of Business Administration

Program Coordinators:  
Dr. Trent E. Boggess  
(603) 535-2414, e-mail: trentb@plymouth.edu  
Mr. Craig Zamzow  
(603) 535-2921, e-mail: czamzow@plymouth.edu

The Master of Business Administration program at Plymouth State began in 1974. Graduate courses are offered year round, including winter and summer sessions. Students may enroll in full or part-time study schedules on campus, or take advantage of various off-campus locations for courses and programs throughout the state. Students enrolling in the 10-course program on a full-time basis can complete the program in just 12 months. Students working toward their degree on a part-time basis may take as long as six years to complete the program.

Convenience is an important aspect of Plymouth’s MBA program. The entire program is offered at four locations and online. Most classes are held during the evening to accommodate working professionals. Students may attend classes at any location and may accelerate their progress by taking up to three courses per term.

MBA PROGRAM HIGHLIGHTS

- Offered in New Hampshire for 32 years—the longest running evening program in the state
- Accredited by NEASC (New England Association of Schools and Colleges) and ACBSP (Association of Collegiate Business Schools and Programs)
- Most cost efficient program available: only 30 credits (10 courses) for a total cost of approximately $11,000. The entire program may be completed in as little as 12 months.
- Complete program offered in Concord, Plymouth, Keene, Lebanon and online
- Convenient evening class times
- Rolling admission allows five opportunities to enter the program per year
- Professors have real world business experience
- The only MBA program in New Hampshire offering the award winning Small Business Institute® learning experience
- Custom designed program to meet student career objectives
- MBA Certificate Programs (12 credit) in six concentration areas
- Work experience considered for prerequisites and entry test requirements
- Conveniently transfer up to 15 credits from other MBA programs
- No GMAT, GRE or MAT admission test required

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 master’s degree program extends and refines a student’s business proficiency through a series of theoretical and substantive courses. Working with faculty members who have had experience in business, industry and government, students can tailor their own program by selecting courses from a wide variety of business and business-related electives.

Graduate Studies in Business also offers six certificate concentration programs:  
- Health Care Administration  
- Investment and Finance  
- Organizational Communication
• Small Business and Entrepreneurship
• Strategic Marketing Management
• The Human Side of Enterprise

Each certificate can be pursued alone or as a concentration in conjunction with the MBA degree.

There are four MBA sites in New Hampshire (Plymouth, Lebanon, Keene and Concord) with coordinated schedules for part-time study on a quarter calendar. Plymouth collaborates with other educational institutions to offer courses at these four areas of the state. Advising assistance is offered at all locations. Each class is held one night per week, for 10 weeks. In the summer, most courses are held for two nights per week for five weeks; a few are offered in a weekend residential format. Courses are also offered online.

Classes are taught by many full-time faculty members, most of whom have extensive experience working in private business or government. Many courses follow the case study approach to teach critical thinking processes and analytical skills. Professors regularly use current events and up-to-date cases to assist in the learning process.

ADMISSION TO THE MBA PROGRAM
Plymouth considers applications on a rolling admission basis. Students may apply at any time during the year. The MBA program is scheduled on a quarter basis, with fall, winter, spring and summer terms. Students may begin their program in any term. Students may take up to four courses (12 credits) before being officially admitted to the program.

APPLICATION PROCESS
Applications are submitted to the College of Graduate Studies. The non-refundable application fee is $75 and must accompany the application. The complete application includes the following:
• Completed application form
• Application fee
• Official transcripts of undergraduate degree
• Three recommendations on the forms provided
• Resumé and statement of interest

TYPES OF ADMITTANCE
A bachelor’s degree with a 2.5 or higher grade point average in the undergraduate academic major, strong recommendations, a well-written Statement of Interest and Intent, and a resumé are required for admittance. When admission documents have been received, the application is then screened by the Admissions Advisory Group. The College of Graduate Studies informs applicants in writing of the group’s decision.

Full admittance may be granted to students meeting all of the criteria for admission.

ADMISSION REGULATIONS
Persons holding a baccalaureate degree from an accredited college or university may enroll in graduate courses. Students taking courses will be classified in the following ways:

Graduate Status: Students who have been officially accepted into the MBA program and are enrolled in courses that will eventually lead to their degree.

Non-Degree Status: Students taking courses before or without being admitted into a graduate program are allowed to take up to 12 credits of graduate coursework before a hold is placed on their registration.

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, department chair and the Associate Vice President of the College of Graduate Studies as outlined on the Student Request form. The total (graduate and undergraduate) credits taken at any one time may not exceed 15 credits.

All applications for admission become part of the permanent records of Plymouth State University and will not be returned. Access to this material is limited under the Family Rights and Privacy Act 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: Plymouth is under no obligation to accept more than 2 credits taken at Plymouth State University prior to admittance into a degree program. Courses older than six years at the time of admittance may not be counted toward a degree.
APPLICANTS FROM FOREIGN COUNTRIES
In addition to the above admission documentation, international students must provide the following information:

- Notarized copies (translated into English) of transcripts of their undergraduate degree evaluated for institutional equivalency and any other institutions you have attended
- Most recent Test of English as a Foreign Language (TOEFL)
- Certified or notarized Affidavit of Support form (U.S. Immigration form I-134), which is required before an I-20 can be issued for F-1 status. This serves as evidence that all financial requirements for a year of tuition and living expenses can be met.
- Proof of country of citizenship and birth, which is required before an I-20 can be issued for F-1 status.

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
- Quantitative/Statistics

CPCs 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 $75 fee for each competency examination. Any competencies not satisfied are listed in the admittance letter and result in a conditional/provisional admittance until they are completed.

Only grades of C or better for CPC-related courses will be accepted for entry in the graduate program. A score equivalent to the grade of C or better will be required if CLEP, DANTES or Plymouth 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.

Course Policies

AUDITS
Full tuition is charged for audits with the exception of Plymouth MBA graduates. These graduates may audit for one-half the full tuition rate. (A change from credit to audit status may occur any time prior to the third class meeting.)

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

After a student enrolls in a Plymouth MBA course, only courses completed at other ACBSP or AACSB accredited institutions may be transferred into the 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 (A = 4.0 scale) 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 for program completion. No course more than six years old at the time of admittance will count toward or transfer to the Plymouth State University MBA degree.

No graduate credit will be given for correspondence courses, curriculum workshops (unless designed for graduate credit) or pass/fail courses. An official transcript must be on file in the College of Graduate Studies office before credits can be transferred to the MBA program. Exceptions to this policy must be approved by the MBA Program Coordinator.
MBA Grading System

MBA graduate students must earn a cumulative grade point average of 3.0 or higher in the program.

PROGRAM OF STUDY

REQUIRED 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 MBA students at Plymouth.

BU 5110 Managing Organizational Behavior 3
BU 5120 Financial Analysis and Decision Making 3
BU 5190 Accounting for Managers 3
BU 5210 Strategies for Cross-Functional 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, Small Business Institute® consultations, independent studies and/or Master’s Research Projects. Students wishing to satisfy elective credits by taking traditional coursework may select two electives from the following subject areas or certificate/concentration programs:

ACCOUNTING

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

GENERAL MANAGEMENT

BU 5160 Seminar in Managing Human Resources 3
BU 5225 Current Issues in Employment Law 3
BU 5230 Management of Organizational Changes 3
BU 5240 Seminar in Organizational Communication and Strategy: SBI I 3
BU 5501 Small Business Analysis: SBI II 3
BU 5550 Investment Management 3
BU 5580 Real Estate Entrepreneurship 3
BU 5810 Seminar in Corporate Public Relations 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 5490 Capstone: Health Care Topics 3

HUMAN RESOURCES

BU 5115 Creating Organizational Health 3
BU 5165 Training and Development 3
BU 5160 Seminar in Human Resources 3
BU 5230 Management of Organizational Change 3

MARKETING

BU 5240 Seminar in Organizational Communication 3
BU 5630 PT: E-commerce 3
BU 5630 PT: Strategic Communications 3
BU 5630 PT: Promoting the Corporate Image 3
BU 5680 Applications in Marketing Research 3
BU 5690 Behavioral Perspectives in Marketing 3
BU 5730 Contemporary Issues in Marketing 3
BU 5810 Seminar in Corporate Public Relations 3
Students accepted into the MBA program meet with an advisor to set up an individualized course of study based on a review of competencies and previous coursework.

**Certificate/Concentration Programs**

Six certificate/concentration programs have been developed for students to focus their studies in a particular area in the business environment. The certificates/concentrations consist of four three-credit courses for a total of 12 credits. They can be pursued as a post-baccalaureate certificate or as a concentration area within the MBA degree. The certificate/concentration subjects and requirements are as follows:

<table>
<thead>
<tr>
<th><strong>HEALTH CARE ADMINISTRATION</strong></th>
<th><strong>REQUERED COURSES</strong></th>
<th><strong>CREDITS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 5410</td>
<td>Human Resources in Health Care Administration</td>
<td>3</td>
</tr>
<tr>
<td>BU 5420</td>
<td>Health Care Laws and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BU 5430</td>
<td>Health Care Administration and Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>BU 5490</td>
<td>Capstone: Health Care Topics</td>
<td>3</td>
</tr>
</tbody>
</table>

**THE HUMAN SIDE OF ENTERPRISE**

<table>
<thead>
<tr>
<th><strong>REQUERED COURSES</strong></th>
<th><strong>CREDITS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 5510</td>
<td>Managing Organizational Behavior</td>
</tr>
<tr>
<td>BU 5520</td>
<td>Legal Environment of Business</td>
</tr>
</tbody>
</table>

**INVESTMENT AND FINANCE**

<table>
<thead>
<tr>
<th><strong>REQUERED COURSES</strong></th>
<th><strong>CREDITS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 5120</td>
<td>Financial Analysis and Decision Making</td>
</tr>
<tr>
<td>BU 5190</td>
<td>Accounting for Managers</td>
</tr>
</tbody>
</table>

Choose two from:

<table>
<thead>
<tr>
<th><strong>BU 5160</strong></th>
<th>Seminar in Human Resources</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BU 5230</strong></td>
<td>Management of Organizational Changes</td>
<td>3</td>
</tr>
<tr>
<td><strong>BU 5240</strong></td>
<td>Seminar in Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>BU 5165</strong></td>
<td>Training and Development</td>
<td>3</td>
</tr>
<tr>
<td><strong>BU 5115</strong></td>
<td>Creating Organizational Health</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ORGANIZATIONAL COMMUNICATION</strong></th>
<th><strong>REQUERED COURSES</strong></th>
<th><strong>CREDITS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 5240</td>
<td>Seminar in Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>BU 5810</td>
<td>Seminar in Corporate Public Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

**SMALL BUSINESS AND ENTREPRENEURSHIP**

<table>
<thead>
<tr>
<th><strong>REQUERED COURSES</strong></th>
<th><strong>CREDITS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 5850</td>
<td>New Ventures and Entrepreneurship</td>
</tr>
<tr>
<td>BU 5500</td>
<td>Small Business: Problems and Strategy (SBI I)</td>
</tr>
<tr>
<td>BU 5501</td>
<td>Small Business Analysis (SBI II)</td>
</tr>
</tbody>
</table>

Choose one from:

<table>
<thead>
<tr>
<th><strong>BU 5110</strong></th>
<th>Managing Organizational Behavior</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BU 5190</strong></td>
<td>Accounting for Managers</td>
<td>3</td>
</tr>
<tr>
<td><strong>BU 5220</strong></td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td><strong>BU 5700</strong></td>
<td>Marketing Techniques</td>
<td>3</td>
</tr>
</tbody>
</table>

**STRATEGIC MARKETING MANAGEMENT**

<table>
<thead>
<tr>
<th><strong>REQUERED COURSES</strong></th>
<th><strong>CREDITS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 5700</td>
<td>Marketing Techniques</td>
</tr>
<tr>
<td>BU 5690</td>
<td>Behavioral Perspectives in Marketing</td>
</tr>
</tbody>
</table>

Choose two from:

<table>
<thead>
<tr>
<th><strong>BU 5630</strong></th>
<th>PT: E-commerce</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BU 5680</strong></td>
<td>Applications in Market Research</td>
<td>3</td>
</tr>
<tr>
<td><strong>BU 5730</strong></td>
<td>Contemporary Issues in Marketing</td>
<td>3</td>
</tr>
<tr>
<td><strong>BU 5810</strong></td>
<td>Seminar in Corporate Public Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose two from:

<table>
<thead>
<tr>
<th><strong>BU 5580</strong></th>
<th>Real Estate Entrepreneurship</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EC 5460</strong></td>
<td>Graduate Money and Banking</td>
<td>3</td>
</tr>
</tbody>
</table>
Master’s Research Project Option

Candidates may complete a three- or 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 enroll, obtain an application form from the College of Graduate Studies, complete it (with appropriate signatures) and register for the project with the College of Graduate Studies. Submit three copies of the Master’s Research Project to the faculty advisor and an oral presentation to a committee no later than April 1 of the intended year of graduation.

Small Business Institute® (SBI)

Students may also earn three or six credits by joining an SBI consulting team. The Small Business Institute® (SBI) at Plymouth State University gives MBA students 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 must be of professional quality. Over the past 32 years, Plymouth students’ reports have won dozens of statewide, regional and national awards in competitions. Recent Small Business Institute® awards include: National First Place (2004, 2003, 2000); National Second Place (2005, 2003, 2002, 2001, 1999); National Third Place (2005); National Fourth Place (2004); Regional First Place (six awards between 1999–2004); and the Showcase Award for Best SBI Program (2003). 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/concentration. For more information, please contact the College of Graduate Studies office and/or the PSU Web site (mba.plymouth.edu).

Twelve Month Program

All MBA courses, whether at Plymouth or at off-campus sites, are delivered in the evenings on a quarter system (fall, winter, spring, summer). In addition to providing excellent access for part-time students, this allows students, regardless of their location of study, to complete the MBA program in just four quarters (fall, winter, spring, summer). To do this, all undergraduate competencies must be met prior to beginning graduate study.

Degree Requirements

The Graduate Council sets the requirements for degrees, which include completion of the courses required in the program (30 graduate credits) with a cumulative grade point average of 3.0 or higher.

Completion Deadlines

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

Master of Education

Program Coordinator information is listed by program area and also beginning on page 10.

Graduate degree programs in education began in 1948. Today, the Master of Education program consists of two degree programs with over 13 majors across many academic departments, and over 75 program concentrations for students to obtain teacher certification, advance in their professional knowledge of content areas, develop skills in a new field or design a program to address personal and professional goals.

Graduate programs in education are based on the key components of reflective practice and support for professional development. Reflective practice is encouraged through core graduate courses, professional portfolio development, collaborative inquiry, specialization courses and capstone experiences of individual research, graduate practicum or graduate thesis. Support for professional development is addressed through internship and practica, projects, collaborative action research, partnerships at the various schools and agencies, cohort groups at many off-campus sites, and on-going research and inquiry.
Curriculum

The curriculum of the graduate programs is viewed as national standards-based, integrated and culturally responsive. The curriculum is designed to develop professional competence in ethics, research and communication. The hallmarks of all graduate programs include:
- Leadership and advocacy
- Scholarship, action and application
- Reflection and innovation
- Professionalism and service
- Global awareness and responsibility.

Program Goals

All Master of Education degree candidates, regardless of specialty, are expected to acquire competence in the following areas:
- Understanding and guiding learners
- Evaluating student progress
- Ability to use a valid decision-making model
- Planning and evaluating learning experiences
- Demonstration of knowledge of the content of a major field
- Effectively interacting within learning communities
- Understanding the community and its resources
- Demonstrating sensitivity to student diversity
- Developing as a professional in their field
- Ability to use research
- Ability to communicate clearly, and
- Demonstration of the ability to use technology as a tool for learning.

The five core propositions of the National Board for Professional Teaching Standards are incorporated into many of the courses and activities of the graduate program. The core propositions are:
1. Teachers are committed to students and their learning.
2. Teachers know the subjects they teach and how to teach those subjects to students.
3. Teachers are responsible for managing and monitoring student learning.
4. Teachers think systematically about their practice and learn from experience.
5. Teachers are members of learning communities.

Conceptual Framework for Teacher Education

INTRODUCTION AND BACKGROUND
This “conceptual framework” is a shared set of beliefs and attitudes that serves as the foundation for teacher education programs. The purpose of articulating a framework is to clearly identify for faculty, staff and students the core values we share as a community. These core values—Commitment, Holism, Experience, Collaboration and Knowledge—are meaningfully integrated into all coursework, field experiences and policy that form the teacher education curricula.

The framework is an organic document that grows and changes over time. In 1992, members of the Plymouth faculty, representing the Education Department and the Council of Teacher Education, developed a framework that was to serve as a basis for decisions made concerning teacher education. At a workshop held in January 1995, an even larger and more diverse group of faculty and staff modified the initial framework. Following is the most recent version of the framework.

COMMITMENT
We define commitment as dedication, perseverance, and individual and social responsibility. Our candidates are committed to lifelong learning and to increasing self-knowledge. They are committed to the beliefs that all students can learn and that education has the power to transform individuals and the greater society. Our candidates recognize the responsibility of educators to take a thoughtful and critical stance towards themselves and their profession.

<table>
<thead>
<tr>
<th>CANDIDATES NEED TO KNOW ...</th>
<th>SO THEY WILL BE ABLE TO ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>The importance of continually seeking a variety of teaching strategies</td>
<td>Design learning experiences to accommodate students’ diverse styles of learning</td>
</tr>
<tr>
<td>Commitment takes sustained effort over time</td>
<td>Show both patience and perseverance with students, families and colleagues</td>
</tr>
<tr>
<td>The importance of dedication to the pursuit and construction of knowledge</td>
<td>Nurture such a lifelong commitment in students</td>
</tr>
<tr>
<td>The legal rights and responsibilities of educators and students</td>
<td>Exhibit ethical behavior and encourage it in others</td>
</tr>
</tbody>
</table>
The dispositions that will help candidates achieve these goals include:

- A commitment to develop, reflect upon and understand their own values leading to high standards of ethical behavior
- Having high expectations of themselves and others
- The personal flexibility to explore with colleagues the values to be reinforced in schools
- An attitude that emphasizes both individual and collective responsibility, and fosters a concern for social justice
- Being committed to personal and professional growth
- Personal qualities such as self-confidence, self-motivation, openness, patience, persistence, a caring attitude, kindness and fairness.

Candidates give evidence of their commitment by:

- Creating a classroom environment in which students feel physically safe and psychologically secure
- Demonstrating a caring attitude towards themselves, students, families and colleagues
- Joining professional associations
- Evidencing continued personal and professional growth through reading, research and application of promising practices
- Exhibiting ethical behavior.

**HOLISM**

Our holistic perspective involves affirming diversity and understanding the “whole child” within the family, community and cultural context. It includes working toward an integrated curriculum and recognizing how we as educators are shaped by our own experiences and culture. This holistic perspective shapes our larger vision.

Candidates give evidence of their understanding of holism by:

- Demonstrating their mastery of content knowledge related to child development through successful performance on tests and in their teaching activities during field experiences
- Demonstrating their ability to design and teach developmentally appropriate lessons using a range of methodological approaches
- Designing lessons that incorporate verbal, non-verbal, written and technological skills in order to communicate with all students
- Using a variety of assessment strategies to evaluate student learning from a holistic perspective.

**EXPERIENCE**

Experience allows us to put theory into practice. We provide opportunities for experiential learning that serves communities and schools so that our candidates can do the same for their students. Experience also involves constantly renewing skills and knowledge within one's discipline.

<table>
<thead>
<tr>
<th>CANDIDATES NEED TO KNOW ...</th>
<th>SO THEY WILL BE ABLE TO ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major concepts, principals, theories and research related to the development of children and adolescents</td>
<td>Design instruction that provides opportunities for the physical, cognitive, affective, linguistic, creative, social and moral development of students</td>
</tr>
<tr>
<td>That students come to them with diverse experiences</td>
<td>Create appropriate learning environments and experiences that address student diversity</td>
</tr>
<tr>
<td>The interrelatedness of the variety of content areas they will teach</td>
<td>Design and implement integrated instruction that is responsive to the diverse needs of the whole child.</td>
</tr>
<tr>
<td>The value of translating research into practice and</td>
<td>Assess the effectiveness of the research and link to teaching learning</td>
</tr>
<tr>
<td>The importance of developing an effective method of personal and professional reflection</td>
<td>Continually evaluate the effects of his/her choices and actions on students, parents and others in the school and community</td>
</tr>
<tr>
<td>The continually changing needs of children and young adults in a diverse society</td>
<td>Design appropriate instruction to respond to all learners</td>
</tr>
<tr>
<td>That learning is enhanced through relevance</td>
<td>Create opportunities for students to reflect on their life choices.</td>
</tr>
</tbody>
</table>
The dispositions that will help candidates achieve these goals include:
• Acknowledgement that learning is a lifelong process
• Flexibility and adaptability
• The willingness to learn from experience and make appropriate adaptations based on what has been learned through reflection and the mentoring process.

Candidates give evidence of their experience by:
• Observing, teaching and engaging school-age youth in a comprehensive set of field-based activities that demonstrate collaborative behavior, a commitment to the profession and a suitable knowledge base.

**COLLABORATION**
Collaboration involves working with students, families and colleagues effectively towards shared goals, showing respect and openness towards diverse perspectives, and confronting and resolving conflicts effectively and respectfully. Collaboration enhances both teaching and learning, and is an essential part of developing the capacity to lead.

**KNOWLEDGE**
Knowledge refers to understanding the theory, content, methods, and materials and technologies of one’s field, and understanding child and adolescent development, learning processes and motivation as these are shaped by culture. Teaching that engages all learners combines a knowledge of students and one’s subjects within the cultural, social and institutional context.

<table>
<thead>
<tr>
<th>CANDIDATES NEED TO KNOW ...</th>
<th>SO THEY WILL BE ABLE TO ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>The complexities of students’ lives in the context of social units such as the family, school and community</td>
<td>Maximize the participation of all these units in the education of students</td>
</tr>
<tr>
<td>How diversity can contribute to the teaching/learning process</td>
<td>Create a positive classroom environment that supports the active and productive involvement of all students</td>
</tr>
<tr>
<td>Group dynamics and facilitative methodological approaches as they relate to educating all students in the classroom</td>
<td>Both exhibit and foster leadership, collaborative and conflict resolution skills.</td>
</tr>
</tbody>
</table>

The dispositions that will help candidates achieve these goals include:
• Sensitivity to and respect for human diversity
• The ability to recognize and foster collegiality as they work with school staff, parents and others to support students’ learning and well-being
• The predilection for valuing the opinions of students, families and other relevant adults in the teaching/learning process
• The desire to improve their own verbal, non-verbal, written and technological literacy.

Candidates give evidence of their collaboration by:
• Creating learning environments that recognize and respect the diversity of individual students and their families
• Developing curricula that enhance students’ collaboration and conflict resolution skill
• Demonstrating the ability to use cooperative learning in the classroom
• Fostering the development of the verbal, non-verbal, written and technological literacy of students
• Implementing cooperative learning and group decision-making.

<table>
<thead>
<tr>
<th>CANDIDATES NEED TO KNOW ...</th>
<th>SO THEY WILL BE ABLE TO ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>The central concepts and tools of inquiry of the content they will be teaching and how it relates to other content areas</td>
<td>Structure learning experiences and curriculum to build on students’ prior knowledge and enable students to see connections across content area</td>
</tr>
<tr>
<td>Child and adolescent development, typical and atypical</td>
<td>Consider the cognitive, social, emotional and physical development of individual students when planning instruction</td>
</tr>
<tr>
<td>Methodology and the learning process</td>
<td>Match instruction to the ways in which individual students think and learn</td>
</tr>
<tr>
<td>Appropriate and multiple assessment techniques congruent with local curricula and state curriculum frameworks</td>
<td>Meaningfully assess students’ learning and use that information to improve and modify instruction</td>
</tr>
<tr>
<td>The impact of culture upon teaching and learning</td>
<td>Understand how we all are influenced by our culture and plan instruction to address all students</td>
</tr>
<tr>
<td>Verbal, nonverbal, written and technological literacy</td>
<td>Use these skills effectively to enhance their teaching and students’ learning.</td>
</tr>
</tbody>
</table>
The dispositions that will help candidates achieve these goals include:

• Enthusiasm and a demonstrated desire to participate in the learning process
• Confidence in their ability to relate to individual students and match instruction to each student's needs
• The ability to take risks and learn from their mistakes, and to communicate to students that taking risks and making mistakes are part of the learning process
• A commitment to lifelong learning and a recognition that there is always more to learn
• An appreciation of their ethical and professional responsibilities as teachers to strive to teach all students and to encourage all students to become successful learners.

Candidates give evidence of their knowledge by:

• Demonstrating their mastery of content knowledge through successful performance on tests and in their teaching activities during field experiences
• Showing their understanding of child development and how students think and learn in their interactions with students—individually, in small groups and as a whole class—and through their instructional planning
• Demonstrating their ability to use a range of methodological approaches in their field experiences
• Using a variety of meaningful assessment strategies to evaluate student learning and using assessments to improve their teaching
• Behaving professionally and ethically in their dealings with school and University personnel, students and students' families, and treating all persons with respect.

**International Outreach**

During the summer, many students come from the American International Schools and Department of Defense schools to complete a degree program. Plymouth graduate students include teachers from many schools in many places such as Austria, Australia, China, England, Germany, Greece, the Netherlands, Russia, Spain, Turkey, Kuwait, Saudi Arabia and other countries.

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

**Graduate Courses at Area Schools**

Plymouth offers graduate courses throughout the academic year to support Eisenhower grant funding and professional or staff development interests expressed by the principals and superintendents. The University offers graduate credit for professional development opportunities through the State of New Hampshire Professional Development Centers located in Exeter, Manchester, Penacook and Gorham. Arrangements for off-campus courses are made through the undergraduate methods instructors and the College of Graduate Studies. Topics for courses have included math and science methods, matching curriculum to New Hampshire assessment, literacy and integrated arts. Please contact the College of Graduate Studies for further information.

**Program Content**

The Master of Education offers a variety of high-quality programs to meet the personal goals and professional needs of students. Concentrations, access and flexibility are features of the M.Ed. program. Courses are offered around the state, online and in workshop and institute formats. All Master of Education degree programs require courses in research, philosophy and diversity as core components. A capstone experience of a graduate practicum, internship, individual research project or thesis is required for every program. Graduate students are expected to develop competencies in critical thinking, communications, collaboration, diversity, leadership, research and technology. Programs in Teacher Education address knowledge-base guidelines articulated by the National Council for the Accreditation of Teacher Education (NCATE) and competencies outlined by the New Hampshire State Department of Education and nationally recognized professional organizations of the various disciplines. M.Ed. degree program descriptions begin on page 49.

**Admission to Master of Education Programs**

With the exception of the M.Ed. in Athletic Training, Plymouth considers applications for graduate courses on a rolling admission basis. This provides applicants the opportunity to begin courses year round. New applications
are evaluated regularly. Students may take up to 12 credits (four courses) before applying to the graduate program. However, students in the CAGS program may take only one course before officially applying to the program. Athletic Training applications are due to Graduate Studies by March 1 each year for the next academic year.

Requirements for admission to the graduate education programs include: a baccalaureate degree with a 3.0 or higher grade point average in the academic major, an average score on the Miller Analogies Test (MAT) or Graduate Record Exam (GRE), three recommendations, a well-written statement of professional goals documenting interest and a current resumé. There may also be program-specific requirements.

Graduate students are responsible for knowing policies governing their program, registration, change of schedule, withdrawal and other policies and procedures of the College of Graduate Studies.

STEP-BY-STEP ADMISSION APPLICATION PROCEDURES

Admission and registration processing takes place in the College of Graduate Studies. Students wishing to apply to the Master of Arts in Teaching, Master of Education, CAGS, Educator Certification or Specialist Certification programs should follow these procedures.

1. Schedule an appointment with the program coordinator or an advisor. Initial contact may be made via e-mail or by telephone. A list of program coordinators is found on page 10.
2. Request or pick up the application packet from the College of Graduate Studies or download the forms from the graduate Web site (www.plymouth.edu/graduate). Complete the official application form and submit the non-refundable application fee.
3. Order official transcripts from all undergraduate and graduate institutions attended. Transcripts must be sent directly from the school(s) to the College of Graduate Studies.
4. Submit three recommendations using official Plymouth State University recommendation forms included with the application packet.
5. Take the MAT or the GRE (the GRE is preferred for Athletic Training candidates). The MAT is offered on a regular basis at Plymouth and at the Granite State College site in Portsmouth. For dates, places and times, see PSU’s graduate Web site (www.plymouth.edu/graduate). To sign up for any MAT test, contact the College of Graduate Studies at (603) 535-2636.
6. Submit a statement of professional goals, documenting interest and intent, and a resumé.
7. Submit the completed application forms and materials to:
   Plymouth State University
   College of Graduate Studies–MSC 11
   17 High Street
   Plymouth, NH 03264-1595

APPLICATION FEE

The application fee must be submitted with the application and is not refundable. The current Master of Arts in Teaching, Master of Education and Educator Certification application fee is $75. The current Certificate of Advanced Graduate Studies application fee is $100.

APPLICANTS FROM FOREIGN COUNTRIES

In addition to the above admission documentation, international students must provide the following information:

- Notarized copies (translated into English) of transcripts of their undergraduate degree and any other institutions you have attended, evaluated for institutional equivalency
- Most recent Test of English as a Foreign Language (TOEFL)
- Certified or notarized Affidavit of Support form (U.S. Immigration for I-134), which is required before an I-20 can be issued for F-1 status. This serves as evidence that all financial requirements for a year of tuition and living expenses can be met.
- Proof of country of citizenship and birth, which is required before an I-20 can be issued for F-1 status.

All applications for admission become part of the permanent records of Plymouth State University and will not be returned. Access to this material is limited under the Family Rights and Privacy Act 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: Plymouth is under no obligation to accept more than 2 credits taken at Plymouth State University prior to admittance into a degree program. Courses older than six years at the time of admittance may not be counted toward a degree.
Upon admission into a Plymouth graduate program, international students will receive a confirmation letter. This letter must be signed by the newly admitted student, indicating that he or she intends to attend Plymouth State University, and must be returned to the College of Graduate Studies. Once that confirmation letter is received, the I-20 process may begin.

APPLICATION DEADLINES AND REVIEW
Completed application folders are evaluated by the Review Board, whose primary members include the Associate Vice President for the College of Graduate Studies, the Director of Graduate Programs and Certification, and the M.Ed. Program Coordinator. Other members of the graduate faculty who serve as program advisors are invited to participate in the review process. Applications are reviewed bi-monthly and students are notified in writing within approximately 30 days of the Board’s decision.

ADMISSION STATUS
Students who have applied to the program may be fully admitted, fully admitted pending completion of necessary requirements or denied admission. Students must meet all requirements attached to their 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.

ADMISSION REGULATIONS
Persons holding a baccalaureate degree from an accredited college or university may enroll in graduate courses. Students taking courses will be classified in the following ways:

Graduate Status: Students who have been officially accepted into the M.A.T., M.Ed. or CAGS program and are enrolled in courses that will eventually lead to their degree.

Non-degree Status: Students taking courses before or without being admitted into a graduate program are allowed to take up to 12 credits of graduate coursework before a hold is placed on their registration.

Graduate Study 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 total (graduate and undergraduate) credits taken by a qualified senior in any one semester may not exceed 15 credits.

GRADUATE STUDIES IN EDUCATION 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 graduate program recognizes C– as the lowest passing grade. Students in the program must attain a grade of B– or better in core courses.

DEGREE REQUIREMENTS
The Graduate Council sets the requirements for graduate degrees.
- Completion of at least 33 to 60 graduate credits (depending on the program) with a cumulative grade point average of 3.0 or higher
- No grade lower than B– will be accepted in M.A.T., M.Ed. or CAGS core courses
- Completion of an academic residency requirement by attendance for one full-time term (six or more term hours).

THESIS OPTION
A thesis option is available in each of the program concentrations of the Master of Education degree. Selection of this option should be declared during the preparation of the Program Contract. The thesis carries 1–9 graduate credits that will, after careful consideration of thesis content, substitute for coursework in the program concentration. 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, which remains on file in the Graduate Studies office.

TRANSFER CREDITS
Transfer credits from other accredited institutions are limited to nine graduate-level credit hours. Grades for transfer courses must be at the B level or higher, and appropriate to the program attempted at Plymouth. Only credits are transferred, not grades: therefore, the grade for transfer courses does not count toward the required 3.0 grade point average for program completion. Courses more than six years old at the time of acceptance may not be counted toward or transferred to a graduate program.

An official transcript must be on file in the Graduate Studies office before credits can be considered for transfer to a
program. Course descriptions and/or course outlines may be requested in order to determine credit consideration.

**COURSE AUDITS**
Half tuition is charged for auditing a class in the Education field, with the exception of technology, lab and studio classes. Permission of the instructor is required for all course audits.

**Master of Education Degree Programs and Concentrations**

**M.Ed. in Athletic Training**
Program Coordinator: Marjorie King, Ph.D., A.T.C., P.T., (603) 535-3108, e-mail: making1@plymouth.edu

Plymouth State University offers two concentrations in Athletic Training. The **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 in Athletic Training. During each semester, for a minimum of four semesters, students will enroll in a practicum in Athletic Training. 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 to continue their practicum experience. The entry-level option is a two-year program that begins each summer. Completed applications for this program must be submitted **no later than March 1**, annually.

The **Advanced Master’s** concentration allows the student to pursue higher education training or advanced sports medicine education. The Higher Education option is designed to prepare certified athletic trainers for a variety of teaching and leadership roles in higher education. The Sports Medicine option is designed to introduce certified athletic trainers to advanced skills and knowledge in sports medicine.

**ADMISSION**
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 contacting the Health and Human Performance Department or by visiting the Athletic Training Web site (www.plymouth.edu/graduate/athletic).

**PREREQUISITES**
1. Bachelor’s degree from accredited institution of higher learning
2. 3.0 undergraduate grade point average
3. Comprehensive statement of professional goals
4. GRE or Millers Analogy Test (GRE preferred)
5. Three letters of recommendation
6. **Entry Level only:**
   a. Minimum of 100 hours observation under direct supervision of a BOC Certified Athletic Trainer. Original letters of documentation must be submitted as part of the application.
   b. Minimum grade of C in the following college/university courses (must be taken within the past seven years):
      - Anatomy (with lab) 4 credits
      - Physiology (with lab) 4 credits
      - Kinesiology 3 credits
      - Exercise Physiology 3 credits
      - Nutrition 3 credits
      - Personal Health 3 credits
      - Fitness Education and Assessment 2–3 credits
      - First Aid and CPR (and current certification)
7. **Advanced Master’s only:**
   - BOC certification and one year of experience (preferred) as a certified athletic trainer (ATC).

**PROGRAM OF STUDY**

**REQUIRED COURSES**  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5000</td>
<td>Social Behavior in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>ED 5010</td>
<td>Philosophy, Ethics and Education</td>
<td>3</td>
</tr>
<tr>
<td>AT 5600</td>
<td>Research Design in Health Science</td>
<td>3</td>
</tr>
<tr>
<td>AT 5610</td>
<td>Statistics in Health Science</td>
<td>3</td>
</tr>
<tr>
<td>AT 5950</td>
<td>Graduate Thesis</td>
<td>6 (minimum)</td>
</tr>
<tr>
<td></td>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>AT 5900</td>
<td>Directed Research</td>
<td>6 (minimum)</td>
</tr>
</tbody>
</table>

**Credits for Core Component** 18
### Entry-Level Concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 5000</td>
<td>Psychomotor Skills in Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>AT 5010</td>
<td>Orthopedic Assessment I</td>
<td>4</td>
</tr>
<tr>
<td>AT 5020</td>
<td>Orthopedic Assessment II</td>
<td>4</td>
</tr>
<tr>
<td>AT 5100</td>
<td>Athletic Training Administration</td>
<td>3</td>
</tr>
<tr>
<td>AT 5200</td>
<td>Pharmacology in Sports Medicine</td>
<td>2</td>
</tr>
<tr>
<td>AT 5250</td>
<td>Therapeutic Exercise in Athletic Training</td>
<td>4</td>
</tr>
<tr>
<td>AT 5300</td>
<td>General Medical</td>
<td>3</td>
</tr>
<tr>
<td>AT 5500</td>
<td>Modalities in Sports Medicine</td>
<td>4</td>
</tr>
<tr>
<td>AT 5750</td>
<td>Practicum in Athletic Training I</td>
<td>1</td>
</tr>
<tr>
<td>AT 5760</td>
<td>Practicum in Athletic Training II</td>
<td>1</td>
</tr>
<tr>
<td>AT 5770</td>
<td>Practicum in Athletic Training III</td>
<td>1</td>
</tr>
<tr>
<td>AT 5780</td>
<td>Practicum in Athletic Training IV</td>
<td>1</td>
</tr>
<tr>
<td>AT 5800</td>
<td>Current Issues in Athletic Training</td>
<td>3</td>
</tr>
</tbody>
</table>

**Credits for Entry-Level component:** 34

### Optional Coursework:

- AT 5255 Introduction to Burdenko Conditioning: 1

**Minimum Total for M.Ed. in Athletic Training, Entry Level Concentration:** 52 credits

### Advanced Master’s: Higher Education Concentration

**Core Courses plus choose 15 credits from:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD 5010</td>
<td>Organizational Leadership in Schools</td>
<td>3</td>
</tr>
<tr>
<td>AD 5020</td>
<td>Staff Development and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>AD 5030</td>
<td>School Finance and Negotiations</td>
<td>3</td>
</tr>
<tr>
<td>AD 5330</td>
<td>Leadership in Curriculum Development and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>AD 5560</td>
<td>Special Topics in Administration and Supervision</td>
<td>3</td>
</tr>
<tr>
<td>AD 5700</td>
<td>School Law</td>
<td>3</td>
</tr>
<tr>
<td>AT 5850</td>
<td>Performance Enhancement Specialization</td>
<td>3</td>
</tr>
<tr>
<td>AT 5875</td>
<td>Special Topics in Athletic Training</td>
<td>1–3</td>
</tr>
<tr>
<td>AT 5790</td>
<td>Advanced Practicum in Athletic Training</td>
<td>1–6</td>
</tr>
<tr>
<td>AT 5900</td>
<td>Directed Research</td>
<td>1–3</td>
</tr>
<tr>
<td>AT 5910</td>
<td>Independent Study</td>
<td>1–6</td>
</tr>
<tr>
<td>CE 5150</td>
<td>Multimedia Tools in Education</td>
<td>3</td>
</tr>
<tr>
<td>CE 5600</td>
<td>Telecommunications and the Internet</td>
<td>3</td>
</tr>
<tr>
<td>CE5700</td>
<td>Administrative Uses of Computers</td>
<td>3</td>
</tr>
<tr>
<td>ED5060</td>
<td>Theories of Learning and Cognitive Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**Credits for Higher Education component:** 15

### Advanced Master’s: Sports Medicine Concentration

**Core Courses plus choose 15 credits from:**

- AT 5200 Pharmacology in Sports Medicine: 2
- AT 5300 General Medical: 3
- AT 5700 Instructional Strategies in Burdenko Conditioning: 1–3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 5790</td>
<td>Advanced Practicum in Athletic Training</td>
<td>1–6</td>
</tr>
<tr>
<td>AT 5850</td>
<td>Performance Enhancement Specialization</td>
<td>3</td>
</tr>
<tr>
<td>AT 5875</td>
<td>Special Topics in Athletic Training</td>
<td>1–3</td>
</tr>
<tr>
<td>AT 5900</td>
<td>Directed Research</td>
<td>1–3</td>
</tr>
<tr>
<td>AT 5710</td>
<td>Burdenko Certification Part I</td>
<td>3</td>
</tr>
<tr>
<td>AT 5720</td>
<td>Burdenko Certification Part II</td>
<td>3</td>
</tr>
<tr>
<td>AT 5730</td>
<td>Burdenko Certification Part III</td>
<td>3</td>
</tr>
<tr>
<td>AT 5740</td>
<td>Aquatic Exercise for Therapeutic Intervention and Sports Training and Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>AT 5910</td>
<td>Independent Study</td>
<td>1–6</td>
</tr>
<tr>
<td>HP 5080</td>
<td>Women’s Health Issues</td>
<td>3</td>
</tr>
<tr>
<td>PE 5560</td>
<td>Principles and Theories of Strength and Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>HH 5560</td>
<td>Topics in Alternative Health and Healing</td>
<td>3</td>
</tr>
<tr>
<td>HH 5600</td>
<td>Body Centered Therapies</td>
<td>3</td>
</tr>
<tr>
<td>HH 5700</td>
<td>Creating Organizational Health</td>
<td>3</td>
</tr>
<tr>
<td>HL 5160</td>
<td>Eating Disorders: Awareness, Prevention and Education</td>
<td>3</td>
</tr>
<tr>
<td>HL 5190</td>
<td>Medical and Physiological Aspects of Eating Disorders</td>
<td>3</td>
</tr>
<tr>
<td>HL 5180</td>
<td>Nutrition: Education and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HL 5170</td>
<td>Treatment Modalities for Eating Disorders</td>
<td>3</td>
</tr>
</tbody>
</table>

**Credits for Sports Medicine component:** 15

**Total for M.Ed. in Athletic Training, Advanced Master’s Concentration:** 33
M.Ed. in Counselor Education
Program Coordinators: School Counseling
Dr. Gary E. Goodnough,
(603) 535-2821, e-mail: ggoodno@plymouth.edu

Mental Health and Human Relations Counseling
Dr. Gail Mears,
(603) 535-2485, e-mail: gmears@plymouth.edu

School Psychologist
Dr. Leo R. Sandy,
(603) 535-2287, e-mail: lsandy@plymouth.edu

Plymouth’s M.Ed. in Counselor Education program is designed to prepare counselors who understand and are sensitive to the needs of the individuals with whom they work. Since this is a program of professional counselor preparation, emphasis is placed on personal and interpersonal growth, in addition to academic excellence. The program is 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 include brief counseling activities in schools and other settings. CO 5100 Practicum in Counseling is taken in order for students to develop and practice interviewing and counseling skills with a number of clients. Finally, the internship places students in settings that allow them to experience the full range of the activities that are associated with the role of the counselor. Students in this program must complete a residency requirement while completing their internship experience.

CONCENTRATIONS
The Counselor Education program offers four concentrations that lead to the M.Ed.:
• Mental Health Counseling
• School Counseling
• School Psychology
• Self Designed

As well as four additional programs:
• Parenting Education Certificate Program
• Play Therapy Certificate Program
• Conflict in Families Certificate Program
• School Psychology Conversion Program

SCREENING AND THE EXTENDED ADMISSION PROCESS
The course CO 5010 Foundations of the Counseling Profession is designed to assist counseling students to identify areas of strength and weakness as potential professional counselors, especially in the interpersonal/affective domain, and to assess their ability to keep personal conflict from interfering with professional work. Early identification of such areas allows students to capitalize on strengths and remediate weaknesses throughout their program. Faculty members are available to facilitate this process both during formal course work and through individually structured programs. Such programs may include the requirement that students become involved in the counseling process as a client. Introduction to the Counseling Profession also allows the faculty members to explore alternative career choices with students whose personal characteristics may seem more compatible with a profession other than counseling.

Professional counseling organizations recommend that program admissions criteria include consideration of the applicant’s openness to self-examination and personal and professional self-development. Foundations of the Counseling Profession fulfills these objectives and is thus an integral part of the admissions process. In order for students to be admitted to the Counseling program, they must:
1. Successfully complete the requirements of CO 5010 Foundations of the Counseling Profession, earning a grade of B or better, and
2. Receive the endorsement of admission by the faculty who teach the course.

This procedure follows the guidelines endorsed by professional counseling organizations regarding the necessity of faculty input into the admissions process. Students need to realize that although they are permitted to take additional course work while they are completing Foundations of the Counseling Profession, these courses do not apply to their M.Ed. in Counselor Education until and unless they successfully complete this course (as described above).

For all of these reasons, it is essential that students take the course Foundations of the Counseling Profession before enrolling in any of the professional Counselor of Education courses. As described above, this course is an important component of the admissions process.
COUNSELOR EDUCATION MONITORING AND DISMISSAL PROCESS

The Counselor Education program faculty admits students to the program after observing and assessing their professional behavior and interpersonal effectiveness in CO 5010 Foundations of the Counseling Profession. As counselor trainees, students have a responsibility to conduct themselves in an ethical and professional manner. The program faculty has the responsibility to monitor those students’ personal characteristics that have the potential to interfere with ethical performance in the field. Thus all Counselor Education students are monitored each term that they are enrolled in Counselor Education courses. This review is based on the Personal Characteristics Monitoring Form, a copy of which is distributed to students during Foundations of the Counseling Profession.

If students are assessed at a level indicating unacceptable interpersonal behavior, they will be given a copy of the form with instructor comments. A copy of the form will be forwarded to the Counselor Education faculty for review. After the review, the student and instructor will meet to discuss necessary remediation steps.

If a student receives more than one form from more than one instructor during any one term, or receives a form from more than one instructor over any two-term time frame, the student will be required to meet with his or her advisor to discuss possible remediation strategies or to reconsider the student’s continuation in the graduate Counselor Education program.

If a student receives three or more unsatisfactory review forms, a committee of three Counselor Education faculty, including the student’s advisor, will meet with the student to discuss reconsideration of continuance in the Counselor Education program. If the committee determines that the student’s personal and/or professional behavior is inappropriate to the profession of counseling, and that the behaviors would be detrimental in working professionally, the student will be dismissed from the program.

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

INTERNSHIP

Students in the School Counseling concentration 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 Seminar and Internship. 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 Mental Health Counseling concentration must successfully complete a 900-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. Students must be in each field placement for a minimum of 400 hours. 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 three academic terms and carries nine credits. Students must complete their internship experience within two calendar years.

Students in the Self Designed concentration must complete three credits (225 hours) of CO 5800 Internship in Counseling: Self Designed in their area of specialization. The Counselor Education faculty must approve internship sites and appropriate field supervision in advance.

In all concentrations, all required professional courses must be successfully completed before students can enroll in the internship experience. Students must contact their advisor during the term prior to their internship experience in order to make appropriate arrangements. The deadlines are October 15 for spring term and February 15 for fall term, unless these dates fall on weekends.
SCHOOL COUNSELING CONCENTRATION
The School Counseling concentration is designed to prepare students to function as Certified Professional School Counselors, K–12. This program is approved by the New Hampshire State Department of Education and leads to New Hampshire certification in school (guidance) counseling.

PROGRAM OF STUDY
REQUISITE COURSES CREDITS
Counselor Education Core
CO 5010 Foundations of the Counseling Profession 3
CO 5050 Advanced Human Development 3
ED 5000 Social Behavior in a Diverse Society 3
ED 5030 Research Design 3
CO 5100 Practicum in Counseling 3
CO 5230 Career Counseling and Development 3
CO 5260 Counseling Theories 3
CO 540 Assessment and Consultation 3
CO 5460 Group Counseling 3

School Counseling Specialization Courses
CO 5030 School Counseling 3
CO 5650 Critical Issues: School Counseling and Special Education 3
CO 5780 Consultation and Counseling Interventions with Children and Adolescents 3
CO 5850 Seminar and Internship in School Counseling K–12 6

Elective 3

Total for M.Ed. in Counselor Education, School Counseling Concentration 48

Mental Health Counseling Concentration
The Mental Health Counseling concentration is designed to prepare students to function as licensed clinical mental health counselors. It provides the educational requirements outlined by the 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.

PROGRAM OF STUDY
REQUISITE COURSES CREDITS
Counselor Education Core
CO 5010 Foundations of the Counseling Profession 3
CO 5050 Advanced Human Development 3
ED 5000 Social Behavior in a Diverse Society 3
ED 5030 Research Design 3
CO 5100 Practicum in Counseling 3
CO 5230 Career Counseling and Development 3
CO 5260 Counseling Theories 3
CO 540 Assessment and Consultation 3
CO 5460 Group Counseling 3

Mental Health Counseling Specialization Courses
CO 5130 Psychopharmacology and the Biological Basis of Mental Illness 3
CO 5600 Introduction to Mental Health Counseling 3
CO 5670 Family and Social Systems 3
CO 5700 Critical Issues: Mental Health Practice 3
CO 5770 Psychopathology: Disorders of Childhood, Adolescence and Adulthood 3
CO 5780 Counseling and Consulting Interventions for Children and Adolescents 3
CO 5790 Interventions in Mental Health Practice 3
CO 5880 Seminar and Internship in Mental Health Counseling 9

Elective 3

Total for M.Ed. in Counselor Education, Mental Health Counseling Concentration 63

SCHOOL PSYCHOLOGIST CONCENTRATION
The School Psychologist concentration has been designed for individuals holding master’s degrees who desire certification in school psychology at the state and/or national level. The School Psychologist concentration may also be a 69-credit Master of Education option. Candidates are expected to possess strong interpersonal skills. The program emphasizes those abilities that will enable practitioners to not only promote the development of children in direct ways but also through consultation and the initiation of systemic change, especially as it relates to the formation of environments that provide physical and psychological safety, and nurture social and emotional
Field experiences will be provided at local schools under the supervision of nationally certified school psychologists and university professors who are likewise trained and certified. Students who are planning to do their internship should apply one semester before. Those planning on doing the internship in the fall should apply no later than April 15, and for those planning on doing it in the spring, no later than October 15. Two hundred of the 1,200 required hours of internship (2 credits) will be done at the Plymouth State University Community Counseling Clinic located at the Whole Village Family Resource Center in Plymouth, N.H.

Acceptance into the program will be contingent upon successful completion of SY 6010 Foundations of School Psychology, strong interpersonal skills verified through documentation and a personal interview. During the time of their enrollment in the program, candidates will be expected to develop a portfolio based on the New Hampshire state standards for School Psychology. This portfolio will be reviewed and completed during internship.

Coursework will focus on:
- Human behavior in a social context
- Human diversity
- Human development across the ages and stages
- Designing and implementing research projects
- The role of education in society
- The process of thinking and learning
- Effective teaching and knowledge acquisition
- Assessing children’s intelligence, social/emotional status, and other abilities and aptitudes
- Consulting with parents, teachers and other professionals
- Theoretical and practical aspects of counseling
- Biological determinants of human behavior
- The roles and responsibilities of the school psychologist
- Applying skills in field settings
- Ethical and professional behavior
- Legal issues in school psychology
- Special education
- Ecology of the family, school, community and society
- The use of technology
- Classroom and behavior management strategies
- Psychopharmacology

**ADMISSION REQUIREMENTS**
- Master’s degree from an accredited institution (for conversion applicants only)
- Completed application form and application fee
- Official undergraduate and graduate transcripts
- Three recommendations, emphasizing interpersonal skills, on the forms provided
- Résumé and statement of interest and professional goals
- Interview with program advisor(s)

**PROGRAM OF STUDY**
(subject to update with new New Hampshire standards)

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5000</td>
<td>Social Behavior in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>ED 5010</td>
<td>Philosophy, Ethics and Education</td>
<td>3</td>
</tr>
<tr>
<td>CO 5050</td>
<td>Advanced Human Development</td>
<td>3</td>
</tr>
<tr>
<td>ED 5030</td>
<td>Research Design</td>
<td>3</td>
</tr>
<tr>
<td>ED 5060</td>
<td>Theories of Learning and Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>CO 5430</td>
<td>Assessment and Consultation</td>
<td>3</td>
</tr>
<tr>
<td>CO 5260</td>
<td>Counseling Theories</td>
<td>3</td>
</tr>
<tr>
<td>CO 5130</td>
<td>Psychopharmacology and the Biological Basis for Mental Illness</td>
<td>3</td>
</tr>
<tr>
<td>SE 5600</td>
<td>Language and Learning Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SE 5570</td>
<td>Autism and Spectrum Disorders</td>
<td>3</td>
</tr>
</tbody>
</table>

**Foundation Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5000</td>
<td>Social Behavior in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>ED 5010</td>
<td>Philosophy, Ethics and Education</td>
<td>3</td>
</tr>
<tr>
<td>CO 5050</td>
<td>Advanced Human Development</td>
<td>3</td>
</tr>
<tr>
<td>ED 5030</td>
<td>Research Design</td>
<td>3</td>
</tr>
<tr>
<td>ED 5060</td>
<td>Theories of Learning and Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>CO 5430</td>
<td>Assessment and Consultation</td>
<td>3</td>
</tr>
<tr>
<td>CO 5260</td>
<td>Counseling Theories</td>
<td>3</td>
</tr>
<tr>
<td>CO 5130</td>
<td>Psychopharmacology and the Biological Basis for Mental Illness</td>
<td>3</td>
</tr>
<tr>
<td>SE 5600</td>
<td>Language and Learning Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SE 5570</td>
<td>Autism and Spectrum Disorders</td>
<td>3</td>
</tr>
</tbody>
</table>

**Professional Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SY 6010</td>
<td>Foundations of School Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CO 5020</td>
<td>Counseling Skills</td>
<td>3</td>
</tr>
<tr>
<td>ED 5150</td>
<td>Individual Intelligence Testing</td>
<td>3</td>
</tr>
<tr>
<td>ED 5570</td>
<td>Classroom Intervention and Special Education Strategies</td>
<td>3</td>
</tr>
<tr>
<td>CO 5670</td>
<td>Family and Social Systems</td>
<td>3</td>
</tr>
<tr>
<td>CO 5770</td>
<td>Psychopathology: Disorders of Childhood, Adolescence and Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>CO 5780</td>
<td>Consultation and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>SE 5190</td>
<td>Educational Testing</td>
<td>3</td>
</tr>
<tr>
<td>SY 6300</td>
<td>Social/Emotional/Behavioral Assessment</td>
<td>3</td>
</tr>
<tr>
<td>SY 6800</td>
<td>School Psychology Internship and Seminar (1,200 hours with full-time school psychologist)</td>
<td>12</td>
</tr>
</tbody>
</table>
Students with degrees in non-related areas complete the full program minus equivalent transfer courses. Students with related master’s degrees take only the courses needed for the conversion.

Total for M.Ed. in Counselor Education, School Psychologist Concentration with certification

Note: The National Association of School Psychologists (NASP) is currently developing a respecialization program and expects to have it in place in the near future. At this time, national certification requires a master’s degree specifically in school psychology. The national certification is granted by the authority of the National School Psychology Certification Board (not NASP) and is called NCSP for the Nationally Certified School Psychologist. The PSU program for New Hampshire state certification is pending New Hampshire Department of Education review.

SELF DESIGNED CONCENTRATION

The Self Designed concentration is designed to prepare students to function in various areas of human services and/or to prepare students for further study in an area of specialization within the field of counseling. Students may also design a program suited to their needs. While the Self Designed program does not lead to certification in any area of professional counseling, it may serve as a foundation for later training that could lead to certification or licensure.

PROGRAM OF STUDY

REQUIRED COURSES  CREDITS

Counselor Education Core Courses

CO 5010  Foundations of the Counseling Profession  3
CO 5050  Advanced Human Development  3
ED 5000  Social Behavior in a Diverse Society  3
ED 5030  Research Design  3
CO 5230  Career Counseling and Development  3
CO 5260  Counseling Theories  3
CO 5020  Counseling Skills  3

Self Designed Component

CO 5360  Interpersonal and Group Process  3
CO 5800  Internship in Counseling: Self Designed  3

Specialized Electives*  9

Total for M.Ed. in Counseling Education, Self Designed Concentration  36

* Students may use the nine credits of transfer courses to which they are entitled in order to fulfill this requirement if Plymouth does not offer appropriate course work in their area of specialization.

COUNSELOR EDUCATION CERTIFICATE PROGRAMS

The following certificate programs can be taken on their own or in conjunction with the Self Designed Concentration, or CAGS strand in Mental Health Counseling.

Note: The Play Therapy Certificate is a post-master’s program only. Self Designed students may wish to consider electives from the PATH Institute (see page 64) or the certificate program in Eating Disorders that is co-listed with Health Education.

CONFLICT IN FAMILIES CERTIFICATE

The Conflict in Families certificate is designed to meet the needs of professionals who work with youth and families.

Students applying for the certificate option need to demonstrate proficiency in human development or take a graduate level human development course. The special electives listed here constitute the course requirements for the certificate option.

PROGRAM OF STUDY

REQUIRED COURSES  CREDITS

Coursework

CO 5020  Counseling Skills  3
CO 5560  ST: Foundations of Conflict Resolution  3
CO 5560  ST: Violence in Families  3
CO 5300  Foundations and Multicultural Aspects of Parenting  3
CO 5670  Family and Social Systems  3
CO 5800  Counseling Internship: Self Designed  3

Total for Conflict in Families Certificate  18

PARENTING EDUCATION CERTIFICATE

A certificate in Parenting Education is offered for matriculating graduate students, counselors, teachers and other human relations professionals interested in enhancing their understanding of parenting education, developing skills necessary to work with parents, and planning new or refining existing parenting programs. This program allows matriculat-
ing students to use their electives to add parenting education as a specialization within their degree programs.

**REQUIREMENTS**
Candidate must be an admitted graduate student or hold a master’s degree in a related area. Admitted graduate students must be recommended for the program by their advisor. Others must provide two letters of reference attesting to their potential as a parent educator. Waivers for prerequisite courses must be obtained from the instructors of those courses.

**PROGRAM OF STUDY**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO 5300</td>
<td>Foundations and Multicultural Aspects of Parenting</td>
<td>3</td>
</tr>
<tr>
<td>CO 5310</td>
<td>Strategies for Parenting Education</td>
<td>3</td>
</tr>
<tr>
<td>ED 5210</td>
<td>Graduate Practicum*</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Human Development/Special Education</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total for Parenting Education Certificate</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

*(Replaces CO 5800 for students in the Self Designed concentration with the parenting certificate)*

**PLAY THERAPY CERTIFICATE**

Play Therapy provides school and mental health counselors with useful, research-based tools and techniques to help children and adolescents through a variety of social, emotional, behavioral and learning difficulties. These problems can include post-traumatic stress disorder, conduct disorder, aggression/impulsive anger, anxiety, depression, ADHD, low self-esteem, to name a few.

The PSU Play Therapy courses will provide the post-master’s counseling professional with the necessary educational requirements to be eligible for the credential of Registered Play Therapist through the International Association for Play Therapy.

**PROGRAM OF STUDY**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO 7010</td>
<td>Foundations of Play Therapy</td>
<td>3</td>
</tr>
<tr>
<td>CO 7020</td>
<td>Child Centered Play Therapy</td>
<td>3</td>
</tr>
<tr>
<td>CO 7210</td>
<td>Practicum in Play Therapy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total for Play Therapy Certificate</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

**M.Ed. in Educational Leadership**

School Principal Coordinator: Dr. Marianne M. True, (603) 535-2660, e-mail: mtrue@plymouth.edu

Special Education Administration Coordinator: Dr. Dennise M. Maslakowski, (603) 535-2636, e-mail: dmaslakowski@plymouth.edu

The Master of Education degree in Educational Leadership prepares educators for a variety of leadership roles such as principal, special education administrator, team leader or department chair at the elementary, middle and secondary levels in both public and private school settings.

The Educational Leadership program incorporates both theory and practice. The course of study is based on the understanding that specific methods of organizing and operating schools change but that sound theory related to management, decision-making, human relations and participatory leadership remain constant.

In general terms, the program provides candidates with:
- An increased understanding of present and probable future roles of school leaders
- An ability to identify and prioritize steps that lead an educational institution in a positive direction for the benefit of children, the adults who work with them and society at large
- A wide variety of approaches to school leadership that reflect flexibility in methodology and outlook
- Opportunities to test ideas with colleagues and other practitioners
- Occasions to build upon previous leadership experience
- Current research concerning school reform and innovation
- Support in developing the self-confidence necessary for providing leadership to others.

More specifically, candidates are expected to develop expertise in:
- Helping others create a vision for the future and translate that vision into reachable goals
- Organizing a school to optimize its human and material resources
- Bringing about positive change
- Fostering a school environment that empowers students and adults
• Creating budgets that are cost effective and facilitate reaching institutional goals
• Communicating effectively with a variety of audiences and managing information well
• Leading others in a humane and participatory fashion
• Developing and assessing curricula and programs that address individual or group needs and are consistent with sound learning theory
• Understanding the impact of law on policy development, decision-making, student and staff rights, and inclusionary practices
• Establishing a link between effective staff development and evaluation procedures
• Creating a partnership between the school and the community.

CERTIFICATION FOR SCHOOL PRINCIPAL OR SPECIAL EDUCATION ADMINISTRATOR
Graduates of this degree program who possess at least three years of teaching experience are eligible for certification as a school principal or special education administrator (with appropriate coursework) in the State of New Hampshire. Reciprocity through interstate compacts extends this certification to many additional states.

SCHOOL PRINCIPAL CONCENTRATION (WITH CERTIFICATION)
PROGRAM OF STUDY
REQUIRED COURSES 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
ED 5060 Theories of Learning and Cognitive Development 3
ED 5570 Classroom Intervention and Special Education Strategies 3
Initial Course in the Sequence
AD 5010 Organizational Leadership in Schools 3
Professional Component for School Principal
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 5800 Practicum in Administration and Supervision I 3
Capstone Experience
AD 5830 Educational Planning and Problem Solving 3
Total for M.Ed. in Educational Leadership, School Principal Concentration 36

SPECIAL EDUCATION ADMINISTRATOR (WITH CERTIFICATION)
Requires previous certification in K–12 General Special Education as well as teaching experience.

PROGRAM OF STUDY
REQUIRED COURSES 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
ED 5060 Theories of Learning and Cognitive Development 3
Initial Course 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
SE 5300 Special Education Law 3
Special Education 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 Experience
SE 5800 Practicum in Special Education 3
Total for M.Ed. in Educational Leadership, Special Education Administration Concentration 36
ATHLETIC ADMINISTRATION CONCENTRATION
Program Coordinator: Dr. Irene Cucina,
(603) 535-2517, e-mail: icucina@plymouth.edu

This program is for students seeking career opportuni-
ties 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; as well as 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.

PROGRAM OF STUDY
REQUISITED COURSES 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
– OR –
AT 5600 Research for the Health Sciences 3

Athletic Administration Core
PE 5600 Athletic Administration 3
PE 5610 Sports Law 3
PE 5620 Sport Finance and Marketing 3
PE 5630 Sports Psychology 3

Athletic Administration Electives
Choose 9 credits of electives from the following list. Other electives may be taken upon approval of advisor.
PE 5640 Sports, Society and Cultures 3
HH 5700 Creating Organizational Health 3
HH 5820 Women and Leaders 3
PE 5500 Strength and Conditioning 3
HL 5200 Aging and Physical Activity 3
HP 5090 Stress Management Techniques for Educators 3
PE 5560 High/Low Ropes Course 3

PE 5560 Project Adventure 3
HL 5560 Health and Fitness 3

Capstone Experience
ED 6900 Graduate Capstone Project 3
– OR –
ED 5210 Graduate Practicum 6

Total for M.Ed. in Educational Leadership, Athletic Administration Concentration
Note: Students who complete the Athletic Administration core courses will receive a graduate certificate.

M.Ed. in English Education
Program Coordinator: Dr. Meg J. Petersen,
(603) 535-2684, e-mail: megp@plymouth.edu

SECONDARY (5–12) TEACHER CERTIFICATION CONCENTRATION
Students interested in obtaining New Hampshire Teacher Certification in English (grades 5–12) should select this option. Graduates will be certified in the state of New Hampshire and fully qualified to teach English/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/language arts as well as providing a background in the subject areas of literature, writing and language at the graduate level.

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

PROGRAM OF STUDY
REQUISITED COURSES CREDITS

Master’s Core Component
ED 5000 Social Behavior in a Diverse Society 3
– OR –
ED 5005 Social Psychology and Mythology across Cultures 3
– OR –
ED 5500 ESL for Teachers 3
ED 5010 Philosophy, Ethics and Education 3
EN 5000 Research in Writing 3

Learning Theory Requirements (if not met in undergraduate work)
ED 5270 Foundations of Teaching 3
ED 5060 Theories of Learning and Cognitive Development 3
ED 5570 Classroom Interventions and Special Education Strategies 3
EN 5560 Methods of Teaching Writing 3

English Content Component 3–6
EN 5500 Topics in Teaching Literature
EN 5630 Writing Workshop for Teachers
EN 5750 Advanced Writing Workshop for Teachers: Editing and Publishing – OR BOTH –
EN 5300 Poetry Workshop for Teachers – AND –
EN 5360 Fiction Writing Workshop for Teachers

Capstone Component
ED 5960 Internship in Education 9
– OR –
ED 5210 Graduate Practicum 6

Total for M.Ed. in English Education, Secondary (5–12) Teacher Certification 33–45

**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
EN 5000 Research in Writing 3

**English Component**
EN 5630 Writing Workshop for Teachers 3

**Two Literature Courses, such as**
EN 5500 Topics in Teaching Literature 3

**Elective English/Writing Courses** 12

**Capstone Experience** 3–6
ED 5210 Graduate Practicum – OR –
ED 5580 Individual Research in Education – OR –
ED 5950 Graduate Thesis

Preparation and presentation of a folder of representative original work.

**Total for M.Ed. in English Education, Teaching of Writing Concentration** 33–36

**Teaching of Writing Concentration**

The Teaching of Writing concentration is designed for students who wish to enhance their professional development through working with their own writing in various genres and becoming writing specialists in their fields. Students may become classroom teachers, professional writers or writing teachers at any level. The program is designed to help participants:

- Improve their own writing in a variety of genres
- Improve teaching skills related to the running of writing workshops
- Enhance their use of literature in the writing classroom
- Work toward publishing their own and their students’ writing
- Work with teaching writing at a variety of levels and in different situations.

**The Plymouth Writing Project**

The mission of the Plymouth Writing Project (PWP) is to improve the teaching of writing in New Hampshire schools. Through its professional development model, the Plymouth Writing Project recognizes the primary importance of developing and extending teacher knowledge, expertise and leadership. Students may choose to incorporate the Plymouth Writing Project coursework into an M.Ed. Self-Paced Learning Plan.
Designed program. For more information on the M.Ed. Self Designed program see page 71 of this catalog.

The Plymouth Writing Project 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 Plymouth Writing Project 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.

The Plymouth Project Model
Our work is guided by the following principles:
• Writing is fundamental to learning in all subjects.
• Writing instruction begins in kindergarten or before and continues through university.
• Writing is pivotal to learning, academic achievement and job success.
• The most effective teachers of writing are those who write themselves.
• Professional development continues throughout teachers’ careers.
• Teachers are the key to reform in education.
• Exemplary teachers partnered with university teachers make the most effective teachers of other teachers, and that universities and schools in collaboration can provide powerful programs for teachers.
• Real change in classroom practice happens over time.

WRITING PROJECT PROGRAMS AND COURSES
ADVANCED LEADERSHIP INSTITUTE
For those who have completed a writing project summer institute. This institute prepares teachers to take on leadership positions relative to the teaching of writing in their schools.

PLYMOUTH WRITING PROJECT SUMMER INSTITUTE
ED 5500 THEORY AND PRACTICE IN THE TEACHING OF WRITING (AVAILABLE BY APPLICATION ONLY)
Each summer, 20 exemplary teachers (K-16 and in all disciplines) are accepted to participate in the PWP Summer Institutes where they present and discuss their own teaching practices, examine and critique current research, and engage in professional and personal writing. After the summer institute, PWP teachers are encouraged to work to bring back PWP staff development programs to their schools.

ON-SITE COURSES AND EMBEDDED INSTITUTES
Graduate courses can be offered off site at local schools. These include Writing Workshops for Teachers, Writing across the Curriculum, Literature and Writing for Cultural Understanding and Teacher Action Research.

ONGOING GROUPS
The Plymouth Writing Project can help teachers launch writing groups, reflective practice groups and teacher inquiry and study groups. We provide continuing consultation and feedback to on-going groups.

WORKSHOPS
The Plymouth Writing Project can provide a series of workshops on specific topics designed to meet the goals of your school improvement team. Topics include portfolio assessment, working with technology in writing, poetry writing, community based reading and writing programs, performing arts and writing, and setting up a writing workshop in your classroom.

CONSULTANT FOR A DAY
Consultations can be scheduled to address the individual needs and interests of teachers at particular grade levels or teachers of a particular content area. The Teacher Consultant for a day works individually and/or in small groups with teachers to address issues and concerns identified by the teachers.

DEMONSTRATION SESSIONS
For each session, a Teacher Consultant presents a classroom demonstration lesson, while a teacher or a group of teachers observe, followed by a debriefing session for reflection, discussion and collaborative coaching.

ON-SITE WRITING INSTITUTE
Plymouth Writing Project staff coordinate a one or two week long Summer Institute (four to six hours a day) that includes presentations about writing, teaching demonstrations, writing response groups, and discussion of issues related to writing and the teaching of writing. Institute participants can earn graduate credit.
For more information about Plymouth Writing Project professional development programs, contact Dr. Mary Cornish at (603) 535-2449 or mcornish@plymouth.edu, or visit www.plymouthwritingproject.org online.

**M.Ed. in Environmental Science**  
Program Coordinator: Dr. Warren Tomkiewicz, (603) 535-2573, e-mail: warrent@plymouth.edu

Those who are interested in pursuing the M.Ed. in Environmental Science should contact the Program Coordinator listed above for further information and advising.

**M.Ed. in Health Education**  
Program Coordinator: Dr. Irene Cucina, (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, or hold a liberal arts degree with a concentration in the sciences, health education, physical education or nursing. Coursework in human anatomy, physiology and psychology are necessary prerequisites of all content coursework.

Two concentrations are available in this program: **School Health** (leading to New Hampshire Teacher Certification) and **Health Promotion**. The core Education courses are offered year round and the required Health Education courses are offered primarily in the summer sessions. A few courses will be offered during the regular fall and spring sessions and during the winter term on a rotating basis. Classes are offered in a variety of formats including evenings, weekends or blocked time periods. 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 School Health Teacher Certification track may be required to take additional coursework at the undergraduate level to meet certification standards and should plan to meet with the Director of Graduate Admissions, Certification and Programs. All students should meet with the Health Education Graduate Program Coordinator to review their transcripts and develop a contract for coursework.

Courses in the Health Education program prepare students to take the 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.

**SCHOOL HEALTH CONCENTRATION**  
Students interested in obtaining New Hampshire Teacher Certification should select this concentration. New Hampshire shares reciprocity with a number of other states. Coursework also provides preparation for the Certified Health Education Specialist (CHES) examination.

The M.Ed. leads to certification to teach Health Education in grades K–12.

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

**REQUIRED COURSES**

**CREDITS**

<table>
<thead>
<tr>
<th>Master's Core Component</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5000  Social Behavior in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>ED 5010  Philosophy, Ethics and Education</td>
<td>3</td>
</tr>
<tr>
<td>ED 5030  Research Design</td>
<td>3</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>AT 5600  Research Design in Health Sciences</td>
<td>3</td>
</tr>
</tbody>
</table>

**Learning Theory Component**

| ED 5270  Foundations of Teaching | 3 |
| ED 5060  Theories of Learning and Cognitive Development | 3 |
| ED 5570  Classroom Interventions and Special Education Strategies | 3 |

**Health Education 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 5110  Wellness Concepts for Educators | 2 |
| HP 5200  Nutrition | 1 |
| HP 5210  Fitness Principles | 1 |
| HP 5220  Disease and the Environment | 1 |
| HP 5240  First Aid and CPR | 1 |
| HP 5250  Consumer Health | 1 |
| HP 5260  Mental Health and Sexuality | 2 |

**Capstone Experience**

| ED 5210  Graduate Practicum | 6 |
| ED 5960  Internship in Teacher Education | 9 |
| HL 5800  Practicum in Health Education | 3 |

**Total for M.Ed. in Health Education, School Health Concentration**

| 39–45 |

**HEALTH PROMOTION CONCENTRATION**

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.

<p>| PROGRAM OF STUDY |</p>
<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
</table>

**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 |
| – OR – |  |
| AT 5600  Research Design in Health Sciences | 3 |

**Health Education 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 |
| – OR – |  |
| AT 5610  Statistics for the Health Sciences | 3 |
| HP 5070  Worksite Health Promotion | 3 |
| HP 5200  Nutrition | 1 |
| HP 5210  Fitness Principles | 1 |
| HP 5220  Disease and the Environment | 1 |
| HP 5240  First Aid and CPR | 1 |
| HP 5250  Consumer Health | 1 |
| HP 5260  Mental Health and Sexuality | 2 |
| HL 5750  Individual Research: Health Education | 3 |
| – OR – |  |
| HL 5800  Practicum in Health Education | 3 |

**Management Component**

| HH 5700  Creating Organizational Health | 3 |

**Electives**

| 2–3 |

Electives or Continuing Education courses for health educators: these courses are offered periodically on a two/three year rotation and can be taken by any student qualified for graduate coursework.

| HP 5080  Women’s Health Issues | 3 |
| HP 5090  Stress Management Techniques for Educators | 3 |
| HP 5120  Issues in Sexuality Education | 3 |
| HL 5910  Independent Study Health Education | 1–3 |

The Director of Graduate Admissions, Certification and Programs and the Graduate Health Education Program Coordinator will determine internship credits based on the teaching portfolio of the candidate.
HH 5560  Topics in Alternative Health and Healing  3
HH 5570  Mindfulness Meditation: Theory and Practice  3
HL 5560  Special Topics in Health Education  1–3

Total for M.Ed. in Health Education, Health Promotion Concentration  39–42

EATING DISORDERS INSTITUTE
Director: Dr. Margaret Burckes-Miller,
(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 knowledge and expertise in the area of eating disorders. All health care professionals, mental health professionals and educators (i.e. counselors, psychologists, dieticians, nurses, physicians, dentists) who work with students/clients will benefit from the knowledge and skills. All courses may be taken for Health Education or Counselor Education credit.

The Institute may also be part of a Self Designed M.Ed. in Health Education or Counselor Education degree. Also offered is a 15-credit graduate certificate in Eating Disorders Awareness, Prevention and Education for those who have completed a bachelor’s degree.

SPECIALIZATION COURSES FOR EATING DISORDERS INSTITUTE

REQUIRED COURSES  CREDITS
CO/HL 5160  Eating Disorders: Awareness, Prevention and Education  3
CO/HL 5190  Medical and Physiological Aspects of Eating Disorders  3
CO/HL 5180  Nutrition: Education and Counseling  3
CO/HL 5170  Treatment Modalities for Eating Disorders  3
CO/HL 5150  Eating Disorders Clinical  3

Total for Eating Disorders Institute  15  

SELF-DESIGNED M.ED. IN HEALTH EDUCATION

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 Cultures  3
ED 5010  Philosophy, Ethics and Education  3
ED 5030  Research Design  3
– OR –
AT 5600  Research Design in Health Sciences  3

Specialization Courses for Eating Disorders Institute
HL 5160  Eating Disorders: Awareness, Prevention and Education  3
HL 5190  Medical and Physiological Aspects of Eating Disorders  3
HL 5180  Nutrition: Education and Counseling  3
HL 5170  Treatment Modalities for Eating Disorders  3

Elective Component Courses  9

Capstone Experience
HL 5150  Eating Disorders Clinical  3

Total for Self Designed M.Ed. in Health Education, Eating Disorders Institute  33

SELF-DESIGNED M.ED. IN COUNSELOR EDUCATION

PROGRAM OF STUDY

REQUIRED COURSES  CREDITS

Master’s Core Component
CO 5010  Foundations of the Counseling Profession  3
CO 5260  Counseling Theories  3
CO 5050  Advanced Human Development  3
CO 5020  Counseling Skills  3
ED 5030  Research Design  3
– OR –
AT 5600  Research Design in Health Sciences  3
ED 5000  Social Behavior in a Diverse Society  3
CO 5230  Career Counseling and Development  3

Specialization Courses for Eating Disorders Institute
CO 5160  Eating Disorders: Awareness, Prevention and Education  3
CO 5190 Medical and Physiological Aspects of Eating Disorders 3
CO 5180 Nutrition: Education and Counseling 3
CO 5170 Treatment Modalities for Eating Disorders 3

Capstone Experience
CO 5150 Eating Disorders Clinical 3

Total for Self Designed M.Ed in Counselor Education, Eating Disorders Institute 36

PATH INSTITUTE: PATHS AND APPROACHES TO TRANSFORMATION AND HEALING
Director: Dr. Nancy Puglisi,
(603) 862-0929, e-mail: Nancy.Puglisi@unh.edu

Plymouth State University currently sponsors coursework on alternative topics in health and healing that lead to a graduate certificate. Eighteen credits in six core courses are needed to complete the certificate program. These courses may also apply to various M.Ed. programs in Health, Counseling and Self Designed.

The program is based on the growing exploration of mind/body medicine literature developed over the past 30 years. This movement influenced Congress in 1992 to establish the Office of Alternative Medicine within the National Institutes of Health.

In concentrated formats, the PATH Institute examines various topics that look at the entire individual via the physical, emotional, mental, social and spiritual aspects. Also explored is the difference between healing and curing, and the interface between alternative and conventional approaches to health and healing.

PATH INSTITUTE CERTIFICATE
PROGRAM OF STUDY

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATH Component</td>
<td></td>
</tr>
<tr>
<td>HH 5560 Topics in Alternative Health and Healing</td>
<td>3</td>
</tr>
<tr>
<td>HH 5570 Mindfulness Meditation Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>HH 5620 Spiritual Health</td>
<td>3</td>
</tr>
<tr>
<td>HH 5590 Transpersonal Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M.ED IN HEALTH EDUCATION WITH PATH INSTITUTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROGRAM OF STUDY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s Core Component</td>
<td></td>
</tr>
<tr>
<td>ED 5000 Social Behavior in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 5005 Social Psychology and Mythology across Cultures</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>ED 5010 Philosophy, Ethics and Education</td>
<td>3</td>
</tr>
<tr>
<td>ED 5030 Research Design</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialized PATH Course Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH 5560 Topics in Alternative Health and Healing</td>
</tr>
<tr>
<td>HH 5570 Mindfulness Meditation Theory and Practice</td>
</tr>
<tr>
<td>HH 5590 Transpersonal Psychology</td>
</tr>
<tr>
<td>HH 5620 Spiritual Health</td>
</tr>
<tr>
<td>HH 5610 The Circle of Life</td>
</tr>
<tr>
<td>HH 5600 Body Centered Therapies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capstone Experience (choose one)</td>
<td></td>
</tr>
<tr>
<td>ED 5210 Graduate Practicum</td>
<td>6</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 5580 Individual Research Project</td>
<td>3</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 6900 Graduate Capstone Project</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total for M.Ed in Health Education, PATH Institute | 33 |

M.Ed. in Heritage Studies
Program Coordinator: Dr. Stacey Yap,
(603) 535-2333, e-mail: staceyy@plymouth.edu

Heritage Studies is an interdisciplinary study of the past to understand the present. The program employs place-based heritage models that may be used to conduct a critical evaluation of the past anywhere on the globe. Using the
methods of historians, geographers, archaeologists, anthropologists, architects, sociologists, folklorists and other social scientists, Heritage Studies students explore the many layers of the past that make the present. Students create a course of study that will aid them in their future endeavors. With their advisor, students design a program of study that focuses on developing heritage models using New Hampshire and New England or global cultures.

In PSU’s Heritage Studies program, students explore the interrelationship of history, literature, geography, culture and the environment. They leave the program to enter careers in public, private and museum education, archaeology and historical research. Designed for maximum flexibility, Heritage Studies focuses on meeting the individual needs of graduate students based on professional and personal interests. Teacher certification for grades 5–2 is also available with additional coursework and practicum experience.

**PROGRAM OF STUDY**

**REQUIRED COURSES**

**CREDITS**

**Master’s Core Component**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5000</td>
<td>Social Behavior in a Diverse Society – OR –</td>
<td>3</td>
</tr>
<tr>
<td>ED 5005</td>
<td>Social Psychology and Mythology across Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ED 5010</td>
<td>Philosophy, Ethics and Education</td>
<td>3</td>
</tr>
<tr>
<td>ED 5030</td>
<td>Research Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**Professional Component**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 5030</td>
<td>Application of Foundations</td>
<td>1</td>
</tr>
<tr>
<td>HS 5100</td>
<td>Heritage Studies: Foundations</td>
<td>3</td>
</tr>
<tr>
<td>HS 5200</td>
<td>World Heritage Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective Component**

Together with their advisor, students will choose 13 – 14 credits from the following areas: heritage studies, anthropology, English, geography, history, political science, natural science and sociology.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 5560</td>
<td>Topics in Heritage Studies</td>
<td>3</td>
</tr>
<tr>
<td>AN 5410</td>
<td>Native Americans: Past and Present</td>
<td>3</td>
</tr>
<tr>
<td>AN 5140</td>
<td>Special Topics in Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>AN 5910</td>
<td>Independent Study in Anthropology</td>
<td>1–3</td>
</tr>
<tr>
<td>HS 5620</td>
<td>Archaeological Field Methods: Prehistory</td>
<td>2–9</td>
</tr>
<tr>
<td>HS 5630</td>
<td>Archaeological Field Methods: Historical</td>
<td>2–9</td>
</tr>
</tbody>
</table>

**HS 5650** Archaeological Field Methods: 2–9

**EN 5910** Independent Study in English 1–3

**EN** An approved English topic course 3

**GE 5150** Topics in Geography 3

**GE 5780** Nature and Heritage Tourism 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

**PO 5130** Topics in Political Science 3

**PO 5910** Independent Study in Political Science 1–3

**NS 5100** Revolutions in Science 3

**SO 5140** Topics in Sociology 3

**SO 5910** Independent Study in Sociology 1–3

** CAPSTONE COMPONENT**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 5710</td>
<td>Internship in Heritage Studies</td>
<td>3–4</td>
</tr>
</tbody>
</table>

**Total for M.Ed. in Heritage Studies** 33

**M.Ed. Integrated Arts Programs**

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

The Integrated Arts Programs are designed for students who wish to enhance their professional development by incorporating the arts into educational, cultural, human services and recreational settings. Students will elect a degree in elementary or secondary education. Graduates of the Integrated Arts Program are typically classroom teachers, visual and performing arts and arts/resource/media specialists employed in schools, museums, libraries, hospitals and other educational and cultural institutions. In addition to gaining general M.Ed. 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 concentration is designed to reflect recent changes in the National Standards for Arts Education and the New Hampshire State Arts frameworks. The Integrated Arts Programs highlight the power of the arts in education by offering:
- 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 including public school classrooms and schools
- Opportunities for participating in the award-winning Educational Theatre Collaborative, the Kearsarge Arts Theatre for Children and TIGER
- State-of-the-art facilities including the Silver Center for the Arts and the Draper & Maynard building on the Plymouth campus.

The Integrated Arts Programs address 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
- 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 curriculum for the Integrated Arts Programs are built around a professional core of courses designed to provide a foundation and framework in research, philosophy and learning theories. The integrative component of the concentration builds upon that foundation with a sequence of courses that explore the value and implications of the arts in society, as well as the arts integration process itself. Elective course work enables participants to be introduced to new artistic disciplines, as well as to expand their present 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 own schools and classrooms. Summer Arts and Culture Institutes in a variety of international locations, as well as the Arts in Education Institute, provide innovative opportunities to focus on diversity, equity and excellence through the arts.

M.ED. IN ELEMENTARY OR SECONDARY EDUCATION WITH A CONCENTRATION IN INTEGRATED ARTS

PROGRAM OF STUDY
REQUISITE COURSES 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
ED 5030 Research Design 3

Learning Theory Component
ED 5060 Theories of Learning and Cognitive Development 3
AR 5700 Curriculum Development and Assessment in the Arts 3

Integration Component
AR 5300 The Arts in Society 3
IN 5970 Integrated Arts 3
ME 5500 Survey of Arts Projects, Programs and Technologies 3

Electives (Elementary or Secondary Education focus) 9
Students will select from a variety of arts electives, which are offered on a rotating basis. An exciting array of courses is offered including Arts in Education Summer Institute, practicum experiences with established arts organizations, opportunities for study abroad and independent work in classroom settings. Students self-select courses based on interest and individual needs.

Capstone Experience
IN 5210 Graduate Practicum in Integrated Arts (45 contact hours per credit) 3

Total for M.Ed. in Elementary or Secondary Education, Integrated Arts Concentration 36
M.Ed. in Mathematics Education (with 5–8 or 7–12 Certification)
Program Coordinator: Dr. Brian Beaudrie, (603) 535-3116, e-mail: bpbeaudrie@plymouth.edu

The M.Ed. in Mathematics Education degree has two programs, 5–8 Mathematics Education and 7–12 Mathematics Education. Middle school teachers may select either program, as both are appropriate to that educational level. Both programs are designed to strengthen the mathematics and pedagogical background of the M.Ed. candidate in the program. The program also 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 do course work in an area not previously considered
• Encourage candidates to complete courses pertinent to their teaching assignments.

DEGREE REQUIREMENTS
1. Each candidate must either:
   a. Take a course in each of the three fields of algebra, geometry, and probability and statistics, or
   b. Show competence 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
   b. Be seeking Secondary Mathematics certification through the M.Ed. program.
   c. Additional credits may be required.
3. The individualized portion of the program may be selected from MG 3100 (courses below 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, with the consent of the Director of Graduate Admissions, Certification and Programs, will select courses and write a contract 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.

PROGRAM OF STUDY
REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Master’s Core Component</strong></td>
<td></td>
</tr>
<tr>
<td>ED 5000</td>
<td>Social Behavior in a Diverse Society</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 5005</td>
<td>Social Psychology and Mythology across Cultures</td>
</tr>
<tr>
<td>ED 5010</td>
<td>Philosophy, Ethics and Education</td>
</tr>
<tr>
<td>ED 5030</td>
<td>Research Design</td>
</tr>
<tr>
<td>ED 5040</td>
<td>Education and Society</td>
</tr>
<tr>
<td><strong>Learning Theory Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>MA 3080</td>
<td>Introduction to Math Education</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 5270</td>
<td>Foundations of Teaching</td>
</tr>
<tr>
<td>MG 4020</td>
<td>Cultural and Psychological Aspects of Mathematics</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 5060</td>
<td>Theories of Learning and Cognitive Development</td>
</tr>
<tr>
<td>CO 5430</td>
<td>Assessment and Consultation</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>RL 5710</td>
<td>Advanced Diagnostic Testing and the Improvement of Reading and Writing</td>
</tr>
<tr>
<td>ED 6100</td>
<td>Curriculum Integration and Performance-Based Assessment</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 5140</td>
<td>Assessment Principles and Practices</td>
</tr>
<tr>
<td>ED 5570</td>
<td>Classroom Intervention and Special Education Strategies</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>MG 4030</td>
<td>Math in the Secondary and Middle School</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 5080</td>
<td>Instructional Strategies and Curriculum Design</td>
</tr>
<tr>
<td><strong>Capstone Experience</strong></td>
<td></td>
</tr>
<tr>
<td>ED 5960</td>
<td>Internship in Teacher Education</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 5210</td>
<td>Graduate Practicum</td>
</tr>
</tbody>
</table>
Minimum credits for M.Ed. in Mathematics Education
Note: Additional credits may be needed for math competencies to obtain New Hampshire State Educator Certification.

M.Ed. in Music Education

INSTRUMENTAL MUSIC EDUCATION CONCENTRATION
Program Coordinator: Dr. Gary Corcoran, (603) 535-2495, e-mail: garyc@plymouth.edu

This program offers instrumental music educators an opportunity to address musical and academic issues pertaining to their multi-faceted 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.

PROGRAM OF STUDY
REQUISITE COURSES CREDITS

Master’s Core Component
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

Specialization Component
ME 5120 New England Band Directors Institute 3
ME 5560 Special Topics in Music Education 6
ME 5300 Technology for Music Educators 3
ME 5260 Instrumental Conducting and Repertoire 3

Capstone Experience
ME 5290 Practicum in Instrumental Music Education 6
– OR –
ED 5580 Individual Research in Education Project 6
– OR –
ED 5950 Graduate Thesis 6

Total for M.Ed. in Music Education, Instrumental Music Education Concentration 33

MUSIC EDUCATOR CERTIFICATION K–12
Program Coordinator: Dr. Jonathan C. Santore, (603) 535-2232, e-mail: jsantore@plymouth.edu

This program leads to educator certification to teach music in grades K–12. Required college level coursework or equivalent competence (audit, portfolio or exam) in guitar, voice, string, flute, saxophone, clarinet, oboe/bassoon, voice II/pedagogy, music in the elementary school, percussion, upper and lower brass techniques, choral or instrumental conducting, choral or instrumental literature and techniques, secondary school music methods, piano I and II, musicianship I, II, III, IV and V, basic conducting, history and literature of music I and II, performance studies, and ensembles.

PROGRAM OF STUDY
REQUIRED COURSES 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 Theory Requirements (if not met in undergraduate work)
ED 5270 Foundations of Teaching 3
ED 5570 Classroom Interventions and Special Education Strategies 3

Music 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
ED 5960 Internship in Education 9
– OR –
ED 520 Graduate Practicum 6

Total for M.Ed. in K–12 Education, Music Educator Certification 33–39
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 prepare classroom teachers, special educators and other educators for the role of reading teacher, specialist and literacy leader at the elementary, middle, high school, school district and adult learning levels.

The Reading and Writing Specialist program integrates into the coursework the five curricular components identified by the National Reading Panel (2000) of phonemic awareness, phonics, fluency, vocabulary and comprehension. The program is designed to provide educators the opportunity to study a comprehensive and balanced literacy curriculum that includes knowledge about print and sounds, phonics, fluency, vocabulary, comprehension, reading and writing across the curriculum, and independent reading and writing.

The role of the Reading and Writing Specialist is to provide specialized instruction in reading and writing, conduct assessments in cooperation with other professionals and diagnosis of students at the early childhood, elementary, middle and high school levels. The Reading and Writing Specialist, according to the draft standards for the International Reading Association, may work in the following roles:

- Serve as a resource in the area of literacy education for paraprofessionals, teachers, administrators and the community
- Work cooperatively and collaboratively with other professionals in planning programs to meet the needs of diverse populations of learners
- Provide professional development opportunities at the local, regional and state levels
- Provide leadership in student advocacy.

The Reading and Writing Specialist program is a K–12 certification program designed to provide educators the opportunity to study the effective teaching of English/Language Arts, the diagnosis and assessment of reading and writing difficulties, reading and writing across the curriculum, literature-based teaching, Reading Recovery and special education strategies, curriculum, the role of the specialist across grade levels and research in literacy. The program follows the guidelines for certification as a Reading Specialist K–12 in the state of New Hampshire. Two years of classroom teaching experience are required for candidates to apply for educator certification at the completion of the program.

**PROGRAM PHILOSOPHY**

The philosophical foundation for the development and implementation of the Reading and Writing specialist program is adapted from the International Reading Association Commission on High-Quality Teacher Education, which identified essential components of a professional development program: understanding the English language as a communication system; interaction with parents and community; instructional planning; developing language fluency; teaching word attack skills, developing comprehension; developing literary appreciation; diagnostic evaluation of reading progress; adapting instruction to various linguistic backgrounds; treatment of literacy difficulties; and initiating improvements in school programs (Hoffman & Pearson, 2000).

The program stresses the importance of a balanced literacy curriculum with a range of literacy experiences to assist all children in learning to read and fostering deep understanding of what is read. Courses emphasize the link between theory and practice through course assignments and practicum experience and focus on how to provide instruction that builds connections to support and nurture literacy for all learners. The components of the curriculum, based on the National Reading Panel Report, include phonemic awareness, phonics, fluency, vocabulary, text comprehension, and reading and writing.

**PROGRAM OF STUDY**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Master’s Core Component</strong></td>
<td></td>
</tr>
<tr>
<td>ED 5010 Philosophy, Ethics and Education</td>
<td>3</td>
</tr>
<tr>
<td>ED 5000 Social Behavior in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>EN 5000 Research in Writing</td>
<td>3</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 5030 Research Design</td>
<td>3</td>
</tr>
<tr>
<td>ED 5060 Theories of Learning and Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>Specialization Component</td>
<td>Reading and Writing Process</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>RL 5110 Issues and Trends in Reading and Writing 3</td>
<td>Listening, speaking, reading, writing and viewing are complex integrated language processes.</td>
</tr>
<tr>
<td>RL 5170 Reading and Writing in the Content Area 3</td>
<td>Language knowledge is an essential characteristic of a successful reader and writer.</td>
</tr>
<tr>
<td>RL 5300 Advanced Children’s/Young Adult Literature 3</td>
<td>Reading and writing is the process of constructing meaning.</td>
</tr>
<tr>
<td>RL 5710 Advanced Diagnostic Testing and the Improvement of Reading and Writing 3</td>
<td>Recognizing, understanding and valuing the cultural, linguistic, developmental and ethnic diversity of students are critical in meeting the needs of all learners.</td>
</tr>
<tr>
<td>RL 5760 Linguistic Principles and Methods of Teaching English as a Second or Other Language 3</td>
<td>All students can learn to effectively communicate through reading and writing.</td>
</tr>
<tr>
<td>RL 5770 Developing Language and Literacy in Early Childhood 3</td>
<td>Reading and Writing Specialists must understand and value the background knowledge and metacognitive abilities of all students.</td>
</tr>
<tr>
<td>Capstone Experience</td>
<td>Understanding the Diversity of Learners</td>
</tr>
<tr>
<td>RL 5820 Practicum in Reading and Writing 3</td>
<td></td>
</tr>
<tr>
<td>RL 5830 Practicum in Reading Diagnosis and Remedial Reading 3</td>
<td></td>
</tr>
<tr>
<td>Total for M.Ed. in Reading and Writing Specialist 36</td>
<td></td>
</tr>
</tbody>
</table>
M.Ed. Elementary, Secondary or K–12 Self-Designed Programs

This degree program is the most flexible for graduate study as it allows students to develop a program of study addressing specific professional goals and interests. This concentration is often multidisciplinary and students may choose to incorporate courses from the Master of Business Administration or Master of Science programs.

REQUIRED COURSES CREDITS

Component
ED 5010 Philosophy, Ethics and Education 3
ED 5000 Social Behavior in a Diverse Society 3
– OR –
ED 5005 Social Psychology and Mythology across Cultures 3
ED 5030 Research Design 3

Specialization Component 21

Capstone Experience
ED 5210 Graduate Practicum 6
– OR –
ED 5580 Individual Research Project 3
– OR –
ED 5950 Graduate Thesis 6
– OR –
ED 6900 Graduate Capstone Project 3

Total for M.Ed. Self Designed 33

Students may elect a focus for their M.Ed Self Designed program of study. Following are some of these focus areas:

ADULT LEARNING AND DEVELOPMENT PROGRAM
Program Coordinators:
Blake Allen,
(603) 535-2636, e-mail: ballen@plymouth.edu
Bernard Keenan,
(603) 447-3970, e-mail: Bernard.Keenan@granite.edu

Courses in adult learning address competencies in understanding learning styles, program design and evaluation, gender perspective and teaching strategies for adult development. The focus of this program is to provide instructors of adults with a framework for understanding the characteristics and special needs of adult learners. The student will develop techniques to maximize learning for the adult learner and develop a better understanding of the unique qualities, motivations and capabilities of students or clients.

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

PSU has active partnerships with Project Adventure and High 5, both leading edge providers of adventure programming. Working with PSU advisers, students craft a degree program that includes multi-day workshop experiences and theory, and practice projects at students’ home sites to create a powerful learning experience.

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

Students interested in athletic administration often select coursework from the areas of administration, health, technology, business and counseling in the development of their program of study. Internships with PSU’s Athletics Director provide a capstone experience for this program. Recommended courses include AD 5700 School Law, HP 5090 Stress Management Techniques for Educators, AD 5010 Organizational Leadership in Schools, as well as health and technology courses.

CURRICULUM AND INSTRUCTION
Program Coordinator: Dr. Kathleen Norris,
(603) 535-3023, e-mail: knorris@plymouth.edu

Students interested in improving their teaching skills and content knowledge are encouraged to pursue this option. Designed with the flexibility to meet the individual needs of the learner, this option allows students to study various curricular areas to enhance their teaching.

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

Students interested in middle level education select the Self Designed concentration and take courses offered through the New England League of Middle Schools (NELMS). Year-round academies, regional conferences, summer conferences in Sturbridge, Mass., and the annual
conference in Providence, R.I., offer students an institute and distance-learning format to achieve their goals. Students combine independent study, attendance at NELMS sponsored conferences, previous education and a capstone project (ED 5580 Research Project or ED 5210 Graduate Practicum) to earn the Master of Education degree. Areas of specialization include curriculum, leadership and technology, as well as electives that support personal interests and goals. This program integrates distance learning and participation in the March and summer NELMS conferences.

**M.Ed. Special Education Programs**

Program Coordinators:
Dr. Marcel Lebrun,  
(603) 535-2288, e-mail: mlebrun@plymouth.edu  
Dr. Dennise M. Maslakowski,  
(603) 535-2636, e-mail: dmaslakowski@plymouth.edu

Courses in special education address competencies in such areas as classroom management, survey of exceptionalities, human development, foundations, assessment and teaching strategies.

**M.ED. IN K–12 EDUCATION: GENERAL SPECIAL EDUCATION CONCENTRATION (WITH K–12 CERTIFICATION)**

**PROGRAM OF STUDY**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Master’s Core Component</strong></td>
<td></td>
</tr>
<tr>
<td>ED 5000 Social Behavior in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>ED 5010 Philosophy, Ethics and Education</td>
<td>3</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>SE 5765 Working with Families and Children: Legal and Ethical Issues</td>
<td>3</td>
</tr>
<tr>
<td>ED 5030 Research Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**Learning Theory Core Component**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5270 Foundations of Teaching</td>
<td>3</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>SE 5600 Language and Learning Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>ED 5060 Theories of Learning and Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>ED 5570 Classroom Intervention and Special Education Strategies</td>
<td>3</td>
</tr>
</tbody>
</table>

**Specialization Component**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE 5300 Special Education Law</td>
<td>3</td>
</tr>
<tr>
<td>SE 6040 Curriculum Development in Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SE 5770 Conduct Disorders in School-Aged Children</td>
<td>3</td>
</tr>
<tr>
<td>SE 5190 Educational Testing</td>
<td>3</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>RL 5710 Advanced Diagnostic Testing and the Improvement of Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>SE 5760 Collaboration, Consultation and Leadership in Special Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Capstone Experience**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE 5800 Practicum in Special Education</td>
<td>3</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 5960 Internship in Teacher Education</td>
<td>9</td>
</tr>
</tbody>
</table>

**Total for K–12 Education, General Special Education Concentration (K–12 certification)**

**EMOTIONAL HANDICAPS K–12 CERTIFICATION**

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

Emotional and behavior disorders have become a major influence in schools and classrooms. Teachers are experiencing an enormous growth in discipline and management issues, which directly impact their ability to teach curriculum. This concentration is designed for teachers who want to improve their management skills and repertoire of strategies. This concentration will lead to increased knowledge and skills in the areas of emotional and behavioral disorders. Students are required to have a completed master’s program in special education with state certification. Participants in this concentration must have prior certification as K–12 General Special Educator. Additional courses will be required for the master’s degree.

**PROGRAM OF STUDY**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Components</strong></td>
<td></td>
</tr>
<tr>
<td>SE 5600 Language and Learning Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SE 5765 Working with Families and Children: Legal and Ethical Issues</td>
<td>3</td>
</tr>
<tr>
<td>CO 5770 Psychopathology</td>
<td>3</td>
</tr>
</tbody>
</table>
Emotional and Behavioral Disorders Specialization

SE 5563 PBIS Schoolwide Approaches 3
SE 5561 Identification of Students with Emotional and Behavioral Disorders 3
SE 5770 Conduct Disorders in School-Aged Children 3
SE 5564 PBIS Comprehensive Approaches for Students with Chronic Needs 3
SE 5562 Functional Assessment 3

Electives

SE 5570 Autism and Spectrum Disorders 3
SE 5581 Technology for Diverse Learners 3

Capstone Experience

SE 5820 Practicum in Emotional Disabilities 3

Total for Emotional Handicap K–12 Certification 30

Learning Disabilities Specialist K–12 Certification

Participants in this concentration must have prior certification in K–12 General Special Education. The purpose of the Learning Disabilities Specialist concentration is to develop educators to identify, diagnose, assess and provide interventions for students experiencing learning disabilities in special education and regular education classrooms. The role of the specialist is to provide direct service to students to enable them to qualify and receive special services to address their disability.

This program is designed to:

- Improve ability to identify various learning disabilities
- Improve teaching skills related to learning disabilities
- Enhance knowledge base by incorporating new techniques and resources that have been grounded in solid academic research
- Enhance ability to diagnose using a variety of academic achievement or ability testing inventories
- Encourage work as part of a team to incorporate changes in curriculum and program delivery for students experiencing learning disabilities
- Enhance ability to program with specific interventions based on documentation and assessment of learning needs
- Enhance ability to supervise program delivery
- Gain valuable experience that can be generalized to a variety of settings and schools.

PROGRAM OF STUDY

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master's Core Component</td>
<td></td>
</tr>
<tr>
<td>ED 5000 Social Behavior in a Diverse Society 3</td>
<td></td>
</tr>
<tr>
<td>ED 5010 Philosophy, Ethics and Education – OR – SE 5765 Working with Families and Children: Legal and Ethical Issues 3</td>
<td></td>
</tr>
<tr>
<td>SE 5562 Research Design 3</td>
<td></td>
</tr>
</tbody>
</table>

Learning Theory Component

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE 5600 Language and Learning Disabilities 3</td>
<td></td>
</tr>
<tr>
<td>RL 5710 Advanced Diagnostic Testing and the Improvement of Reading and Writing 3</td>
<td></td>
</tr>
</tbody>
</table>

Take one of the following courses depending on experience and education:

Elementary teachers take:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RL 5770 Developing Language and Literacy in Early Childhood 3</td>
<td></td>
</tr>
</tbody>
</table>

Middle and secondary teachers take:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RL 5170 Reading and Writing in the Content Area 3</td>
<td></td>
</tr>
</tbody>
</table>

Learning Disabilities Specialization

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE 5581 Technology for Diverse Learners 3</td>
<td></td>
</tr>
<tr>
<td>SE 5570 Autism and Spectrum Disorders 3</td>
<td></td>
</tr>
<tr>
<td>SE 5770 Conduct Disorders in School-Aged Children 3</td>
<td></td>
</tr>
<tr>
<td>SE 5760 Collaboration, Consultation and Leadership in Special Education 3</td>
<td></td>
</tr>
<tr>
<td>SE 5190 Educational Testing 3</td>
<td></td>
</tr>
</tbody>
</table>

Capstone Experience

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE 5810 Practicum in Learning Disabilities 3</td>
<td></td>
</tr>
</tbody>
</table>

Total for Learning Disabilities Specialist 36

Educational Leadership: Special Education Administration Concentration

Please see detailed description for this option under Educational Leadership, page 57.
GRADUATE CERTIFICATE IN POSITIVE BEHAVIORAL INTERVENTIONS AND SUPPORT (PBIS)
Program Coordinator: Dr. Marcel Lebrun, (603) 535-2288, e-mail: mrlebrun@plymouth.edu

The certificate in Positive Behavioral Interventions and Support (PBIS) 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.

PROGRAM REQUIREMENTS
1. The student must hold a bachelor’s degree in education or a related field.
2. The Coordinator of the Special Education program must interview the student.
3. The student must complete a minimum of 12 credits from the list of courses below. Courses will be determined according to the individual needs of the student and must be approved by the program director.
4. The student must maintain a B average or higher in the program.

COMPETENCIES
1. Knowledge and application of positive behavioral interventions and supports designed to enhance the emotional well-being of all students in schools.
2. Knowledge and application of universal, positive and proactive schoolwide approaches designed to enhance discipline practices and school climate including:
   - Developing skills in collaboration and consultation with colleagues and families
   - Developing and implementing schoolwide expectations
   - Developing and implementing a behavior matrix of expectations across settings
   - Developing and implementing teaching scripts to address pro-social behaviors
   - Developing and implementing a school wide reinforcement system
   - Determining office vs. classroom referrals
   - Developing and implementing a database system for behavior
   - Evaluating the universal system using data-based decision making for improving practice.
3. 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.
4. 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 wraparound planning
   - Developing skills in interagency coordination
   - Evaluating the intensive system using data-based decision making for improving practice.

These courses are sequential and build upon one another. It is key to take the courses in this specific order.

PROGRAM OF STUDY
REQUISITED COURSES

PBIS Courses

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE 5563</td>
<td>Positive Behavioral Interventions and Support: Schoolwide Approaches for All Students</td>
<td>3</td>
</tr>
<tr>
<td>SE 5566</td>
<td>Positive Behavioral Interventions and Support: Targeted Approaches for Students at Risk</td>
<td>3</td>
</tr>
<tr>
<td>SE 5564</td>
<td>Positive Behavioral Interventions and Support: Comprehensive Approaches for Students with Intense and Chronic Needs</td>
<td>3</td>
</tr>
</tbody>
</table>
Teacher Preparation and Certification Programs

Plymouth State University has a long tradition of teacher preparation. Its teacher education programs are renowned in the state of New Hampshire and throughout New England, and Plymouth graduates are highly recruited for teaching positions. Beginning as early as the first year of the program, teacher education students at PSU have many opportunities to teach and learn in public elementary, middle and high school classrooms. This experience culminates in an intensive internship with a mentor teacher during a full semester of student teaching under the supervision of a clinical faculty member.

Graduates of any of the teacher education programs at PSU will be 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 for initial certification in most states by applying to an individual state’s department of education. Plymouth State University’s graduate professional preparation 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 also a member of the American Association of Colleges for Teacher Education (AACTE).

M.Ed. in K–12 Education

ART EDUCATION
Program Coordinator: Dr. Cynthia Vascak,
(603) 535-2649, e-mail: cynthiav@plymouth.edu

The M.Ed. degree leads to certification to teach art in grades K–12. Required college level coursework or equivalent competence (audit, portfolio or exam) in: Foundations of Art Education, Methods and Materials for Art Education, Instructional Planning and Pedagogy for Art Education, Curriculum and Assessment for Art Education, upper level art concentration (three course equivalent), Survey of Art I and II, 20th Century Art, Color and Design, Form in 3D, Drawing Objects I and II, Painting I, Sculpture I, Ceramics: Hand Building, Introduction to Printmaking and Drawing III: Figure.

ADMISSION REQUIREMENTS
1. 3.0 or higher GPA
2. Application and acceptance to graduate studies program
3. Portfolio Review (by Coordinator of Art Education)
4. Passing scores in Praxis I exam (only if student anticipates they will need their certification awarded prior to being conferred the M.A.T. in Art Education)

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 Cultures 3
ED 5010 Philosophy, Ethics and Education 3
ED 5030 Research Design 3

Learning Theory Requirements (if not met in undergraduate work)
ED 5060 Theories of Learning and Cognitive Development 3
ED 5570 Classroom Interventions and Special Education Strategies 3
AR 5700 Curriculum Development and Assessment in the Arts 3

• Equivalency to AE 3050 Methods and Materials in Art Education
• Equivalency to AE 2000 Foundations of Art Education
• Equivalency to AE 3060 Instructional Planning and Pedagogy in Art Education
• Competency in art, graphic design, art history and computer education will be determined on an individual basis. Other content courses may also be required by New Hampshire State Standards.

**Capstone Experience**

AE 5410 Teaching Internship in Arts Education 9

Total for M.Ed. in K–12 Education, Art Educator Certification 33

**K–12 ART CERTIFICATION (WITHOUT MASTER’S DEGREE)**

**ADMISSION REQUIREMENTS**

1. Submit a portfolio of studio work: 20 slides or CD representing a selection of 20 works to be evaluated by Art Education faculty
2. 3.0 or higher GPA
3. Passing score for Praxis I exam
4. Application and acceptance to graduate studies program.

**PROGRAM OF STUDY**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Education Component</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5000 Social Behavior in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 5005 Social Psychology and Mythology across Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ED 5010 Philosophy, Ethics and Education</td>
<td>3</td>
</tr>
<tr>
<td>ED 5060 Theories of Learning and Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>ED 5570 Classroom Interventions and Special Education Strategies</td>
<td>3</td>
</tr>
<tr>
<td>AR 5700 Integrated Arts Curriculum and Assessment</td>
<td>3</td>
</tr>
</tbody>
</table>

• Equivalency to AE 3050 Method and Materials in Art Education
• Equivalency to AE 2000 Foundations of Art Education
• Equivalency to AE 3060 Instructional Planning and Pedagogy in Art Education

These equivalencies are taken through six credits of AR 5910 with Dr. Vascak.

**COMPANY TECHNOLOGY EDUCATOR WITH CERTIFICATION**

**Program Coordinator:** Dr. Royce Robertson, (603) 535-3002, e-mail: rrobertson@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 technology educator certification. Plymouth’s College of Graduate Studies has responded to these new standards by updating the Computer Technology Educator concentration in our Elementary and Secondary Education Master of Education degree. This 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 new competencies for New Hampshire certification for Technology Educator.

**PROGRAM OF STUDY**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Master's Core Component</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5000 Social Behavior in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>ED 5005 Social Psychology and Mythology across Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ED 5010 Philosophy, Ethics and Education</td>
<td>3</td>
</tr>
<tr>
<td>ED 5030 Research Design</td>
<td>3</td>
</tr>
</tbody>
</table>
**Education Component**

ED 5060 Theories of Learning and Cognitive Development 3
ED 5270 Foundations of Teaching 3
ED 5570 Classroom Intervention and Special Education Strategies 3

**Specialization Component**

CE 5540 Computers, Curriculum and Change 3
CE 5290 Managing Technology in an Educational Environment 3
CE 5120 The Integration of Technology in the K–12 Curriculum 3
CE 5150 Making Multimedia Meaningful 3
CE 5180 Information Technology: Designing and Implementing Network Technology 3
CE 5700 Leadership in Educational Technology 3

**Capstone Experience**

CE 5800 Practicum in Educational Computing 3
ED 5960 Internship in Teacher Education 9

Total for M.Ed. in K–12 Education, 39–50

**French Education Certification**

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

The M.Ed. degree leads to certification to teach French in grades K–12.

Required college level course work or equivalent competencies (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), K–12 foreign language methods.

**PROGRAM OF STUDY**

**REQUIRED COURSES**

**CREDITS**

*Master's Core Component*

ED 5000 Social Behavior in a Diverse Society 3
– OR –
LL 5005 Language Teaching Methods 3
ED 5010 Philosophy, Ethics and Education 3
ED 5030 Research Design 3

*Learning Theory Requirements (if not met in undergraduate work)*

ED 5270 Foundations of Teaching 3
LL 5170 Foreign Language Methodology K–12 3
ED 5060 Theories of Learning and Cognitive Development 3
ED 6100 Curriculum Integration and Performance-Based Assessment 3
– OR –
ED 5140 Assessment Principles and Practices 3
ED 5080 Instructional Strategies and Curriculum Design 3
ED 5570 Classroom Interventions and Special Education Strategies 3

*French Content Courses*

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**

ED 5960 Internship in Teacher Education 9
– OR –
ED 5210 Graduate Practicum 6

Total for M.Ed. in K–12 Education, 36–42

**French Education Certification**

**HEALTH EDUCATION CERTIFICATION**

Program Coordinator: Dr. Irene Cucina, (603) 535-2517, e-mail: icucina@plymouth.edu
See program details on page 61.

**LIBRARY MEDIA SPECIALIST WITH CERTIFICATION**

Program Coordinator: Elaine Allard, (603) 535-2458, e-mail: eallard@plymouth.edu

The M.Ed. degree leads to certification as a Library Media Specialist.
PROGRAM OF STUDY

REQUIRED COURSES CREDITS

Master's Core Component

ED 5000 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

Library Media Specialist Component

LM 5020 Cataloging and Classification 3
RL 5300 Advanced Children's/Young Adult Literature 3
LM 5040 Instructional Materials Production and Use 3
LM 5010 Learning Resources Centers and Services 3
LM 5030 Reference and Research 3

Electives 6

Capstone Experience

LM 5210 Practicum in School Media 3

Total for M.Ed. in K–12 Education, Library Media Specialist Certification 33

Physical Education Certification

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

The M.Ed. degree leads to certification to teach physical education in grades K–12.

Required college level coursework or equivalent competence (audit, portfolio or exam) in square/folk/social dance, school activities I and II, fitness activities, elementary gymnastics, foundations of physical education, adventure skills, field experience, evaluation in physical education, kinesiology, physiology of exercise, adaptive physical education, motor learning and motor development, planning for movement programs, pedagogical perspectives in movement, dual and team sports, human anatomy and physiology and labs I and II, first aid and CPR certification, and personal wellness.

PROGRAM OF STUDY

REQUIRED COURSES 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 Theory Requirements (if not met in undergraduate work)

ED 5270 Foundations of Teaching 3
ED 5060 Theories of Learning and Cognitive Development 3
ED 6100 Curriculum Integration and Performance-Based Assessment – OR –
ED 5140 Assessment Principles and Practices 3
ED 5080 Instructional Strategies and Curriculum Design 3
ED 5570 Classroom Interventions and Special Education Strategies 3

PE 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

ED 5960 Internship in Teacher Education 9
ED 5210 Graduate Practicum 6

Total for M.Ed. in K–12 Education, Spanish Education Certification 33–39

Spanish Education Certification

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

The M.Ed. degree leads to certification to teach Spanish in grades K–12.

Required college level coursework or equivalent competencies (audit, portfolio or exam): completion of five upper division major courses in Spanish (Spanish history/culture/civilization, Spanish American history/culture/civilization and Spanish conversation, advanced Spanish, Spanish grammar/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.

**PROGRAM OF STUDY**

**REQUIRED COURSES**

**Master’s Core Component**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5000</td>
<td>Social Behavior in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>LL 5005</td>
<td>Language Teaching Methods</td>
<td>3</td>
</tr>
<tr>
<td>ED 5010</td>
<td>Philosophy, Ethics and Education</td>
<td>3</td>
</tr>
<tr>
<td>ED 5030</td>
<td>Research Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**Learning Theory Requirements** (if not met in undergraduate work)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5270</td>
<td>Foundations of Teaching</td>
<td>3</td>
</tr>
<tr>
<td>LL 5170</td>
<td>Foreign Language Methodology K–12</td>
<td>3</td>
</tr>
<tr>
<td>ED 5060</td>
<td>Theories of Learning and Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>ED 6100</td>
<td>Curriculum Integration and Performance-Based Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ED 5140</td>
<td>Assessment Principles and Practices</td>
<td>3</td>
</tr>
<tr>
<td>ED 5080</td>
<td>Instructional Strategies and Curriculum Design</td>
<td>3</td>
</tr>
<tr>
<td>ED 5570</td>
<td>Classroom Interventions and Special Education Strategies</td>
<td>3</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 5960</td>
<td>Internship in Teacher Education</td>
<td>9</td>
</tr>
<tr>
<td>ED 5210</td>
<td>Graduate Practicum</td>
<td>6</td>
</tr>
</tbody>
</table>

Total for M.Ed. in K–12 Education, Spanish Education Certification: 36–42 credits

**Special Education Certification**

**GENERAL SPECIAL EDUCATION**

Dr. Dennise M. Maslakowski, (603) 535-2636, e-mail: dmmaslakowski@plymouth.edu

See program details page 72.

**EMOTIONAL HANDICAP K–12 CERTIFICATION**

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

See program details page 72.

**LEARNING DISABILITIES K–12 CERTIFICATION**

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

See program details page 73.

**TESOL K–12 EDUCATOR CERTIFICATION**

(TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES)

Program Coordinator: Dr. Gaye Gould, (603) 535-2370, e-mail: gegould@plymouth.edu

The M.Ed. degree leads to certification to teach TESOL in grades K–12.

**PROGRAM OF STUDY**

**REQUIRED COURSES**

**Master’s Core Component**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL 5004</td>
<td>Language and Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>ED 5010</td>
<td>Philosophy, Ethics and Education</td>
<td>3</td>
</tr>
<tr>
<td>ED 5030</td>
<td>Research Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**ESOL Component**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL 5001</td>
<td>American and World Englishes</td>
<td>3</td>
</tr>
<tr>
<td>LL 5003</td>
<td>Language and the Mind</td>
<td>3</td>
</tr>
<tr>
<td>LL 5005</td>
<td>Language Teaching at Home and Abroad</td>
<td>3</td>
</tr>
<tr>
<td>LL 5006</td>
<td>Designing and Evaluating Language Tests</td>
<td>3</td>
</tr>
<tr>
<td>LL 5007</td>
<td>ESOL Literacy</td>
<td>3</td>
</tr>
<tr>
<td>ED 5570</td>
<td>Classroom Interventions and Special Education Strategies</td>
<td>3</td>
</tr>
</tbody>
</table>
Capstone Experience
LL 5010 Practicum in TESOL 6
– OR –
ED 5960 Internship in Teacher Education 9
Total for M.Ed. in K–12 Education, TESOL Certification 33–36

M.Ed. in Elementary Education

EARLY CHILDHOOD EDUCATION
Program Coordinator: Dr. Gerard Buteau,
(603) 535-2641, e-mail: gbuteau@plymouth.edu

For more information about Early Childhood Education with New Hampshire state certification please contact the Program Coordinator listed above.

K–8 ELEMENTARY EDUCATION WITH CERTIFICATION
Program Coordinator: Dr. Kimberly M. Williams,
(603) 535-3191, kmwilliams3@plymouth.edu

The M.Ed. leads to certification to teach grades K–8 in New Hampshire.

Required college level course work or equivalent competencies in general undergraduate education (demonstrated through transcript audit, portfolio or exam): English composition and literature, college mathematics beyond algebra, physical and biological sciences, American government, U.S. History, New Hampshire/New England history.

PROGRAM OF STUDY
REQUIRED COURSES CREDITS
Master's Core Components
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
Learning Theory Requirements
ED 5270 Foundations of Teaching 3
ED 5060 Theories of Learning and Cognitive Development 3
ED 5080 Instructional Strategies and Curriculum Design 3
ED 5570 Classroom Intervention and Special Education Strategies 3
ED 6100 Curriculum Integration and Performance-Based Assessment 3
– OR –
RL 5710 Advanced Diagnostic Testing and the Improvement of Reading and Writing 3

Interdisciplinary Methods Requirements
ED 5500 Science Methods 3
ED 5500 Math Methods 3
IN 5970 Integrated Arts 3
RL 5110 Issues and Trends in Reading and Writing 3
RL 5300 Advanced Children’s/Young Adult Literature 3
HS 5100 Heritage Studies (Social Studies Methods) 3
HP 5110 Wellness Concepts for Educators 2
CE 5120 Integrating Technology into the Curriculum 3

Capstone Experience
ED 5960 Internship in Education 9
– OR –
ED 5210 Graduate Practicum (if employed) 6
Total for M.Ed. in Elementary Education, K–8 Certification 54–57

Note: Learning Theory Requirements are determined based on previous coursework in the undergraduate major, previous certifications held, etc. Candidates who have met certification requirements prior to admission will have a reduced number of credits required to complete the M.Ed.

M.Ed. in Secondary Education

BIOLOGY EDUCATION: 7–12 EDUCATION CERTIFICATION
Program Coordinator: Dr. Warren Tomkiewicz,
(603) 535-2573, e-mail: warrent@plymouth.edu

The M.Ed. leads to certification to teach Biology in Grades 7–12.

Required college level course work or equivalent competencies (audit, portfolio or exam): Completion of general biology with labs I and II; invertebrate zoology or plant morphology; human anatomy and physiology with labs I and II; biochemistry, microbiology, genetics, evolution and ecology.
### 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 Cultures | 3
ED 5010 | Philosophy, Ethics and Education | 3
ED 5030 | Research Design | 3

**Learning Theory Requirements (if not met in undergraduate work)**
ED 5270 | Foundations of Teaching | 3
ED 5060 | Theories of Learning and Cognitive Development | 3
NS 5700 | Science Teaching in the Middle and High School | 3
ED 5570 | Classroom Interventions and Special Education Strategies | 3
ED 6100 | Curriculum Integration and Performance-Based Assessment | 3
– OR –
ED 5140 | Assessment Principles and Practices | 3
NS 5800 | Seminar: Current Issues in Science Education | 3

**Biology Content Component**
In this content major, a range of 0–40 credits must be taken in the content area, of which six must be taken at Plymouth State University. Additional credits in this discipline may be necessary for certification.

**Capstone Component**
ED 5960 | Internship in Teacher Education | 9
– OR –
ED 5210 | Graduate Practicum | 6

**Total for M.Ed. in Secondary Education, Biology Educator 7–12 Certification** | **36–42**

### GENERAL SCIENCE EDUCATION: 5–9 CERTIFICATION

Program Coordinator: Dr. Warren Tomkiewicz, (603) 535-2573, e-mail: warrant@plymouth.edu

The M.Ed. leads to certification to teach General Science in grades 5–9.

Required college level course work or equivalent competencies (audit, portfolio or exam): Completion of college algebra or higher level mathematics; general biology with labs I and II; general chemistry with labs I and II; earth science; astronomy; oceanography; meteorology; physical science; laboratory safety; and history and philosophy of science; plus 9-12 credits of undergraduate or graduate specialization courses.

### 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 Cultures | 3
ED 5010 | Philosophy, Ethics and Education | 3
ED 5030 | Research Design | 3

**Learning Theory Requirements (if not met in undergraduate work)**
ED 5270 | Foundations of Teaching | 3
ED 5060 | Theories of Learning and Cognitive Development | 3
NS 5700 | Science Teaching in the Middle and High School | 3
ED 5570 | Classroom Interventions and Special Education Strategies | 3
ED 6100 | Curriculum Integration and Performance-Based Assessment | 3
– OR –
ED 5140 | Assessment Principles and Practices | 3
NS 5800 | Seminar: Current Issues in Science Education | 3

**Content Area Concentration Component**
In this content major, a range of 30–40 credits must be taken in the content area, of which six must be taken at Plymouth State University. Additional credits in this discipline may be necessary for certification. Must have six undergraduate or graduate credits in specialized areas: biology, chemistry, earth science, environmental science or physics.

**Capstone Component**
ED 5960 | Internship in Teacher Education | 9
– OR –
ED 5210 | Graduate Practicum | 6
Total for M.Ed. in Secondary Education, General Science Educator 5–9 Certification

PHYSICAL SCIENCE: 7–12 CERTIFICATION
Program Coordinator: Dr. Mark Turski, (603) 535-2749, e-mail: markt@plymouth.edu

The M.Ed. leads to certification to teach Physical Science in Grades 7–12.

Required college level coursework or equivalent competencies (audit, portfolio or exam): laboratory safety; general chemistry with labs I and II; organic chemistry with labs I and II; quantitative analysis; instrumental analysis; physical chemistry I; earth or physical science elective.

PROGRAM OF STUDY
REQUiRED COURSES CREDITS

Master's Core Components
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

Learning Theory Requirements (if not met in undergraduate work)
ED 5270 Foundations of Teaching 3
ED 5060 Theories of Learning and Cognitive Development 3
NS 5700 Science Teaching in the Middle and High School 3
ED 5570 Classroom Interventions and Special Education Strategies 3
ED 6100 Curriculum Integration and Performance-Based Assessment 3
   – OR –
ED 5140 Assessment Principles and Practices 3
NS 5800 Seminar: Current Issues in Science Education 3

Content Area Concentration Component
In this content major, a range of 30–40 credits must be taken in the content area, of which six must be taken at Plymouth State University. Additional credits in this discipline may be necessary for certification.

Capstone Component
ED 5960 Internship in Education 9
   – OR –
ED 5210 Graduate Practicum 6

Total for M.Ed. in Secondary Education, Physical Science 7–12 Certification

SOCIAL STUDIES EDUCATION: 5–12 CERTIFICATION
Program Coordinator: Dr. Stacey Yap, (603) 535-2333, e-mail: staceyy@plymouth.edu

The M.Ed. leads to certification to teach Social Studies in Grades 5–12.

This certification requires the completion of upper level coursework in U.S. history, local history, non-Western history, physical geography, thematic/regional geography, local government, U.S. government, economics and at least one behavioral science course.

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 Cultures 3
ED 5010 Philosophy, Ethics and Education 3
ED 5030 Research Design 3

Learning Theory Requirements (if not met in undergraduate work)
ED 5270 Foundations of Teaching 3
ED 5060 Theories of Learning and Cognitive Development 3
ED 5080 Instructional Strategies and Curriculum Design 3
ED 5570 Classroom Interventions and Special Education Strategies 3
ED 6100 Curriculum Integration and Performance-Based Assessment 3
   – OR –
ED 5140 Assessment Principles and Practices 3
HS 5100 Heritage Studies Foundations (SS Methods) 3
Social Studies Content Component
A minimum of six PSU graduate credits in history, heritage studies, anthropology, geography or political science, depending on the candidate’s undergraduate preparation.

Additional credits in this discipline may be necessary for certification. The equivalent of a 30-credit undergraduate major in history or social studies is required to meet content standards. The State of New Hampshire requires the Praxis II for educator certification.

Capstone Component
ED 5960 Internship in Teacher Education 9
– OR –
ED 5210 Graduate Practicum (if employed) 6
Total for M.Ed. in Secondary Education, Social Studies Educator 5–12 Certification 39–42

Education and Specialist Conversion Programs

Educator Certification
Program Coordinators: Dr. Kathleen Norris, (603) 535-3023, e-mail: knorris@plymouth.edu
Dr. Dennise M. Maslakowski, (603) 535-2636, e-mail: dmmaslakowski@plymouth.edu

Plymouth offers educator certification in the areas of N–3 and K–8 through the Self Designed concentration and secondary certification 5–12, 7–12 and K–12 through the Educator Certification concentration. A prescribed curriculum is followed and courses may require day, evening and summer study. Students typically complete certification requirements over a two or three year period, depending on their undergraduate degree background. Students exploring teacher certification take ED 5270 Foundations of Teaching as the first course in the program. This course serves as the screening course for admission. A number of courses require students to document observation and participation in the public schools. Throughout the professional courses, students are typically required to work in various school settings to apply theory to practice. Plymouth State University’s graduate professional preparation 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 also a member of the American Association of Colleges for Teacher Education (AACTE).

Students desiring teaching certification are assigned advisors from the College of Graduate Studies as well as from their content area, if applicable. Students should meet with their advisors on a regular basis to review progress toward their degree requirements. Candidates will be assigned an advisor who will assist them in understanding their program of study. A contract of courses, which may consist of undergraduate as well as graduate courses, will be outlined with the student. Students with degrees in areas other than education will be required to take additional courses to meet certification competencies. Candidates must meet general education as well as professional education competencies as described by the State of New Hampshire.

EDUCATOR CERTIFICATION POLICIES
For candidates 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 State Board of Education determines passing scores. Additional testing for content area teachers, PRAXIS II, is required for New Hampshire certification unless the candidate has a master’s or higher degree in the subject to be taught.

To enter into the Educator Certification program, students must file an application for admission, which includes a statement of professional goals, submit a program contract for completion of certification requirements, have a cumulative 3.0 GPA and submit faculty references. In addition, students must file an Intent to Student Teach form with Graduate Studies one year prior to the anticipated term of student teaching. The criteria for admission and monitoring throughout the student’s Educator Certification program will focus on “academic achievement and personal characteristics.” Continual assessment of a student’s specific strengths and weaknesses in these areas will be used to determine “continuation in, or removal from, the teacher 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).
Students who are candidates for teacher certification are subject to New Hampshire law, which requires all persons who come into contact with pupils on a daily basis for a period of time to undergo a full disclosure criminal records check, including fingerprinting. The fee for this processing is the responsibility of the student and is paid directly to the school district. It is the responsibility of the school district to inform students of the policies at their schools.

A minimum of six credits in the content area must be taken with Plymouth faculty to ensure that the University is satisfied with the content area achievement. Students must complete their student teaching in residence for review by Plymouth faculty.

Student teaching (internship) is typically 16 weeks. Under special circumstances, students may petition to “test out” of student teaching by meeting with the Associate Vice President for the College of Graduate Studies and the Director of Graduate Programs. A graduate practicum is arranged and details of this contract can be obtained from the College of Graduate Studies.

TEACHER CERTIFICATION OPTIONS
Art Education, K–12
Biological Science, 7–12
Computer Technology Educator, K–12
Early Childhood Education, N–3
Elementary Education, K–8
Emotional and Behavioral Disorders, K–12
English Education, 5–12
English Speakers of Other Languages (ESOL) K–12
French Education, K–12
General Science, 5–9
General Special Education, K–12
Health Education, K–12
Learning Disabilities, K–12
Library Media Specialist, K–12
Mathematics, 7–12 and Middle School 5–8
Music Education, K–12
Physical Education, K–12
Physical Science Education, 7–12
Social Studies Education, 5–12
Spanish Education, K–12
Teaching English to Speakers of Other Languages (TESOL) K–12

SPECIALIST CERTIFICATION OPTIONS (POST-MASTER’S)
Reading Specialist, K–12
School Counselor, K–12
School Principal, K–12
School Psychologist, K–12
Special Education Administration, K–12
Superintendent (CAGS required), K–12

Note: Secondary teacher certification will require undergraduate or graduate coursework within the content area and methods. N–3 and K–8 teacher certification will require undergraduate or graduate coursework in various curricula and methods.

Certificate Programs and Institutes

ATHLETIC ADMINISTRATION
See page 58.

CONFLICT IN FAMILIES
See page 55.

EATING DISORDERS INSTITUTE
See page 63.

PARENTING EDUCATION CERTIFICATE PROGRAM
See page 55.

PATH: PATHS AND APPROACHES TO TRANSFORMATION AND HEALING
See page 64.

PLAY THERAPY
See page 56.

POSITIVE BEHAVIORAL INTERVENTIONS AND SUPPORT (PBIS), CERTIFICATE
See page 74.

SCHOOL PSYCHOLOGY, POST-MASTER’S
See page 53.
Master of Science Degree Programs

M.S. in Applied Meteorology
Program Coordinator: Dr. Jim Koermer, (603) 535-2574, e-mail: koermer@plymouth.edu

The Master of Science in Applied Meteorology (MSAM) program is managed by the Department of Chemical, Earth, Atmospheric and Physical Sciences 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 just the bachelor’s 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
- Computer-based programming and meteorological applications

MSAM PROGRAM HIGHLIGHTS

- The only M.S. 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 NHDES
- Some full assistantships with tuition waivers are available
- Flexibility in course selection to tailor a program to the student’s need
- Well-qualified students may be able to complete the program in approximately 18 months
- Office area for graduate students
- Cost efficient program; only 30 credits for a total cost of approximately $12,000

ADMISSION TO THE MSAM PROGRAM

Plymouth considers applications on a rolling admission basis. Students may apply at any time of the year. The MSAM Program is based on full fall, winter/spring and summer semesters. However, it is generally recommended that students consider starting the program during the fall semester. Applicants wanting to start in the fall semester should also apply by mid-January for priority consideration for any available assistantships. Students may take up to 12 graduate credits before being officially admitted to the program.

APPLICATION REQUIREMENTS

Applications are submitted to the College of Graduate Studies. The non-refundable application fee is $75 and must accompany the application. A complete application package includes the following:

- Completed application form
- Application fee
- Official transcripts of undergraduate degree
- Official transcripts for additional coursework (if any) that may be important for consideration
- Three recommendations on the forms provided
- Official GRE scores for the quantitative, verbal and analytical writing components
- Resumé
- Statement of interest

All interested candidates are encouraged to contact the PSU Meteorology Program for an in-person or phone interview before submitting their applications. You can contact the Meteorology Graduate Program Coordinator at msmeteorology@plymouth.edu.

APPLICANTS FROM FOREIGN COUNTRIES

In addition to the above documentation, international students must provide the following information:

- Notarized copies (translated into English) of transcripts of their undergraduate degree evaluated for institutional equivalency and any other institutions you have attended
- Most recent Test of English as a Foreign Language (TOEFL)
- Certified or notarized Affidavit of Support form (U.S. Immigration for I-134), which is required before an I-20 can be issued for F-1 status. This serves as evidence that all financial requirements for a year of tuition and living expenses can be met.
• Proof of country of citizenship and birth, which is required before an I-20 can be issued for F-1 status.

**TYPES OF ADMITTANCE**

A bachelor’s degree with a 3.0 grade point average or higher and strong supporting course work in mathematics and physics, solid recommendations, well-written Statement of Interest/Intent, résumé and GRE scores are required for admittance. When admission documents have been received, the application is then screened by the MSAM Admissions Advisory Group. Graduate Studies informs applicants of the group’s decision.

Full admission to the MSAM program may be granted to students meeting all of the criteria for admission. The most highly qualified admitted students may also be offered assistantships and/or tuition waivers based on available resources for such purposes. However, students must enroll in the thesis degree option to be eligible for assistantships.

Full admission to the College of Graduate Studies with the opportunity to enroll in graduate meteorology courses may be granted to some students with marginal credentials. Such students would not initially be eligible for assistantships. Upon completion of a successful semester—3.0 or higher cumulative grade point average (GPA)—the student would automatically be granted full admission to the MSAM degree program and could then be considered for an assistanship.

**ADMISSION REGULATIONS**

Persons holding a baccalaureate degree from an accredited college or university may enroll in graduate meteorology courses providing they meet the necessary prerequisites. Students taking courses will be classified in the following ways:

**GRADUATE STATUS**

Students who have officially been accepted into the MSAM Program or College of Graduate Studies and are enrolled in courses that will eventually lead to their degree.

**NON-DEGREE STATUS**

Students taking courses before or without being formally admitted into the graduate program are allowed to take up to 12 credits before a hold is placed on their registration.

**GRADUATE STUDY BY UNDERGRADUATE SENIORS**

Plymouth State University seniors with a cumulative GPA of 3.0 or better, may take up to six graduate credits with prior permission of the instructor, advisor, department chair and the Associate Vice President as outlined in the Student Request form. The total (graduate and undergraduate) credits taken at any one time may not exceed 17 credits.

All applications for admission become part of the permanent records of Plymouth State University and will not be returned. Access to this material is limited under the Family Rights and Privacy Act of 1974. Materials received as part of the application process will not be duplicated for use by the applicant nor forwarded to a third party. Please note: Plymouth is under no obligation to accept more than 2 credits taken at Plymouth State University prior to admittance into a degree program. Courses older than six years at the time of admittance may not be counted toward a degree.

**COURSE POLICIES**

**AUDITS**

Full tuition is charged for audits. A change from credit to audit may occur any time prior to the third week of the semester.

**TRANSFER CREDITS**

Transfer of graduate credits from other accredited institution(s) is limited to nine credits. All courses for transfer must have the approval of the Meteorology Program Coordinator. For courses taken elsewhere during the program, prior approval by the Program Coordinator is recommended.

Grades for transfer courses must be at the B level or higher (A = 4.0 scale). Only credits are transferred, not grades; therefore grades for transfer courses do not count toward the required 3.0 grade point average for program completion. Courses taken more than six years before the admission date will not be accepted for transfer.

No graduate transfer credit will be given for correspondence courses, curriculum workshops, or pass/fail courses. An official transcript must be on file in the College of Graduate Studies office before credits can be transferred.
MSAM GRADING SYSTEM
MSAM graduate students must maintain a cumulative GPA 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 MSAM who fall below a 3.0 cumulative GPA would have one semester to restore it to the satisfactory level. If a student does not achieve this level after this semester, the student would be barred from future coursework and pursuit of the MSAM degree and lose assistantship support (if applicable).

Students admitted into the College of Graduate Studies, but not formally enrolled in the MSAM program, would not be eligible to enroll in the MSAM program and pursue the degree, if they fail to earn a satisfactory GPA during their first semester.

PROGRAM OF STUDY/DEGREE REQUIREMENTS
The program requires a minimum of 30-credits to complete an M.S. degree. Students may choose either a thesis or non-thesis degree option. Credit minimums for each option are:
- Thesis: 24 credits of coursework and six credits of thesis research
- Non-thesis: 28 credits of coursework and two 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 two-credit independent study course. As part of their coursework, 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 graduate seminar and either thesis or 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 Graduate Program Plan, 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 paper(s)/project(s), to earn graduate credit in these courses. The co-listed courses are as follows:

<table>
<thead>
<tr>
<th>CO-LISTED METEOROLOGY COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT 5300/4300 Synoptic Meteorology II</td>
<td>4</td>
</tr>
<tr>
<td>MT 5310/4310 Dynamic Meteorology I</td>
<td>3</td>
</tr>
<tr>
<td>MT 5320/4320 Dynamic Meteorology II</td>
<td>3</td>
</tr>
<tr>
<td>MT 5410/4410 Atmospheric Physics</td>
<td>3</td>
</tr>
<tr>
<td>MT 5110/4110 Air Quality</td>
<td>3</td>
</tr>
<tr>
<td>MT 5430/4430 Climate Change</td>
<td>3</td>
</tr>
<tr>
<td>MT 5450/4450 Advanced Synoptic Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>MT 5470/4470 Micrometeorology</td>
<td>3</td>
</tr>
<tr>
<td>MT 5550/4550 Topics</td>
<td>3</td>
</tr>
</tbody>
</table>

Students with undergraduate degrees in meteorology or atmospheric science are expected to have already completed the bold-faced courses above or their equivalents and these students cannot take those courses for graduate credit. Eligible undergraduate students, desiring graduate credit for the non-bold listed courses, should sign up for the course using the graduate course number designator. Students entering into the program without a B.S. in meteorology or sufficient meteorology course background need to complete the four courses listed in bold-face as a minimum, but only two of those courses can be counted toward their 30 graduate credits requirement. Any further prerequisite deficiencies would have to be made up with non-degree credits.

GRADUATE COURSES
At least 15 of the credits counting towards the M.S. 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 towards their 30-credit degree requirements.
NON CO-LISTED METEOROLOGY COURSES 

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT 5350</td>
<td>Boundary Layer Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>MT 5600</td>
<td>Computer Applications in Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>MT 5620</td>
<td>Numerical Weather Prediction</td>
<td>3</td>
</tr>
<tr>
<td>MT 5200</td>
<td>Transportation Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>MT 5340</td>
<td>Radar Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>MT 5330</td>
<td>Satellite Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>MT 5800</td>
<td>Thesis Research</td>
<td>3</td>
</tr>
<tr>
<td>MT 5700</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MT 5910</td>
<td>Independent Study</td>
<td>1–4</td>
</tr>
</tbody>
</table>

Additional non-meteorology courses could also be used to fulfill up to nine credits towards degree requirements with approval of the advisor and Meteorology Graduate Program Coordinator. Examples (not a definitive list) of such courses are listed below:

MATHEMATICS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MG 3120</td>
<td>Elements of Linear Algebra</td>
</tr>
<tr>
<td>MG 3300</td>
<td>Statistics II</td>
</tr>
<tr>
<td>MG 3410</td>
<td>Numerical Methods Using the Computer</td>
</tr>
<tr>
<td>MG 4420</td>
<td>Numerical Analysis Using the Computer</td>
</tr>
<tr>
<td>MG 4450</td>
<td>Seminar in Applied Mathematics (check topic)</td>
</tr>
</tbody>
</table>

ENVIRONMENT

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESP 5500</td>
<td>ST: Hydrology</td>
</tr>
<tr>
<td>ESP 5510</td>
<td>Limnology</td>
</tr>
</tbody>
</table>

Total for M.S. in Applied Meteorology 30

COMPLETION DEADLINES

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

M.S. in Biology

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

The program provides students with expanded knowledge and research skills in some of the core areas in biological sciences that are needed for these students to attain professional goals as well as to provide a pool of well-qualified applicants for jobs for regional companies, school districts, etc. 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 M.S. 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 orally and in writing.

ADMISSIONS STANDARDS FOR THE M.S. IN BIOLOGY

- Successful applicants will be graduates from an accredited college or university.
- 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 (GPA) for their undergraduate coursework and for their 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.
- Applicants must submit a detailed letter of intent that will include personal background and goals.
- At least three letters of recommendation must be submitted.
- Students wishing to transfer earned credit into the program are limited to six credits for appropriate graduate courses from an accredited college or university, for which they have received a grade of “B” or better.
- Successful applicants will also need proper backgrounds in key areas, such as mathematics, physics, chemistry and biology. Students without the needed prerequisites may have to mitigate these shortfalls.
- All other College of Graduate Studies admissions policies, fees and conditions for entrance into graduate programs apply.
Students will be selected for admission by a biology faculty committee. Students not meeting the above requirements may be admitted as non-matriculated biology program students, and would not be eligible for assistantships or tuition waivers until they are fully admitted into the M.S. in Biology program.

**DEGREE REQUIREMENTS**
The program requires a minimum of 30 credits with the following framework for thesis and non-thesis options:
- **Thesis:** 24 credits of coursework and six credits of thesis research
- **Non-thesis:** 28 credits of coursework and two credits of independent study

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

**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
- Electron Microscopy

Students will be required to complete courses in a variety of the above listed areas, but they have flexible options on selecting 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 will be co-listed as graduate courses (see the list below). 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 paper(s)/project(s).

### BIOLOGY COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI 5790</td>
<td>Biological Rhythms 3</td>
</tr>
<tr>
<td>BI 5900</td>
<td>Graduate Seminar in Biology 3</td>
</tr>
<tr>
<td>BI 5910</td>
<td>Independent Study 3</td>
</tr>
<tr>
<td>BI 5360</td>
<td>Community Ecology 3</td>
</tr>
<tr>
<td>BI 5210</td>
<td>Predator/Prey Ecology 3</td>
</tr>
<tr>
<td>BI 5560</td>
<td>Special Topics in Biological Science 3</td>
</tr>
<tr>
<td>BI 5950</td>
<td>Thesis Research 6</td>
</tr>
<tr>
<td>BI 5370</td>
<td>Behavioral Ecology 3</td>
</tr>
<tr>
<td>BI 5570</td>
<td>Current Topics in Cell Biology 3</td>
</tr>
<tr>
<td>BI 5400</td>
<td>Paleoeconomy 3</td>
</tr>
<tr>
<td>BI 5230</td>
<td>Landscape Ecology 3</td>
</tr>
<tr>
<td>BI 5100</td>
<td>Biology Colloquium 1</td>
</tr>
<tr>
<td>BI 5810</td>
<td>University Biology Teaching 1</td>
</tr>
</tbody>
</table>

### UNDERGRADUATE AND GRADUATE CO-LISTED BIOLOGY COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI 4090/BI 5090</td>
<td>Cell Structure and Function 4</td>
</tr>
<tr>
<td>BI 4180/BI 5180</td>
<td>Biotechnology 4</td>
</tr>
<tr>
<td>BI 4300/BI 5390</td>
<td>Ecology 4</td>
</tr>
<tr>
<td>BI 4440/BI5440</td>
<td>Electron Microscopy Techniques 4</td>
</tr>
<tr>
<td>BI 4760/BI5760</td>
<td>Animal Behavior 4</td>
</tr>
<tr>
<td>BI 4770/BI5770</td>
<td>Animal Physiology 4</td>
</tr>
<tr>
<td>BI 4780/BI5780</td>
<td>Neurobiology 4</td>
</tr>
</tbody>
</table>

### ENVIRONMENTAL SCIENCE AND BIOLOGY CO-LISTED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EV5240/BI5240</td>
<td>Terrestrial Ecology 3</td>
</tr>
<tr>
<td>EV5350/BI5350</td>
<td>Conservation Biology 3</td>
</tr>
<tr>
<td>EV5380/BI5380</td>
<td>Avian Ecology 3</td>
</tr>
</tbody>
</table>

**Total for M.S. in Biology**

Plymouth State University senior undergraduate students will be allowed to double-count up to six credits of the above listed courses towards their graduate total as long as they receive an “A” in the course as an undergraduate. Students entering into the program without a B.S. 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.
**M.S. in Criminal Justice**

Program Coordinator: Dr. David Mackey, (603) 535-3198, e-mail: damackey@plymouth.edu

The Master of Science in Criminal Justice (MSCJ) is a 36-credit-hour program intended primarily for those individuals who are already employed as professionals in the areas of law enforcement, corrections, courts or the associated professional roles in the criminal justice system. In addition, the MSCJ program provides the opportunity for prosecutors, defense attorneys and law students to more fully examine the theoretical workings of the criminal justice system. Both of these groups benefit from the program, which will enable them to become leading professionals in the field. The MSCJ program is intended to be completed in three years of part-time study.

The MSCJ program seeks to develop the leadership and administrative skills of its participants. Students will be provided with opportunities to develop and refine writing and presentation skills. With its research and policy focus, the program builds broad understanding of the applicable criminal justice literature to include the value of appropriate research methodology. The program provides a setting for the creation and development of innovative approaches to institutional responses within the criminal justice field. The MSCJ program also builds an understanding of the challenges and difficulties of diversity issues that are presented to leaders in the criminal justice field.

**PROGRAM OF STUDY**

The Master of Science in Criminal Justice has 18 credits that comprise the core component of the degree, which all MSCJ students will complete. Along with the core courses, students are required to complete six credits in contemporary issues. Students can choose to complete the contemporary issues component by taking two three-credit, specialized courses or completing a six-credit research and writing contemporary issues thesis. Students considering advanced study beyond the MSCJ are advised to elect the six-credit thesis option. Students will then have a choice of concentration in either law orientation or leadership/criminal justice management, each being 12 credits of coursework. The law orientation coursework is being offered through an articulation agreement with Franklin Pierce Law Center.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>CREDITS</th>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>CJ 5000</td>
<td>Criminal Justice Survey</td>
</tr>
<tr>
<td>9</td>
<td>CJ 5010</td>
<td>Applied Criminological Theory</td>
</tr>
<tr>
<td>9</td>
<td>CJ 5020</td>
<td>Correctional Policy</td>
</tr>
<tr>
<td>9</td>
<td>CJ 5030</td>
<td>Diversity and Social Justice</td>
</tr>
<tr>
<td>9</td>
<td>CJ 5040</td>
<td>Research Design in Criminal Justice</td>
</tr>
<tr>
<td>9</td>
<td>CJ 5050</td>
<td>Criminal Justice and Public Policy</td>
</tr>
</tbody>
</table>

**Leadership and Criminal Justice Management Concentration Courses**

<table>
<thead>
<tr>
<th>CREDITS</th>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CJ 5100</td>
<td>Public Budgeting and Finance</td>
</tr>
<tr>
<td>3</td>
<td>CJ 5110</td>
<td>Command, Leadership and Human Resources</td>
</tr>
<tr>
<td>3</td>
<td>CJ 5120</td>
<td>Public Agency Management</td>
</tr>
<tr>
<td>3</td>
<td>CJ 5130</td>
<td>Communication Strategy for Crisis Management</td>
</tr>
</tbody>
</table>

**Law Orientation Concentration Courses** (offered at Franklin Pierce Law Center)

<table>
<thead>
<tr>
<th>CREDITS</th>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CJ 5200</td>
<td>Criminal Law</td>
</tr>
<tr>
<td>3</td>
<td>CJ 5201</td>
<td>Criminal Procedure 1</td>
</tr>
<tr>
<td>3</td>
<td>CJ 5202</td>
<td>Criminal Procedure 2</td>
</tr>
<tr>
<td>3</td>
<td>CJ 5203</td>
<td>Criminal Practice Clinic</td>
</tr>
</tbody>
</table>

**Contemporary Issues Component Courses**

<table>
<thead>
<tr>
<th>CREDITS</th>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>CJ 5200</td>
<td>Contemporary Issues in Criminal Justice – OR –</td>
</tr>
<tr>
<td>6</td>
<td>CJ 5950</td>
<td>Contemporary Issues in Criminal Justice Thesis</td>
</tr>
</tbody>
</table>

**Total for the M.S. in Criminal Justice**

36

---

**M.S. in Environmental Science and Policy**

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

The Master of Science degree in Environmental Science and Policy (ESP) prepares future scientists and resource managers with interdisciplinary competence for career opportunities in industry, government, non-profits and academia. The program focuses on interrelated chemical, physical, biological and socio-cultural topics that drive environmental research, policy and management. The coursework and applied research trains students to better meet the needs of future employers. Representatives of potential future employers will...
be involved in the program as advisors, instructors, funders and as student-committee members, and will thus provide regular feedback to the program. The program is intended to be highly flexible to meet the needs of individual students. Students select a program of study with at least one course in each of four categories: social science, communications, terrestrial science and aquatic science. All students are required to take the Graduate Science Colloquium Series. Students are encouraged to develop a public outreach component to their coursework or thesis, to hone a skill necessary for success in the working world. Each student will have a Program of Study created by the student and the advisor and approved by the Environmental Science and Policy Program Coordinator.

Plymouth State University has a partnership agreement with the Humboldt Field Research Institute in Steuben, Maine (HFRI). The HFRI offers week-long, intensive field courses, taught by a diverse and revolving international faculty. Up to six pass/fail graduate credits may be taken at HFRI. Student theses focus on issues of importance to the regional environment, and include an outreach component to provide communication experience.

Full-time graduate students are encouraged to enroll in the summer, to get a jump-start on thesis research and to have the opportunity to complete their programs within two years. Part-time students can set their own schedules, depending on personal needs. Most graduate courses will be offered one day per week in the late afternoon or early evening, to minimize the disruptions to the work schedules of part-time students, and to facilitate field research.

PROGRAM OF STUDY
For the latest information, students should see the College of Graduate Studies Web page at www.plymouth.edu/graduate.

Steps for prospective students:
1. Choose the preferred program status:
   - Thesis or non-thesis, and
   - Full-time, part-time, or accelerated 1+ year program.
2. Establish a line of communication with a prospective faculty advisor. A faculty member must agree to serve as advisor before the student can be formally accepted into the program.
3. Take the GRE and submit an application to the program. A student can be admitted and defer taking courses for up to two years. Alternatively, students can take up to 12 credits before being admitted.
4. Develop a financial plan for studies in partnership with an advisor, including but not limited to
   - Federal work-study (contact the Financial Aid office)
   - Grant funding available or to be sought before applying.

The student’s GPA for pre-enrollment courses will be used as part of the evaluation of the application.

For faculty and matriculated full-time students on the two year plan:
First semester:
- Enroll in classes as early as possible (under-enrolled classes may be canceled), including the required graduate colloquium
- Be proactive in determining financial aid and assistantship status, with major advisor
- Discuss thesis project (if a thesis student) with your major advisor, and begin literature search
- Begin to fill out the Graduate Plan with course selections and committee membership, and meet with the committee and the Graduate Coordinator before the end of the semester to discuss your preliminary plan.

Second semester:
- Continue to take courses (including the Colloquium), and register for at least one course at the Humboldt Field Research Institute
- Complete a draft of the Graduate Plan and meet to discuss and sign with your committee and Graduate Coordinator
- Begin work on a thesis proposal (if a thesis student), and present an overview of your research plans late in the semester as part of the colloquium
- Begin research data collection.

Third semester:
- Continue to take classes, including thesis credits and the colloquium
- Determine financial aid and assistantship status with major advisor
- Begin transforming thesis proposal into the thesis using data as collected; work with advisor and the Writing and Reading Center as necessary to refine thesis drafts
- Meet with committee and Coordinator.
Fourth semester:
• Register for graduate thesis credits and complete other courses as necessary
• Complete research data collection and complete a draft of the thesis early in the semester
• Continue to write and obtain feedback from your advisor and Writing and Reading Center
• Submit thesis draft to entire committee when approved by major advisor
• Defend thesis.

Part-time students and students in the accelerated 1+ program will modify the timeline and guidelines in consultation with their major advisor and the graduate coordinator, depending on individual circumstances.

M.S. in Science Education
Program Coordinator: Dr. Warren Tomkiewicz, (603) 535-2573, e-mail: warrent@plymouth.edu

The Master of Science in Science Education program will enhance the science content knowledge and further develop the scientific process and inquiry skills of middle and high school science teachers. The program will provide 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 district. These efforts will help 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 Master of Science 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 Master of Science 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/or 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
• Enhance teacher’s understanding and application of the national and state science education standards.

ADMISSION TO THE M.S. IN SCIENCE EDUCATION
The College of Graduate Studies considers applications on a rolling admission basis. Students may apply at any time of the year. Students may take up to 12 graduate credits before being officially admitted to the program.

APPLICATION REQUIREMENTS
Applications are submitted to the College of Graduate Studies. The non-refundable application fee is $75 and must accompany the application. A complete application package includes the following:
• Completed application form
• Application fee
• Official transcripts of undergraduate degree
• Official transcripts for additional coursework (if any) that may be important for consideration
• Three recommendations on the forms provided
• Official GRE scores for the quantitative, verbal and analytical writing components
• Resumé
• Statement of interest

All interested candidates are encouraged to contact the chair of the Department of Chemical, Earth, Atmospheric and Physical Sciences for an in-person or phone interview before submitting their applications.
APPLICANTS FROM FOREIGN COUNTRIES
In addition to the above documentation, international students must provide the following information:

- Notarized copies (translated into English) of transcripts of their undergraduate degree evaluated for institutional equivalency and any other institutions attended
- Most recent Test of English as a Foreign Language (TOEFL)
- Certified or notarized Affidavit of Support form (U.S. Immigration for I-134), which is required before an I-20 can be issued for F-1 status. This serves as evidence that all financial requirements for a year of tuition and living expenses can be met.
- Proof of country of citizenship and birth, which is required before an I-20 can be issued for F-1 status.

PROGRAM OF STUDY
REQUISITE COURSES
MSSE Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS 5700</td>
<td>Science Teaching in the Middle and High School</td>
<td>3</td>
</tr>
<tr>
<td>NS 5800</td>
<td>Seminar: Current Issues in Science Education</td>
<td>3</td>
</tr>
<tr>
<td>NS 5200</td>
<td>Action Research in the Science Classroom: Foundation and Implementation</td>
<td>3</td>
</tr>
<tr>
<td>NS 5850</td>
<td>Capstone Research Project</td>
<td>4</td>
</tr>
</tbody>
</table>

Individualized Science Content Courses 20

The Individualized Science Content requirement would be satisfied by successfully completing courses and/or institutes in biology, chemistry, environmental, biotechnology, earth system or physical sciences.

Total for M.S. in Science Education 33

Certificate of Advanced Graduate Studies (CAGS)
Program Coordinator: Dr. Leo Corriveau,
(603) 535-3145, e-mail: lcorriveau@plymouth.edu

CAGS in Educational Leadership

The Plymouth CAGS program in Educational Leadership was first offered in the spring of 1997. It is a 33- to 60-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 foundation themes for this program are rigor, relevance and reflection.

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 become part of a cohort group exploring contemporary issues in education for all students. Students can design their program of study to obtain certification as:

- Reading and Writing Specialist, K–12
- School Principal, K–12
- School Psychologist, K–12
- Special Education Administration, K–12
- Superintendent of Schools, K–12

A block schedule format is used to accommodate busy professional schedules. 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 Graduate Studies.

PROGRAM OF STUDY
REQUISITE COURSES
Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP 7020</td>
<td>Collaborative Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EP 7030</td>
<td>Transforming the Educational Agenda</td>
<td>3</td>
</tr>
<tr>
<td>EP 7040</td>
<td>Planning in Education and Human Services</td>
<td>3</td>
</tr>
</tbody>
</table>
EP 7050  Qualitative Methodology and Applied Research  3
EP 7060  Legal Issues in Policy Making  3
EP 7070  Contemporary Social Trends  3

**Specialization Component**
Strand area different from master’s degree  12

**Elective Component**  3–6
Elective (to be approved by CAGS director)

Total for CAGS in Educational Leadership  33

**STRANDS (FOCUS AREAS OF THE CAGS)**
- Arts, Leadership and Learning
- Administration and Curriculum/Assessment (with or without additional strand in professional certification)
- Counselor Education (School Counseling or Mental Health Counseling) and School Psychology
- Self Designed
- Doctoral Program (with Argosy or Franklin Pierce (see page 98)

**Arts, Leadership and Learning**
Program Coordinators:
Dr. Patricia Lindberg,
(603) 535-2647, e-mail: plindber@plymouth.edu

Dr. Cynthia Vascak,
(603) 535-2649, e-mail: cynthiav@plymouth.edu

The CAGS strand 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 Plymouth 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**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Component</strong></td>
<td></td>
</tr>
<tr>
<td>EP 7020  Collaborative Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EP 7030  Transforming the Educational Agenda</td>
<td>3</td>
</tr>
<tr>
<td>EP 7040  Planning in Education and Human Services</td>
<td>3</td>
</tr>
<tr>
<td>EP 7050  Qualitative Methodology and Applied Research</td>
<td>3</td>
</tr>
<tr>
<td>EP 7090  Critical Perspectives for Arts Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>EP 7110  Arts and Learning</td>
<td>3</td>
</tr>
</tbody>
</table>

**Specialization Component**  12
Coursework selected by student and advisor and approved by CAGS director.

Total for CAGS in Educational Leadership, Arts, Leadership and Learning Strand  33

**Administration and Curriculum/Assessment**

**PROGRAM OF STUDY**

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Courses</strong></td>
<td></td>
</tr>
<tr>
<td>EP 7020  Collaborative Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EP 7030  Transforming the Educational Agenda</td>
<td>3</td>
</tr>
<tr>
<td>EP 7040  Planning in Education and Human Services</td>
<td>3</td>
</tr>
<tr>
<td>EP 7050  Qualitative Methodology and Applied Research</td>
<td>3</td>
</tr>
<tr>
<td>EP 7060  Legal Issues in Policy Making</td>
<td>3</td>
</tr>
<tr>
<td>EP 7070  Contemporary Social Trends</td>
<td>3</td>
</tr>
</tbody>
</table>

**Specialization Component**  12
Coursework selected by student and advisor and approved by CAGS director.

Total for CAGS in Educational Leadership, Administration & Curriculum/Assessment Strand  33
Counselor Education and School Psychology
Chair: Dr. Gary Goodnough, (603) 535-2821, e-mail: ggoodno@plymouth.edu

The Counselor Education and School Psychology strands are designed as 33-credit programs that address the needs of practicing counselors and educators who have completed a master’s degree and are interested in pursuing advanced academic work in school counseling, mental health counseling, counselor education or school psychology.

ADMISSION REQUIREMENTS
The basic admissions requirements for the CAGS strands in Counselor Education and School Psychology are the same as for the CAGS in Educational Leadership, but with two additional requirements. First, prospective students need to meet with the chair or Program Coordinator to undergo a curriculum review of candidates’ previous master’s degree to determine initial eligibility for the degree. Second, candidates for admission must have a personal, face-to-face interview with members of the admissions board. After candidates submit their application materials, they can set up an admissions interview by contacting the Program Coordinator.

SCHOOL COUNSELING
Program Coordinator: Dr. Gary Goodnough, (603) 535-2821, e-mail ggoodno@plymouth.edu

This flexible program is intended for two distinct groups of counselors who wish to be leaders in the field of school counseling.

1. Counseling professionals who hold a counseling master’s degree that does not meet the educational requirements for New Hampshire certification as a school guidance counselor may be able to meet these requirements through the CAGS strand in School Counseling. This program allows counselors with specializations in other areas such as clinical, human relations or rehabilitation to gain the specialized academic and field experiences required for school guidance counseling.

2. Already certified school counselors. The CAGS contains coursework targeted at leadership issues applicable to school guidance counseling settings. The CAGS strand in School Counseling offers the opportunity for counselors who are already certified to further their education and take specialized coursework in areas that will expand their areas of expertise.

PROGRAM OF STUDY

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Counselor Education Core</strong></td>
<td></td>
</tr>
<tr>
<td>CO 7120 Ethical, Legal and Professional Issues in Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CO 7300 Counseling Supervision</td>
<td>3</td>
</tr>
<tr>
<td>EP 7050 Qualitative Methodology and Applied Research</td>
<td>3</td>
</tr>
<tr>
<td>– OR –</td>
<td></td>
</tr>
<tr>
<td>CO 5560 ST: Action Research for School Counselors</td>
<td>3</td>
</tr>
</tbody>
</table>

| **School Counseling Specialization** |         |
| CO 5030 School Counseling          | 3       |
| CO 5650 Critical Issues: School Counseling and Special Education | 3       |
| CO 5780 Counseling and Consulting Interventions for Children and Adolescents | 3       |
| HH 5700 Creating Organizational Health | 3       |
| – OR –                            |         |
| EP 7020 Collaborative Leadership   | 3       |

| Electives                         | 6       |

| Capstone Experience               |         |
| CO 5850 Seminar and Internship in School Counseling K–12 | 6       |
| – OR –                            |         |
| ED 5210 Graduate Practicum        |         |
| – OR –                            |         |
| ED 5950 Graduate Thesis           |         |

Total for CAGS in Educational Leadership, Counselor Education and School Psychology Strand – School Counseling: 33

MENTAL HEALTH COUNSELING
Program Coordinator: Dr. Gail Mears, (603) 535-2485, e-mail: gmears@plymouth.edu

This program is intended for two distinct groups of counselors who wish to be leaders in the field of mental health counseling.

1. Counseling professionals 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 may be able to meet their educational licensure requirements through the CAGS strand in Mental Health Counseling. This program
allows counselors with specializations in other areas such as school, human relations or rehabilitation to gain the specialized academic and field experiences required for clinical mental health counseling.

2. Already licensed clinical mental health counselors. The CAGS contains coursework targeted at leadership issues applicable to mental health counseling settings. The CAGS strand in 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.

**COUNSELOR EDUCATION: SELF DESIGNED**

**Program Coordinator:** Dr. Gail Mears, (603) 535-2485, e-mail: gmears@plymouth.edu

This flexible program allows students with master’s degrees in counseling to continue their studies in a manner that suits their professional development needs.

**PROGRAM OF STUDY**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Counselor Education Core</strong></td>
<td></td>
</tr>
<tr>
<td>CO 7120 Ethical, Legal and Professional Issues in Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CO 7300 Counseling Supervision</td>
<td>3</td>
</tr>
<tr>
<td>EP 7050 Qualitative Methodology and Applied Research</td>
<td>3</td>
</tr>
<tr>
<td><strong>Mental Health Specialization</strong></td>
<td></td>
</tr>
<tr>
<td>CO 5770 Psychopathology: Disorders of Childhood, Adolescence and Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>CO 5700 Critical Issues: Mental Health Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CO 5600 Introduction to Mental Health Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CO 5790 Interventions in Mental Health Practice</td>
<td>3</td>
</tr>
<tr>
<td>CO 5130 Psychopharmacology and the Biological Basis of Mental Illness</td>
<td>3</td>
</tr>
<tr>
<td><strong>Internship</strong></td>
<td></td>
</tr>
<tr>
<td>CO 5880 Seminar and Internship in Mental Health Counseling</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total for CAGS in Educational Leadership, Counselor Education and School Psychology Strand – Self Designed Counselor Education</strong></td>
<td>33</td>
</tr>
</tbody>
</table>

Candidates in the Mental Health Counseling strand may intern in any mental health organization that can provide the requisite clinical opportunities and clinical supervision. The Counselor Education program works with multiple organizations across New England.

**SCHOOL PSYCHOLOGY**

**Program Coordinator:** Dr. Leo Sandy, (603) 535-2287, e-mail: lsandy@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 upwards of 60 credits depending on the relatedness to school psychology of candidates’ previous masters’ degrees. Please see the M.Ed. in School Psychology on page 53 of this catalog for a complete listing of courses needed for certification as a School Psychologist.
PROGRAM OF STUDY

REQUiRED COURSES CREDITS
Counselor Education Core
CO 7300 Counseling Supervision 3
EP 7050 Qualitative Methodology and Applied Research 3
SE 5765 Working with Families and Children Ethical and Legal Issues 3

School Psychology Specialization 12+
Students take what they need for certification based on the competencies met in their master’s degree program.

Capstone
SY 6800 School Psychology Seminar and Internship 12

Total for CAGS in Educational Leadership, Counselor Education and School Psychology Strand – School Psychology 33

Professional Certification Strands

READING AND WRITING SPECIALIST
Program Coordinator: Sandy Tilton,
(603) 535-2636, e-mail tilsm@metrocast.net

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 prepare classroom teachers, special educators and other educators for the role of reading teacher, specialist and literacy leader at the elementary, middle, high school, school district and adult learning levels.

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

Specialization Component
RL 5110 Issues and Trends in Reading and Writing 3
RL 5170 Reading and Writing in the Content Area 3
RL 5300 Advanced Children’s/Young Adult Literature 3
RL 5710 Advanced Diagnostic Testing and the Improvement of Reading and Writing 3
RL 5760 Linguistic Principles and Methods of Teaching English as a Second or Other Language 3
RL 5770 Developing Language and Literacy in Early Childhood 3

Capstone Experience
RL 5820 Practicum in Reading and Writing 3
RL 5830 Practicum in Reading Diagnosis and Remedial Reading 3

Total for CAGS in Educational Leadership, Reading and Writing Specialist Strand – K–12 Certification 36

SUPERINTENDENT OF SCHOOLS
Program Coordinator: Dr. Leo Corriveau,
(603) 535-3145, e-mail lcorriveau@plymouth.edu

The School Superintendent Certification Option strand was built on the foundation of the competencies required for school principal certification and integrated with the CAGS courses. Students who are admitted into the CAGS program may select this certification option for their program.

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

Superintendent of Schools Component
AD 5020 Staff Development and Evaluation 3
AD 5300 School Finance and Negotiation 3
AD 5330 Curriculum Development and Assessment 3
AD 5750 School Building and Transportation 2
**SCHOOL PRINCIPAL**  
Program Coordinator: Dr. Leo Corriveau,  
(603) 535-3145, e-mail lcorriveau@plymouth.edu

<table>
<thead>
<tr>
<th>PROGRAM OF STUDY</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REQUIRED COURSES</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CAGS Core Component</strong></td>
<td></td>
</tr>
<tr>
<td>EP 7020 Collaborative Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EP 7030 Transforming the Educational Agenda</td>
<td>3</td>
</tr>
<tr>
<td>EP 7040 Planning in Education and Human Services</td>
<td>3</td>
</tr>
<tr>
<td>EP 7050 Qualitative Methodology and Applied Research</td>
<td>3</td>
</tr>
<tr>
<td>EP 7060 Legal Issues in Policy Making</td>
<td>3</td>
</tr>
<tr>
<td>EP 7070 Contemporary Social Trends</td>
<td>3</td>
</tr>
<tr>
<td><strong>Special Education Administration Component</strong></td>
<td></td>
</tr>
<tr>
<td>AD 5020 Staff Development and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>AD 5300 School Finance and Negotiation</td>
<td>3</td>
</tr>
<tr>
<td>AD 5330 Leadership in Curriculum Development and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ED 5060 Theories of Learning and Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>ED 5770 Classroom Intervention and Special Education Strategies</td>
<td>3</td>
</tr>
<tr>
<td><strong>Capstone Experience</strong></td>
<td></td>
</tr>
<tr>
<td>AD 5800 Practicum in Administration and Supervision I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total for CAGS in Educational Leadership, School Principal Strand – K–12 Certification: 42

**Doctoral Partnerships**

**ARGOSY UNIVERSITY OF SARASOTA**

Plymouth has an articulation agreement with the Argosy University of Sarasota doctoral program for CAGS candidates interested in doctoral studies. Candidates who decide to expand their horizons even further can pursue a Doctor of Education (Ed.D.) degree. This collaborative venture combines Plymouth State University post-master’s courses, distance learning and courses in residence at Argosy University of Sarasota, in Florida, allowing a candidate to enroll in a Doctor of Education program in Higher Education, Educational Leadership or Curriculum and Instruction. Argosy University of Sarasota has approximately
1,500 graduate students and is accredited by the North Central Association of Colleges and Schools.

For additional information for doctoral studies at Argosy University please contact Dr. Kathleen Norris at knorris@plymouth.edu and visit the Argosy University Web site at www.argosyu.edu.

FRANKLIN PIERCE COLLEGE
Plymouth State University entered into a partnership agreement with Franklin Pierce College in the spring of 2006 to offer a doctoral program for CAGS candidates interested in doctoral studies. Candidates who decide to continue their education can pursue a Doctor of Arts degree in Leadership.

During the academic year, courses will be offered on a weekend schedule with course weekend dates occurring approximately once a month during the term, plus an online course component. Internships/externships may be taken during the summer and special topics courses taught in the summer will be offered on a variable time schedule. Classes will be held at Franklin Pierce College in Concord, Portsmouth and Lebanon, N.H., in cohort groups.

The goals of the Doctor of Arts degree program are:
- To prepare leaders for transformational roles in society
- To advance knowledge and applied research, preparing leaders with vision
- To develop practice-focused scholarship, integration of knowledge, and reflective and service-based inquiry
- To enhance the leadership values, skills and knowledge of current and aspiring leaders in professional disciplines
- To inspire the holistic view of leadership as a transformational process
- To engage the process of analyzing and synthesizing content through a transformational leadership perspective
- To foster an understanding of the importance of the arts and humanities in assuming the role of steward of the societal landscape, developing a sense of connectedness and community.

TIMELINE AND COST
Applications are available online from Franklin Pierce College at www.fpc.edu/pages/gps/apply.htm. The estimated time to degree completion is three to four years, with the final year devoted to dissertation work. The tuition rate for 2006–2007 is $649 per credit.

For additional information please visit the Franklin Pierce Web site at www.fpc.edu or e-mail Dr. Jane Venzke, associate dean of graduate studies at Franklin Pierce College venskej@fpc.edu.
## Graduate Courses and Descriptions

**GRADUATE COURSE CODES**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD</td>
<td>Administration</td>
<td>100</td>
</tr>
<tr>
<td>AE</td>
<td>Art Education</td>
<td>104</td>
</tr>
<tr>
<td>AL</td>
<td>Adult Learning</td>
<td>122</td>
</tr>
<tr>
<td>AN</td>
<td>Anthropology</td>
<td>139</td>
</tr>
<tr>
<td>AP</td>
<td>Adventure Learning</td>
<td>123</td>
</tr>
<tr>
<td>AR</td>
<td>Art</td>
<td>105</td>
</tr>
<tr>
<td>AT</td>
<td>Athletic Training</td>
<td>106</td>
</tr>
<tr>
<td>BI</td>
<td>Biology</td>
<td>149</td>
</tr>
<tr>
<td>BU</td>
<td>Business</td>
<td>109</td>
</tr>
<tr>
<td>CE</td>
<td>Computer Education</td>
<td>119</td>
</tr>
<tr>
<td>CH</td>
<td>Chemistry</td>
<td>151</td>
</tr>
<tr>
<td>CO</td>
<td>Counseling</td>
<td>114</td>
</tr>
<tr>
<td>CJ</td>
<td>Criminal Justice</td>
<td>121</td>
</tr>
<tr>
<td>EC</td>
<td>Economics</td>
<td>113</td>
</tr>
<tr>
<td>ED</td>
<td>Education</td>
<td>123</td>
</tr>
<tr>
<td>EN</td>
<td>English</td>
<td>132</td>
</tr>
<tr>
<td>EP</td>
<td>Education Leadership</td>
<td>102</td>
</tr>
<tr>
<td>ESP</td>
<td>Environmental Science and Policy</td>
<td>151</td>
</tr>
<tr>
<td>ER</td>
<td>Early Childhood Education</td>
<td>126</td>
</tr>
<tr>
<td>EV</td>
<td>Environmental Science</td>
<td>157</td>
</tr>
<tr>
<td>FR</td>
<td>French</td>
<td>142</td>
</tr>
<tr>
<td>GE</td>
<td>Geography</td>
<td>139</td>
</tr>
<tr>
<td>HH</td>
<td>Health and Healing</td>
<td>135</td>
</tr>
<tr>
<td>HL</td>
<td>Health Education</td>
<td>135</td>
</tr>
<tr>
<td>HI</td>
<td>History</td>
<td>139</td>
</tr>
<tr>
<td>HP</td>
<td>Health Promotion</td>
<td>135</td>
</tr>
<tr>
<td>HS</td>
<td>Heritage Studies</td>
<td>140</td>
</tr>
<tr>
<td>IN</td>
<td>Integrated Arts</td>
<td>106</td>
</tr>
<tr>
<td>LL</td>
<td>Language &amp; Linguistics</td>
<td>142</td>
</tr>
<tr>
<td>LM</td>
<td>Library Media</td>
<td>143</td>
</tr>
<tr>
<td>ME</td>
<td>Music Education</td>
<td>146</td>
</tr>
<tr>
<td>MG</td>
<td>Mathematics</td>
<td>144</td>
</tr>
<tr>
<td>MT</td>
<td>Meteorology</td>
<td>158</td>
</tr>
<tr>
<td>MU</td>
<td>Music</td>
<td>147</td>
</tr>
<tr>
<td>NS</td>
<td>Natural Science</td>
<td>160</td>
</tr>
<tr>
<td>PA</td>
<td>Project Adventure</td>
<td>127</td>
</tr>
<tr>
<td>PE</td>
<td>Physical Education</td>
<td>138</td>
</tr>
<tr>
<td>PH</td>
<td>Physics</td>
<td>161</td>
</tr>
<tr>
<td>PO</td>
<td>Political Science</td>
<td>141</td>
</tr>
<tr>
<td>PS</td>
<td>Psychology</td>
<td>119</td>
</tr>
<tr>
<td>PY</td>
<td>Philosophy</td>
<td>128</td>
</tr>
<tr>
<td>RL</td>
<td>Reading &amp; Writing</td>
<td>147</td>
</tr>
<tr>
<td>SE</td>
<td>Special Education</td>
<td>128</td>
</tr>
<tr>
<td>SO</td>
<td>Sociology</td>
<td>142</td>
</tr>
<tr>
<td>SP</td>
<td>Spanish</td>
<td>143</td>
</tr>
<tr>
<td>SW</td>
<td>Social Work</td>
<td>142</td>
</tr>
<tr>
<td>SY</td>
<td>School Psychology</td>
<td>119</td>
</tr>
<tr>
<td>TH</td>
<td>Theatre</td>
<td>147</td>
</tr>
</tbody>
</table>

“Permission of the instructor” is the implied prerequisite for all courses with a stated prerequisite.

Students observing and participating in the public schools prior to Student Teaching (or school-based practica and internships) may be asked to complete a form authorizing a full-disclosure New Hampshire criminal records check.

## Administration and Educational Leadership

### 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. Falls and summers.

**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. Falls and summers.

**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. Springs and summers.

AD 5330 LEADERSHIP IN CURRICULUM 3 CREDITS
DEVELOPMENT 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. Springs and summers. Prerequisite: AD 5010; to be taken concurrently with or after ED 5060.

AD 5520 NEGOTIATING, COLLABORATING 3 CREDITS
AND LEADING IN 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 1–3 CREDITS
EDUCATIONAL LEADERSHIP
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. Springs and summers.

AD 5730 SEMINAR IN ADMINISTRATION 1 CREDIT
AND SUPERVISION
This is the culminating course in Administration and Supervision programs. Problems appropriate to the needs of the students are posed and probable courses of action are derived. Springs and summers. Instructor permission required.

AD 5750 SCHOOL BUILDINGS AND 2 CREDITS
TRANSPORTATION
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 the program needs of the students while complying with state and federal regulations.

AD 5800 PRACTICUM IN 3 CREDITS
ADMINISTRATION AND SUPERVISION I
AD 5810 PRACTICUM IN 3 CREDITS
ADMINISTRATION AND SUPERVISION II
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. Fall, spring and summer.

AD 5830 EDUCATIONAL PLANNING 3 CREDITS
AND PROBLEM SOLVING
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 M.Ed. in Educational Leadership or the Professional Certification Program for the School Principal K–12.

AD 5910 INDEPENDENT STUDY IN 1–3 CREDITS
EDUCATION ADMINISTRATION
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 is required.

**Educational Leadership**

**EP 7010** PORTFOLIO DEVELOPMENT 3 CREDITS
The design and application of an alternative assessment approach. This multi-term course facilitates students’ reflections over time on their professional growth while completing the Certificate of Advanced Graduate Studies degree. After exploring current theory and practice concerning portfolios, students will use the approach to document progress in the degree. Electronic portfolios will be a key tool as students communicate and document their growth. The portfolio will be periodically reviewed by a graduate faculty member and students will receive individualized feedback. Students will meet as a group twice a year to interact with faculty members, outside speakers and each other. At the culmination of the advanced degree program, the portfolio will assist students in an oral defense of their graduate work.

**EP 7020** COLLABORATIVE LEADERSHIP 3 CREDITS
A team-taught experience where faculty from diverse educational backgrounds, administration, special education and counseling, help students develop critical skills necessary for collaboration in schools. Students will explore major concepts related to developing partnerships and a community of learners.

**EP 7030** TRANSFORMING THE EDUCATIONAL AGENDA 3 CREDITS
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. Explores 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 develop an understanding of the need to keep student learning and development as the central core of educational change.

**EP 7040** PLANNING IN EDUCATION AND HUMAN SERVICES 3 CREDITS
Vision is essential to leaders. Planning is the tool of the visionary. The ability to plan is essential to effective leadership. The purpose of this course is to develop effective planners. Therefore, participants will study planning models and will create plans, both personal and professional.

**EP 7050** QUALITATIVE METHODOLOGY AND APPLIED RESEARCH 3 CREDITS
An overview of the process and application of developing, implementing and evaluating qualitative research. Descriptive analysis of initiating the inquiry, gathering data, recording and analyzing data and evaluating the project. Emphasis on the literature of teacher as researcher. Connections made to curriculum development and instructional decision-making across grade levels, disciplines and school contexts.

**EP 7060** LEGAL ISSUES IN POLICY MAKING 3 CREDITS
The stakeholders in society use the law as a tool toward social change. This tool may be wielded with political force. When it is necessary to codify conduct, an opportunity for dialogue to create positive change has passed. In educational institutions, the codification of rules or laws demonstrates a failure of the school to meet the expectations of some constituency. The educational institution must deal with the legal and political environment in which it exists. It must use processes that prevent unnecessary litigation, yet it must not fear the legal forum. Therefore, while behaving as civil members of a community, educational institutions must manage themselves so as to advocate positive change yet always be preparing to be an adversary. Prerequisites: A course in School Law.

**EP 7070** CONTEMPORARY SOCIAL TRENDS 3 CREDITS
Problems and issues that relate to the present and the future of public and private education are the core of the course. They are identified in a forum that brings experience and current methodology together to address problems that relate to the specific roles of the course participants. Please note: Candidates taking this course may have the opportunity to work online with classmates.

**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, 2 CREDITS**
**NEGOTIATIONS AND PERSONNEL MANAGEMENT**
Focus on policies and procedures affecting personnel management in the schools. Discussion of staffing, program and personnel evaluations, office procedures and record keeping, 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 mediational 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 7130 SHAPING POLICIES AND PRACTICES IN ARTS EDUCATION, 3 CREDITS**
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 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 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 an administrator through applying knowledge learned in coursework to on-the-job situations.

**EP 7810 ARTS, 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/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 120 hours in the externship placement including accompanying PSU seminars.
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 Associate Vice President is required.

Art and Integrated Arts

Art Education

AE 5020  CONTEMPORARY CHALLENGES  1–3 CREDITS
IN ARTS EDUCATION
This course provides the opportunity for immersion in a specialized topic/area of study concerning selected arts form(s), arts history, multicultural arts traditions, special education and the arts, the arts and technology, and/or arts 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 Plymouth.

AE 5050  ELEMENTARY METHODS AND  3 CREDITS
MATERIALS IN 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 10-hour school observation component is required.

AE 5060  PEDAGOGY AND PLANNING IN  3 CREDITS
SECONDARY LEVEL 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  ARTS IN EDUCATION INTERNSHIP  1–9 CREDITS
An art education internship provides a continuous field experience crossing two semesters during which interns are placed in two sequential field sites: an elementary and a secondary school placement, as student teachers in Art Education. The interns are supervised by an Art Education Content Specialist and will attend seminars for dialectic discussion as theory, practice and research are brought together. Accompanying the second internship is an action research project that will be presented as part of a culminating portfolio. This research project will be developed in conjunction with the course ED 5180 Collaborative Action Research. The field experience fulfills the student teaching requirements for New Hampshire K–12 teacher certification in art education. All the policies related to the undergraduate and graduate field experience apply to this course.

AE 5560  SPECIAL TOPICS IN ART  1–3 CREDITS
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. Summers.

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 mediational 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 7130 SHAPING POLICIES AND PRACTICES IN ARTS 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 7810 ARTS, LEADERSHIP AND LEARNING PRACTICUM
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.

Art

AR 5200 SURVEY OF ARTS PROJECTS, PROGRAMS AND TECHNOLOGY
An overview of art projects, programs and technologies, this 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, 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
An exploration of the relationship of the creative artist and the arts (visual arts, theatre, 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 5400 PAPERMAKING AS AN EXPRESSION ART FORM
Explores the many possibilities of combining paper pulps and fibers to be used as expressive 2-D and 3-D art mediums and utilizes the traditional processes and materials of hand papermaking. Considers paper-making as a component of the visual arts language system while exploring the many roles the visual arts play in the design and implementation of an integrated arts curriculum. Summers.

AR 5560 SPECIAL TOPICS IN ART
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. Summers.

AR 5700 CURRICULUM DEVELOPMENT AND ASSESSMENT 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. 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.

AR 5910 INDEPENDENT STUDY IN ART
Advanced work in a limited area of studio art, art history or art education, selected and carried on in consultation with an Art faculty advisor. Consent of a faculty supervisor, the department chair and the Associate Vice President is required.
EP 7090  CRITICAL PERSPECTIVES FOR ARTS ADVOCACY
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.

Integrated Arts

IN 5100  EDUCATIONAL THEATRE: PROCESS TO PERFORMANCE
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
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/times will be individualized for each student in order to ensure maximum participation.

IN 5210  GRADUATE PRACTICUM IN INTEGRATED ARTS
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
The Institute is an opportunity for students to explore a given culture through travel and participation in a specified integrated arts project. Institutes vary 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 5560  SPECIAL TOPICS IN INTEGRATED ARTS
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. Fall, spring and summer.

IN 5970  INTEGRATING THE ARTS
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. Winterim and summer.

Athletic Training

AT 5000  PSYCHOMOTOR SKILLS IN ATHLETIC TRAINING
This course will examine the 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.
AT 5010  ORTHOPEDIC ASSESSMENT I  4 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.

AT 5020  ORTHOPEDIC ASSESSMENT II  4 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.

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 healthcare facility and associated venues that provide healthcare 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  4 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.

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 5500  MODALITIES IN SPORTS MEDICINE  4 CREDITS
This is a comprehensive course in the theory and use of therapeutic modalities in a sports medicine setting. Principles of neurophysiology, pain control, 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 CONDITIONING  1–3 CREDITS
Students will learn and apply the instructional knowledge base on how to plan, implement and evaluate comprehensive conditioning programs based on the Burdenko Conditioning method. 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 1, 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  3 CREDITS
PART II
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  3 CREDITS
PART III
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  3 CREDITS
THERAPEUTIC INTERVENTION
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  1 CREDIT
TRAINING I
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. Prerequisites: AT 5010, AT 5020, AT 5500, AT 5250.

AT 5760  PRACTICUM IN ATHLETIC  1 CREDIT
TRAINING II
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. Prerequisites: AT 5010, AT 5020, AT 5500, AT 5250.

AT 5770  PRACTICUM IN ATHLETIC  1 CREDIT
TRAINING III
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. Prerequisites: AT 5010, AT 5020, AT 5500, AT 5250.

AT 5780  PRACTICUM IN ATHLETIC  1 CREDIT
TRAINING IV
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. Prerequisites: AT 5010, AT 5020, AT 5500, AT 5250.

AT 5790 ADVANCED PRACTICUM IN ATHLETIC TRAINING
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
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
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
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. Use of WebCT for support material is expected.

AT 5900 DIRECTED RESEARCH
This course will give students valuable experience in research design, data collection and/or analysis by playing an integral role in a faculty sponsored research project. Repeatable.

AT 5910 INDEPENDENT STUDY
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
Students select a topic for study in consultation with their program advisor and related faculty. A time line, 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

Business and Economics

Unless specific prerequisites are stated, graduate status only is required for all 5000 level business courses. All MBA core courses (*) are offered each fall, winter and spring quarter.

Business

BU 5050 BUSINESS GRADUATE INTERNSHIP
A supervised internship in business for graduate students. The purpose is to gain meaningful work experience and apply knowledge learned in previous course work 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 Program Coordinator of Graduate Studies in Business. Prerequisite: nine graduate credits in business.

BU 5110 MANAGING ORGANIZATIONAL BEHAVIOR
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. Prerequisite: Behavioral Science competency.

BU 5115 CREATING ORGANIZATIONAL HEALTH
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 and develop 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.

**BU 5120  FINANCIAL ANALYSIS AND DECISION MAKING**  
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.

**BU 5160  SEMINAR IN MANAGING HUMAN RESOURCES**  
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**  
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 5190  ACCOUNTING FOR MANAGERS**  
Budgetary accounting and cost accounting including profit planning and control systems, budget process, cost systems and their managerial applications. Prerequisite: demonstration of competency in Financial Accounting.

**BU 5210  STRATEGIES FOR CROSS-FUNCTIONAL ANALYSIS**  
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: Macroeconomics, Microeconomics and Statistics competencies or permission of the instructor.

**BU 5220  THE LEGAL ENVIRONMENT**  
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.

**BU 5225  CURRENT ISSUES IN EMPLOYMENT LAW**  
A study of legal issues that affect employers and employees in the modern American workplace, including wage/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**  
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**  
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/media relations, critical skills such as listening, speaking, writing analysis and an understanding of non-verbal, visual and mass communication will be developed. Practical topics will include: organizational systems, conference organization, metacommunications, public relations, improved listening skills and presentational speaking.
BU 5400 SURVEY OF ISSUES IN HEALTH CARE ADMINISTRATION
This course serves as the introduction to the graduate Healthcare Certificate program. In this course students will be able to recognize and discuss the basic components of the United States healthcare 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 text books, articles and Web sites. Students will use this material in preparation for written essays, presentations and classroom discussions.

BU 5410 HUMAN RESOURCES IN HEALTH CARE ADMINISTRATION
This course will address managing organizational behavior issues and techniques with a specific focus on human resource management issues unique to the healthcare industry.

BU 5420 HEALTH CARE LAW AND ETHICS 3 CREDITS
This course is specifically designed for graduate students enrolled in the proposed Healthcare Administration Certificate Program and/or an MBA with a health administration specialty. This course will focus on the principles and theories of law as it relates to health care delivery, healthcare management and administration; examination of the applications of laws in relation to healthcare liability prevention and risks facing administrators, managers and practitioners.

BU 5430 HEALTH CARE ADMINISTRATION 3 CREDITS
and FINANCIAL MANAGEMENT
This course presents an in-depth review of the financial management of healthcare organizations. This includes but is not limited to budget formulation process specific to healthcare 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.

BU 5490 CAPSTONE: HEALTH CARE TOPICS 3 CREDITS
This course is a seminar-style presentation of current healthcare 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 healthcare policy, quality initiatives, marketing in healthcare, current issues within Medicare and Medicaid, strategic decision making and public health.

BU 5500 SMALL BUSINESS PROBLEMS AND STRATEGY: SBI PART I
Student teams examine, research and present case findings and recommendations orally 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 under the Small Business Institute Program® at Plymouth State University.

BU 5501 SMALL BUSINESS ANALYSIS: 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.

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.

BU 5520 NEGOTIATING, COLLABORATING AND LEADING IN 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 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, com-
modity and financial futures, portfolio theory. Emphasis is on successful strategies. Written case analysis. Subscription to Wall Street Journal.

**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.

**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, equipment; capital gains and losses; nontaxable transactions; individual income tax; family tax planning; common tax traps. Prerequisite: Financial Accounting competency or permission of the instructor.

**BU 5610  CONTEMPORARY ACCOUNTING AND THE BUSINESS ENVIRONMENT  3 CREDITS**
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, 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.

**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.

**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.

**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. Prerequisite: Basic Management core courses (BU 5190, BU 5210 and BU 5210) and/or commensurate work experience.

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 in the 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.

BU 5810 SEMINAR IN CORPORATE PUBLIC RELATIONS
This seminar will examine public relations principles, practices and theory. Specific topics include: 1) models of communication, 2) decision making, 3) methods of persuasion, 4) communication channels, 5) targeting audiences and 6) mass communication. Particular emphasis will be placed on business-media relations and crises communication.

BU 5820 WOMEN AND 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 both small and large examples of successful new ventures and student fieldwork. Software available to help business planning will be introduced for hands-on use. Students will each prepare a formal business plan for new ventures.

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 Associate Vice President is required.

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 (1) monetary policy, including interaction effects with fiscal policy; (2) analysis of the role of monetary factors in our recent inflation-proof economy; and (3) 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 1–3 CREDITS IN ECONOMICS
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, Program Coordinator of Graduate Studies in Business and the Associate Vice President is required.

Counseling and Psychology

Counseling

CO 5010 FOUNDATIONS OF THE COUNSELING PROFESSION 3 CREDITS
Foundations of the Counseling Profession is the introductory course to the counselor education program. There are three emphases in this class. The first is on exploring an understanding of what it means to be human and the ethical implication of that understanding. The second emphasis is on developing a professional counseling identity. Finally, the course serves as part of the admissions process in counselor education by considering potential students’ ability to form effective interpersonal relationships in individual and small group contexts as well as applicant’s openness to self-examination, personal development and other characteristics associated with effective counselors.

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.

CO 5030 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 prepracticum field experience as part of this course.

CO 5050 ADVANCED HUMAN DEVELOPMENT 3 CREDITS
Focuses on a life-span 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 multidisciplinary approach and the larger ecological context of developmental events in human behavior. This course will have four major concerns: a) to identify and describe the changes that occur across the life span; b) to explain these changes in the context of maturation, early learning and societal factors impacting development; c) to review research and theoretical frameworks that have affected our way of thinking and d) study the interdependence and interrelatedness of all aspects of development.

CO 5100 PRACTICUM IN COUNSELING 3 CREDITS
This course is a 100-hour field based experience at the Plymouth State University Community Clinic that focuses on developing competency in basic counseling skills through work with individuals and groups. In addition to field work, students will participate in a weekly supervision seminar. Students need to successfully complete at least 100 hours of field work and be endorsed by the practicum instructor to be eligible for internship. Prerequisites: CO 5010, CO 5260, CO 5020. Prerequisite or corequisite: CO 5780 or CO 5790.
CO 5130  PSYCHOPHARMACOLOGY AND  3 CREDITS
THE BIOLOGICAL BASIS OF MENTAL
HEALTH
Psychopharmacology and the Biological Basis of Mental
Health explores the biological influences on mental illness.
This includes an examination of the physiological basis of
behavior, perception, emotion and self-regulation; the cur-
rent theory and research on the relationship between bio-
logical events in the central nervous system and behavior;
and psychopharmacological interventions.

CO 5150  EATING DISORDER CLINICAL  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 experi-
ence working in an eating disorders treatment facility for
120 hours. Prerequisite: 12 credits of Eating Disorders
certificate program. Also presented as HL 5150.

CO 5160  EATING DISORDER AWARENESS  3 CREDITS
AND PREVENTION
The focus of the course will be on increasing the student’s
knowledge of awareness, education, prevention and treat-
ment of eating disorders. Discussion will include diag-
nostic 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
i.e. women, children, males, athletes; prevention programs;
resources; the latest research and information on becoming
a coordinator of Eating Disorder Awareness and Prevention
Week. Also presented as HL 5160.

CO 5170  TREATMENT MODALITIES  3 CREDITS
FOR EATING DISORDERS
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, psycho-
logical assessments, psychotherapeutic and other interven-
tions, as well as clinical issues encountered in treatment.
Prerequisite: CO/HL 5160. Also presented as HL 5170.

CO 5180  NUTRITION FUNDAMENTALS  3 CREDITS
AND COUNSELING 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, different diet plans, i.e. vegetarian, sports nutri-
tion. 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 educa-
tion for the eating disorder client. Prerequisite: CO/HL 5160
or permission of instructor. Also presented as HL 5180.

CO 5190  MEDICAL AND PHYSIOLOGICAL  3 CREDITS
ASPECTS 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 medial systems and the physiologic function.
Discussion will include diagnostic criteria and a multidisci-
plinary, integrative approach to assessment and manage-
ment 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 presented as HL 5190.

CO 5230  CAREER COUNSELING AND  3 CREDITS
DEVELOPMENT
An introduction to career development theories and
their application to the counseling process. Students will
understand and utilize career information and assessments
as they pertain to counseling and career development.
Students will apply theory and practice to current or poten-
tial work settings. Prerequisite: CO 5010. There is a 20-hour
prepracticum 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 counsel-
ing theories and strategies, consider appropriate application
of these strategies in diverse populations and develop a
personal model for providing help and facilitating behavioral change. Prerequisite: CO 5010.

CO 5300 FOUNDATIONS AND MULTICULTURAL ASPECTS OF PARENTING 3 CREDITS
Focuses on developing competency in a variety of areas surrounding parenting education, including the following: 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
Examines the practical aspects of parenting education. Students will study 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). Topics to be discussed include: delivery approaches, implementation issues, outcomes assessment, and trends and directions in parenting education. Offered according to demand.

CO 5320 DEVELOPING FAMILY SCHOOL AND COMMUNITY PARTNERSHIPS 3 CREDITS
Focuses on developing effective family-school-community partnerships through outreach and family empowerment. The course will emphasize a systems perspective and discuss strategies to involve families and the community in children’s education, including shared responsibility for educational outcomes. Students will develop assessment tools and intervention plans designed to bring families, schools and communities into closer and more collaborative relationships. Specific attention will be paid to working with diverse parents.

CO 5360 INTERPERSONAL AND GROUP PROCESS 3 CREDITS
Development and awareness of behavioral skills that facilitate positive socioemotional-educational growth within interpersonal and group contexts, and the development of an understanding of interpersonal and group processes.

CO 5400 FOCUSED RESEARCH IN HUMAN RELATIONS 1–3 CREDITS
To formulate, develop and present results of a thorough literature search related to the student’s area of professional interest. The student, working under direction of the course instructor, will carry out the research from design to completion.

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: ED 5030.

CO 5460 GROUP COUNSELING 3 CREDITS
Human behavior and the counseling process within a group context. Among the concepts included are curative factors, interpersonal learning, group composition, and tasks and techniques. The class itself will experience these concepts by participating in a personal growth group and reviewing appropriate literature. The course serves as an introductory experience and will provide a foundation upon which students may further study and perfect skills relative to group process. (Enrollment is limited to 17 individuals. Individuals enrolled at PSU who require CO 5460 Group Counseling to complete their program contract will receive enrollment preference). Prerequisites: CO 5010 and CO 5260.
CO 5480 ADVENTURE IN SCHOOLS AND HUMAN SERVICES 3 CREDITS
This course is designed to orient school professionals and human service providers to the history, theory and ethical practice of adventure programming. Students will become a part of an experiential learning community to foster greater transfer of learning back to their communities, organizations and employment settings.

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 5560 SPECIAL TOPICS: 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 peacefully. 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 5600 INTRODUCTION TO 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. Prerequisites: CO 5010, CO 5260. There is a 20-hour prepracticum field experience as part of this course.

CO 5650 CRITICAL ISSUES: SCHOOL COUNSELING AND SPECIAL EDUCATION 3 CREDITS
This course focuses on helping school counselors understand and professionally respond to significant issues affecting schools, school-aged children and their parents. The first part of the course addresses the needs of exceptional students in the context of schools. The second part of the course focuses on critical issues facing school counselors including Section 504, substance abuse, eating disorders, child abuse and neglect, anxiety, depression, among others. Prerequisite CO 5010.

CO 5670 FAMILY AND SOCIAL SYSTEMS 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 and CO 5260.

CO 5670 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 utilize resources. Prerequisite: CO 5010. Fall.

CO 5700 CRITICAL ISSUES: MENTAL HEALTH COUNSELING 3 CREDITS
This 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/psychiatric disorders as discrete clinical conditions and to be able to apply differential diagnoses. Prerequisite: matriculated counselor education student or permission of instructor.

CO 5780 CONSULTATION AND COUNSELING INTERVENTIONS WITH CHILDREN AND ADOLESCENTS 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, CO 5260, CO 5050.
CO 5790  INTERVENTIONS IN MENTAL HEALTH COUNSELING  3 CREDITS
This course examines clinical interventions and documentation in clinical mental health settings. Students will learn and practice clinical counseling skills appropriate to mental health settings, documentation procedures and assessment strategies. Contemporary models of brief treatment, mental health consultation and prevention will be covered. An emphasis will be placed on culturally responsive counseling. This course is designed to develop necessary entry-level mental health counseling skills.

CO 5800  COUNSELING INTERNSHIP  1–6 CREDITS
An internship for students in the Human Relations concentration of the Counselor Education program. 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 5850  SEMINAR AND INTERNSHIP  1–6 CREDITS IN SCHOOL 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 Plymouth 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  1–12 CREDITS IN MENTAL HEALTH COUNSELING
A 900-hour clinical counseling experience under supervision and conducted in a mental health counseling setting. Students must attend an on-campus seminar with fellow student interns 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 Plymouth internship supervisor. Variable and repeatable.

CO 5910  INDEPENDENT STUDY IN COUNSELOR 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. 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 is required.

CO 7010  FOUNDATIONS OF PLAY THERAPY: HISTORY, THEORY AND SPECIAL APPLICATIONS  3 CREDITS
This course is designed to present a broad overview of the major theories of play therapy (history, therapeutic properties of play, developmental perspectives, beliefs, techniques) and the application of these theories to a variety of special populations and settings. The course is an introductory course and is one of the required courses for becoming a registered play therapist (RPT).

CO 7020  CHILD-CENTERED PLAY THERAPY  3 CREDITS
This course is designed to provide post-graduate counselors with the development of therapeutic skills and experience in implementing child-centered theory in the play therapy process. Class format includes lectures, discussions, personal reflections, skill development, case presentations and videotaping with critique analysis. Group supervision is a strong component in this course.

CO 7120  PROFESSIONAL, LEGAL AND ETHICAL ISSUES IN COUNSELING  3 CREDITS
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, creating treatment plans and provide observations of each child in this learning experience. Prerequisites: CO 7010 and CO 720.
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 7880  MENTAL HEALTH COUNSELING  3–6 CREDITS INTERNSHIP
A collaborative supervised field experience in the area of mental health counseling in one of several cooperating institutions or agencies. The purpose is to gain meaningful work experience through applying knowledge learned in coursework to on-the-job situations.

Psychology

PS 5000  PSYCHOLOGICAL FOUNDATIONS  3 CREDITS OF LEARNING DISABILITIES
Attempts to provide an understanding of the neural, sensory, perceptual and attentional processes that underlie learning. The goal is an appreciation of how the human information processing system operates and how it can malfunction. Specific disabilities and their remediation will be discussed. Unscheduled.

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 is required.

School Psychology

SY 6010  INTRODUCTION TO SCHOOL  3 CREDITS PSYCHOLOGY
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 course will also determine the suitability of students to enter the profession.

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.

SY 6800  SCHOOL PSYCHOLOGY  6–12 CREDITS INTERNSHIP AND SEMINAR
As the culminating component in the School Psychology Program, this field experience will be done in a public school setting under the supervision of an NASP 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.

Computer Education

CE 5120  INTEGRATION OF TECHNOLOGY  3 CREDITS IN THE K–12 CURRICULUM
This instructional technology foundation course is designed to provide K–12 educators, school librarians/media teachers and administrators with an understanding of the ways that 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. Lab sessions will focus upon gaining experience on IBM compatible or Macintosh computers, learning software applications with Microsoft Office, evaluating educational software, designing technology-enhanced lessons and utilizing telecommunications for K–12 curriculum integration. This is an introductory course and is specifically focused on educators wanting a hands-on approach to learning new technology skills.
CE 5140  ELECTRONIC PORTFOLIO  3 CREDITS
DEVELOPMENT AND 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. Student 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 innovate technologies used in electronic portfolio development.

CE 5150  MAKING MULTIMEDIA  3 CREDITS
MEANINGFUL
This course is designed to provide K–12 educators with in-depth, hands-on experiences with multimedia technology and the power it brings to student learning. Educators will discover how multimedia tools enhance project-based learning and authentic assessment while: (1) producing a multimedia presentation based on an integrated curriculum theme; (2) using computers, information technology and telecommunications for powerful teaching and assessment of student work; and (3) creating a project through teamwork with new technologies. As educators explore the significance of student-centered learning and teacher as coach, they will see how these new paradigms for teaching connect to their classrooms and schools.

CE 5180  DESIGNING AND IMPLEMENTING  3 CREDITS
NETWORK TECHNOLOGY
This course provides an understanding of LAN and WAN networking architectures. Students will learn the theory behind LANs and WANs and how to design both types of networks. LAN and WAN integration is stressed throughout the course. Some of the LAN architectures that are covered include ETHERNET, Token Ring and FDDI. All major LAN and WAN protocols will be discussed, including protocol theory. The course provides a range of laboratory and hands-on assignments that teach students about theory as well as how to design and internetwork LANs and WANs.

CE 5190  MANAGING TECHNOLOGY IN  3 CREDITS
THE SCHOOL ENVIRONMENT
This course is an introduction to the technical features of information technology, especially hardware, software and network systems, used in educational settings. An examination of the responsibilities, knowledge and skills required of the school technology coordinator, including utilizing operating systems and applications to increase productivity, efficiency and computer health. Specific topics will include network planning and construction, client-server relationships, hardware configuration and placement, software deployment and imaging, print and file services, Internet connectivity, anti-virus measures, staffing and outsourcing, and planning.

CE 5540  COMPUTERS, CURRICULUM  3 CREDITS
AND CHANGE
Computers have transformed how people learn, work and play. Issues of philosophy, ethics, funding and training have spawned new realms of controversy. This course examines these controversies in light of current educational practice. Topics include equitable use, technology planning, curriculum change, funding issues, learning theory, professional development and pop culture.

CE 5560  SPECIAL TOPICS IN COMPUTER  1–3 CREDITS
EDUCATION
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  3 CREDITS
WEB-BASED LEARNING
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 5700  LEADERSHIP IN EDUCATIONAL TECHNOLOGY  3 CREDITS
This course is designed to enable the educational leader to develop the knowledge and skills necessary to provide solid instructional leadership through research, decision making and modeling. Today’s instructional leader must understand the importance and role of various technologies and how the financial expenses relate to human collateral such as professional time and energy spent creating budgets, scheduling, connecting with colleagues and evaluating staff. Credible technology leadership in today’s schools includes the ability to model technology use in order to perform the duties and responsibilities of the position with the highest level of ethical and legal standards.

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 in-depth study of a problem in the field of education. Consent of a faculty supervisor, department chair and the Associate Vice President is required.

Criminal Justice

CJ 5000  CRIMINAL JUSTICE SURVEY  3 CREDITS
This course will introduce the student to the breadth of the field of Criminal Justice. It will introduce the student to the difficult government, legal and ethical stresses and constraints under which the Criminal Justice professional labors.

CJ 5010  APPLIED CRIMINOLOGICAL THEORY  3 CREDITS
The theory of criminology and the policies that our society puts into place to cope with crime will be addressed. This includes how society faces the difficult choices about how to address deviant behavior that results in crime.

CJ 5020  CORRECTIONAL POLICY  3 CREDITS
This course will look at how and why correctional policy has evolved and what can be predicted about future policy directions. The choices that our society can make about what we should do with those who are adjudged criminal will also be discussed. We will address the profound impact upon the criminal, the victim of crime, the citizenry and the institutions that are charged with carrying out the corrections mission.

CJ 5030  DIVERSITY AND SOCIAL JUSTICE  3 CREDITS
This course will examine all dimensions of diversity in our population and how effectively different groups in our society share, control or are impacted by the status quo in social justice.

CJ 5040  RESEARCH DESIGN IN CRIMINAL JUSTICE  3 CREDITS
This course will allow the student to design and study, by statistical analysis, a social phenomenon in the context of an institution within the criminal justice system or within the criminal justice environment. The use of social science research methodologies are applied to a question designed by the student in consultation with the instructor.

CJ 5050  CRIMINAL JUSTICE AND PUBLIC POLICY  3 CREDITS
Both the law and institutions that make up the criminal justice system are impacted by public policy. The choices that a free society makes to ensure the safety of the population and what the appropriate levels of due process should be for the accused will be addressed. We will examine the contemporary balance between the needs of the individual and the state, and how that balance is formulated into policy.

CJ 5100  PUBLIC BUDGETING AND FINANCE  3 CREDITS
Public budgeting, public finance, financial management, fiscal policy, and state and local government processes will be addressed. Comprehensive examination and treatment of the public budgeting process, with the emphasis on state
and local government will be explored. To demonstrate key concepts we will review a managerial, multidimensional methodology that includes case scenarios, practical examples and instructional exhibits of budget documents.

CJ 5110 COMMAND, LEADERSHIP AND HUMAN RESOURCES
This course is designed to provide command and leadership skills for those who will be supervisors in law enforcement and allied fields. The relationships involved in individual and group management methods and the practical techniques for carrying out the various responsibilities of the supervisor are explored. Everyday problems faced by the police supervisor in interpersonal, operational and administrative relationships with subordinates are covered in detail.

CJ 5120 PUBLIC AGENCY MANAGEMENT
Emphasizing a value-based approach to the study and practice of the administration, this course will cover the new and emerging paradigm of governance, while continuing to define the basic values and ideas of public administration and public policy formulation in the United States.

CJ 5130 COMMUNICATION STRATEGY FOR CRISIS MANAGEMENT
An understanding of issues management, media relations and crisis planning are crucial for an organization's success in today's volatile environments. The tactical communication skills necessary to strategically plan for the control of information are studied. Students critically analyze the effectiveness of government institutions' use of the media and how the implementation of a strategic plan for information flow in a time of crisis may prevent negative and unintended consequences.

CJ 5200 CONTEMPORARY ISSUES IN CRIMINAL JUSTICE
Elective topic course that represents current theory and practice in any of the diverse fields of criminal justice. Subject matter may focus on issues that are discussed in required courses but with a much narrower, yet deeper intensity. Or subject matter may focus on issues not covered in the requirements of the curriculum that are contemporary issues in the field of criminal justice. Students, faculty and the director of the program will collaborate on the choice of topics to be offered.

CJ 5950 CONTEMPORARY ISSUES CRIMINAL JUSTICE THESIS
A research design that results in an article for publication or presentation at a national or regional journal or conference. The thesis must be done under the tutelage of a faculty member. Students will conduct an investigation in an applied or theoretical problem in his or her area of interest. Normally, it is expected that the enrollment for this course will span more than one term. The written study will be signed by the student, sponsoring faculty member, program director and submitted to the department chair. An oral presentation to students and faculty will follow. Submission must be completed prior to April 1 of the year of graduation.

Education and Special Education

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: (1) theory, (2) research, (3) changes that occur within oneself throughout adulthood—physical, cognitive, health, social, (4) personality characteristics, (5) meaning in life, (6) stages and pointers for a successful journey, (7) death and dying. Students use their own life experiences as a context for creating understanding in these seven areas.

AL 5070 LEARNING IN ADULTHOOD
The 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. Also emphasizes the concept of learning how to learn and the ways in which adults function in independent learning situations. We will examine theory, research and practice from several different discipline perspectives to answer the question, “How do adults learn?”

AL 5080 TEACHING ADULTS
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**
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**
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**
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**
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 and 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 also be examined.

**Adventure Learning**

**AP 5600 ROPES FACILITATOR**
Students will participate in and facilitate activities that include games, initiatives, and low and high ropes course. Students will learn equipment, spotting techniques, practice set up and take down of elements, gear retrieval, belay techniques and rescues that are necessary to safely facilitate a group in adventure activities. Additional fees required. Summer and fall.

**Education**

**ED 5000 SOCIAL BEHAVIOR IN A DIVERSE SOCIETY**
Seeks to examine the manner in which the behavior, feelings or thoughts of one individual are influenced by the behavior and/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. Fall, spring and summer.

**ED 5005 SOCIAL PSYCHOLOGY AND MYTHOLOGY ACROSS CULTURES**
This course will provide an in-depth study of the social/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: 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 compari-
son 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 5060** THEORIES OF LEARNING AND COGNITIVE DEVELOPMENT 3 CREDITS
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, ideas and strategies for mining and reporting assessment data.

**ED 5150** INDIVIDUAL INTELLIGENCE TESTING 3 CREDITS
Concepts of intelligence. Introduction to psychological tests. Students give, score and write interpretations for the Stanford-Binet, WISC and WAIS. Basically intended for special class teachers, administrators and guidance personnel. May be taken as PS 5150. Unscheduled.

**ED 5180** COLLABORATIVE ACTION RESEARCH 1–3 CREDITS
A course for teaching/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/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 5200 APPLIED STATISTICS FOR THE SCHOOL PRACTITIONER**
Essential statistical and graphical techniques for analysis and interpretation of diagnostic and achievement test scores. Specifically, attention will be paid to measures of central tendency, variability, standard scores and norms, correlation and regression, measurement error, grading and techniques for item and test analysis. Unscheduled.

**ED 5210 GRADUATE PRACTICUM**
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 course work 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 Plymouth 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.

**ED 5270 FOUNDATIONS OF TEACHING**
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/participation experience of a minimum of 30 hours is required.

**ED 5430 INTERNSHIP IN COLLEGE TEACHING**
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 post-secondary level with attention to models of instruction, learning styles and needs of the college student and non-traditional 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**
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 5570 CLASSROOM INTERVENTION AND SPECIAL 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.

**ED 5580 INDIVIDUAL RESEARCH IN EDUCATION**
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.

**ED 5810 TEACHER EFFECTIVENESS TRAINING**
Unscheduled.

**ED 5910 INDEPENDENT STUDY**
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 is required.
ED 5950  GRADUATE THESIS  6 CREDITS
The thesis carries six graduate credits which 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 time-line, thesis publication and defense are outlined. Three copies of the thesis must be submitted with a bound copy that remains on file in the Graduate Studies office.

ED 5960  INTERNSHIP IN TEACHER  1–9 CREDITS
EDUCATION
Student teaching for students in the Master of Education Elementary or Secondary Education programs. Students must have all course work for the degree, including any required undergraduate prerequisites, completed before taking this course.

ED 5980  PUPPETRY IN EDUCATION  1 CREDIT
WORKSHOP
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 5990  PHILOSOPHY AND ETHICS  3 CREDITS
A survey of various positions concerning the question of ethics. Major emphasis will be placed on how ethical judgments are to be justified from a philosophical foundation. Emphasis will also be placed on the ethics associated with world religions such as Judaism, Christianity, Islam, Hinduism, Buddhism and Confucianism. Ethical systems related to professional practice will also be surveyed. 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,  3 CREDITS
WRITING AND 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. Also presented as RL 5100.

ED 6900  GRADUATE CAPSTONE  1–12 CREDITS
PROJECT
A culminating, supervised project or practicum experience in a work environment or cooperating institution or agency. The purpose is to apply knowledge learned in previous coursework to the work environment or through an approved project. The candidate works with a field supervisor on site and presents their final product to PSU faculty. 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. The candidate must submit a Graduate Capstone Project form with their registration and the Capstone Project must be approved by the advisor and Associate Vice President.

Early Childhood Education

ER 5000  DEVELOPMENTALLY  3 CREDITS
APPROPRIATE PRACTICES: EARLY
CHILDHOOD CURRICULUM, BIRTH
TO GRADE THREE
An overview of the key curriculum models for early childhood education, including Montessori, High Scope, Bank Street and integrated practices, including primary curriculum (K-3). Students will examine developmentally appropriate practices, teaching strategies and techniques for evaluating curriculum materials. Offered according to demand.
ER 5020 ISSUES AND TRENDS IN EARLY CHILDHOOD EDUCATION 3 CREDITS
This course explores issues of concern to early childhood educators, with a focus on the concept of “best practices” and the potential influence of early childhood programs on the lives of children and families. This includes issues related to teaching and caring for young children, building family and community relationships, curriculum and program delivery. The influence of historical, cultural, political, social and economic factors on the field of early childhood education in the United States will be examined. The course emphasizes professional ethics and the early childhood educator’s development as a leader and advocate. Offered according to demand.

ER 5040 SUPPORTING THE LITERACY DEVELOPMENT OF YOUNG CHILDREN 3 CREDITS
Students will explore the language processes of listening, speaking, reading and writing as they develop in young children from birth to age eight. Special emphasis will be given to the development of oral language and to children’s emergent understandings of written language. Students will explore the role of literature as a model for language learning and will become familiar with a wide range of literature for young children. Emphasis will be placed on a balanced approach to literacy instruction. Offered according to demand.

ER 5500 EARLY CHILDHOOD ASSESSMENT AND EVALUATION 3 CREDITS
Designed to study the critical aspects of assessment and evaluation during the early childhood years (birth to age nine). Focuses on developmentally appropriate techniques, instruments and professional decision-making impacting the young child and family. Students will explore the fundamental assumptions of assessment, drawing from their own professional experiences. Emphasis will be placed on ethical considerations in assessment and the importance of the child study technique when conducting an assessment of a young child. Offered according to demand.

ER 5560 SPECIAL TOPICS IN EARLY CHILDHOOD 1–3 CREDITS
An in-depth study of a particular topic, contemporary issue or concern related to the field being studied or as an alternative methodology. The course will be taught by a specialist within the field. 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.

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 5800 ADVANCED PRACTICUM IN EARLY CHILDHOOD 3 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 course work 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 Plymouth faculty. 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 is required. Offered according to demand.

Project Adventure

PA 5560 SPECIAL TOPICS: PROJECT ADVENTURE 1–4 CREDITS
An in-depth study of a particular topic, contemporary issue or concern related to adventure-based programs. Some of the range of 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. This course is open to M.Ed. and MBA students.
Philosophy

PY 5910 INDEPENDENT STUDY 1–3 CREDITS
Limited to students who have demonstrated their ability to do superior work in philosophy and who are able to do independent work. Before registering for an independent study, students should consult with a member of the department concerning the program of study. Students are expected to work independently with tutorial guidance. Evidence of progress is demonstrated by papers and discussion. Prerequisite: 12 term hours in philosophy with an average grade of B or better. Consent of a faculty supervisor, department chair and the Associate Vice President is required.

Special Education

SE 5190 EDUCATIONAL TESTING 3 CREDITS
This course will address educational testing including the general academic achievement, specific subject and specific skill tests. The emphasis will be on diagnosis and prescription writing.

SE 5200 INTRODUCTION TO GIFTED AND TALENTED
Introduces students to the characteristics and the identification procedures of giftedness and creativity. Problems of underachievement, the culturally different and instructional procedures within the classroom are researched. Offered according to demand.

SE 5210 METHODS AND MATERIALS—TEACHING GIFTED AND TALENTED
To acquaint students with knowledge about curriculum theory, learning theory and evaluation methodology in planning instructional procedures and classroom strategies for gifted and talented students. To develop skills in the selection and design of appropriate learning materials. Offered according to demand.

SE 5220 GIFTED AND TALENTED WORKSHOP
Provides educators the opportunity to observe, interact, share and explore educational experiences that will increase conceptual awareness, skill development, language acquisition and socio-cultural appreciation in gifted and talented students. Offered according to demand.

SE 5250 EDUCATIONAL LEADERSHIP—GIFTED AND TALENTED
3 CREDITS
Explores practical and theoretical views of the administration of educational programs serving gifted and talented students. Examines settings, goals, philosophies, assumption, roles and responsibilities. Reviews curriculum models, program design, staff development, funding and community support. Offered according to demand.

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. We 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 5420 SURVEY IN SPECIAL EDUCATION 2 CREDITS
Introduction to the range of handicapping conditions recognized in the field, including the retarded, visually and learning disabled, multiple handicapped, emotionally disturbed and learning disabled. Survey includes current definitions, history, etiology, variations in services and recent developments. Alternative classification systems will also be discussed. Offered according to demand.

SE 5550 AMERICAN SIGN LANGUAGE 4 CREDITS
A critical skills course in a major communication system for those preparing to work with the hearing impaired. Grammar and vocabulary will be emphasized in both the receptive and expressive modes of language transmission. Deaf culture will be examined. Offered for graduate students with no sign language background. Offered according to demand. Summer.

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. Unscheduled.

SE 5561  IDENTIFICATION OF EMOTIONAL  3 CREDITS
BEHAVIOR 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: (1) the nature, extent and history of the problem, and conceptual approaches to it; (2) the identification and assessment of the problem(s) at hand; (3) causal factors; (4) the distinct features and elements that define and distinguish disordered emotions and behaviors; (5) 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  3 CREDITS
FOR ALL STUDENTS
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 vs. classroom referrals, designing a data-based system for behavior, and evaluating the universal system using data-based decision making and utilizing data for improving practice.

SE 5564  PBIS: COMPREHENSIVE  3 CREDITS
APPROACHES FOR 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 data-based decision making.

SE 5565  PBIS SUMMER INSTITUTE  3 CREDITS
Intensive week-long 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  3 CREDITS
FOR STUDENTS 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 3 CREDITS AS COACH AND 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 3 CREDITS DISORDERS**

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 3 CREDITS AUTISM AND 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 educational assessments and develop appropriate treatment plans and a system for monitoring case management of students with Autism Spectrum Disorder.

**SE 5572 DEVELOPMENTAL GOAL 3 CREDITS WRITING AND EVIDENCE-BASED TEACHING STRATEGIES FOR STUDENTS WITH AUTISM**

In this class, Developmental Goal Writing and Evidence-Based Teaching 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 effect the learning outcome of the student with autism and will incorporate this knowledge into applied teaching strategies.

**SE 5573 DATA ANALYSIS FOR AUTISM 3 CREDITS AND SPECTRUM DISORDERS**

The learner will analyze and interpret raw data collected; use analyzed information to formulate new developmentally appropriate goals and objectives.

**SE 5574 INCLUSIONARY PRACTICES FOR 3 CREDITS AUTISM AND SPECTRUM DISORDERS**

The learner will develop a co-teaching relationship with another team member that will enrich the inclusionary experience of the student with autism. They will experience four co-teaching strategies and be able to utilize each in appropriate learning situations. The learner will employ the cooperative process while working collaboratively with their co-teaching partner.

**SE 5581 TECHNOLOGY FOR DIVERSE 3 CREDITS LEARNERS**

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 3 CREDITS DISABILITIES**

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 comorbidity 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 5650 SPECIAL TOPICS: GIFTED AND TALENTED**
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.

**SE 5750 INDIVIDUAL RESEARCH IN SPECIAL EDUCATION**
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. Unscheduled.

**SE 5760 COLLABORATION, AND LEADERSHIP 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.

**SE 5765 WORKING WITH FAMILIES AND CHILDREN: ETHICAL 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 best practices that promote democratic decision making, advocacy and the empowerment of parents.

**SE 5770 CONDUCT DISORDERS IN SCHOOL-AGED CHILDREN**
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. We will investigate specific causes, diagnosis, assessment methods, interventions, etiology, co-morbidity, subtypes, pharmacotherapy, role of the classroom teacher and possible resources.

**SE 5800 PRACTICUM IN SPECIAL 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 course work to the on-the-job situation. Commitment includes a negotiated number of hours per week. Supervision is done by the institution or agency concerned and by Plymouth faculty.

**SE 5810 PRACTICUM IN LEARNING DISABILITIES**
A student will provide direct service and experiential learning with learning-disabled students in a classroom or school setting under the supervision of an experienced special education professional. The focus of the practicum will be on identification, assessment and remediation of learning problems. Student will need to demonstrate assessment report writing, be able to develop IEPs and be able to implement and follow interventions plans. Total hours of practicum will be 100-300 hours, depending on present level of functioning, past experience and present employment or role. This field course will provide the student with specific key experiences in the role of learning disabilities specialist. This course will be structured to accommodate graduate candidates who have a variety of prior school experiences. Students who do not have extensive school experiences will be required to fulfill all the requirements. This practicum is centered around competency areas that are basic to learning disabilities. This field course serves as an exit check for completion of the Learning Disabilities Specialist concentration, thus leading to certification.
SE 5820  PRACTICUM IN EMOTIONAL DISABILITIES  
1–3 CREDITS
A student will provide direct service and experiential learning to children with emotional disorders in a classroom or school setting under the supervision of an experienced special education professional. The focus of the practicum will be on identification, assessment and remediation of behavior problems. Student will need to demonstrate assessment report writing, be able to develop IEPs and be able to implement and follow intervention plans. Total hours of practicum will be 150 hours (50 hours per credit) depending on present level of functioning, past experience and present employment or role. The practicum will be repeatable for credit if a student requires more training or hours to complete their experience. This field course will provide the student with specific key experiences in the role of emotional behavioral specialist. This course will be structured to accommodate graduate candidates who have a variety of prior school experiences. Students who do not have extensive school experiences will be required to fulfill all the requirements. This practicum is centered on competency areas that are basic to emotional behavioral disorders. This field course serves as an exit check for completion of the Emotional Behavior Option thus leading to certification.

SE 5830  PRACTICUM: GIFTED AND TALENTED  
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 is required.

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 is required.

SE 5920  INDEPENDENT STUDY IN GIFTED AND TALENTED  
1–3 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 course work to an on-the-job situation. Commitment includes a negotiated number of hours per week. Supervision is by the institution or agency concerned and by Plymouth faculty. Offered according to demand.

SE 6040  CURRICULUM DEVELOPMENT IN SPECIAL EDUCATION  
3 CREDITS
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 understanding 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.

English

EN 5000  TEACHER ACTION RESEARCH 3 CREDITS
This course is designed to provide a background in qualitative classroom-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 and/or analysis of artifacts. They will write up and present the results of this limited study.

EN 5050  THEORY AND PRACTICE IN THE TEACHING OF WRITING MIDDLE/SECONDARY  
6 CREDITS
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 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 5150 TEACHING EARLY MODERN LITERATURE
This course will emphasize multi-disciplinary, cultural studies approaches to teaching English literature from the early modern period (roughly 1500–1700) in secondary schools. We will read and discuss canonical English writers from this period, but we will also pay much attention to marginalized writers and cultural, political and historical texts that inform readings of these authors. We will also study performance pedagogy in teaching drama.

EN 5200 TEACHING LITERATURE IN A GLOBAL CONTEXT
Students will focus on comparing points of view from first and third world countries. Four novels will be taught in pairs. One novel will be from a first-world perspective, the second from a third-world. Students will be enjoined to see how perspective determines narrative. The emphasis is on the range of perspectives.

EN 5230 TEACHING LITERATURE: THE MEMOIR
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
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. Recent developments in language study.

EN 5300 POETRY WORKSHOP FOR TEACHERS
This course is designed to help teachers develop their own poetry and to learn ways of working with poetry with their students. They will compile a portfolio of their own 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
This course focuses on critical reading of short fiction and how to approach discussion of story elements.

EN 5350 NON-FICTION WORKSHOP FOR TEACHERS
Students will become familiar with the genre of creative non-fiction. They will consider questions like: What is an essay? What are some of the forms that it takes? How do these forms complement your interests as teachers and writers? Students will prepare a portfolio of their non-fiction work.

EN 5360 FICTION WRITING WORKSHOP FOR TEACHERS
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 5400 JOURNALISM WORKSHOP
Students will learn how to edit and put together a small newspaper/magazine. They will learn how to edit and tailor stories to different news outlets. They will work to understand and to help their students to understand how the news media shape how they and their students think about the world.

EN 5450 LEADERSHIP IN WRITING
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 through application only.
EN 5500  TOPICS IN TEACHING LITERATURE  1–3 CREDITS
Various topics in literature at the graduate level, not covered in other English courses. May be repeated with different topics.

EN 5560  TOPICS IN TEACHING WRITING  1–3 CREDITS
Various topics related to the teaching of writing not covered in other English courses. 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 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 WRITING AT THE SECONDARY LEVEL  3 CREDITS
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 5750  ADVANCED WRITING WORKSHOP FOR TEACHERS: EDITING AND PUBLISHING  3 CREDITS
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 5760  PERSONAL WRITING TO LEARN  1–3 CREDITS
This course focuses on writing in the disciplines and on using one's own experience writing in the course as a springboard for integrating writing assignments into teaching.

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 5820  WRITING FOR YOUNG ADULTS  3 CREDITS
This course centers around writing for an adolescent audience. Participants will write and workshop fiction for young adults.

EN 5830  TEACHING LITERATURE FOR CULTURAL UNDERSTANDING  1–3 CREDITS
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 5860  YOUNG ADULT LITERATURE  3 CREDITS
This course is designed to prepare pre-service teachers at the secondary level in the teaching of young adult literature at the middle school level. We will explore the historical and cultural contexts of Young Adult Literature and its major genres. We will review and evaluate books, relate adolescent literature to adolescent development and explore the major approaches to teaching literature at the middle school level.

EN 5870  TEACHING LITERATURE IN SECONDARY SCHOOL  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 is required.

Health Education

Health and Healing

HH 5560 TOPICS IN ALTERNATIVE HEALTH 3 CREDITS AND HEALING
Topics in Alternative Health and Healing introduces the fundamental concepts of complementary and alternative health and wellness methods and practices. Participants will explore and study the psychophysiology of a wide variety of mind/body modalities and discuss the integration of these approaches with Western medicine.

HH 5570 MINDFULNESS MEDITATION: THEORY AND PRACTICE
Mindfulness Meditation Theory and 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
Transpersonal Psychology 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 wellbeing.

HH 5600 BODY CENTERED THERAPIES 3 CREDITS
Body Centered Therapies 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 THE CIRCLE OF LIFE 3 CREDITS
The Circle of Life explores the life cycle from birth to the dying process and the ending of life, including issues concerning near-death experiences, how people die and the meaning of death. The course examines death at different ages and within various relationships, along with stages of grieving and strategies for coping.

HH 5620 SPIRITUAL HEALTH 3 CREDITS
Spiritual Health 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.

HH 5700 CREATING ORGANIZATIONAL HEALTH 3 CREDITS
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 health paradigm into organizational design.

HH 5820 WOMEN AND 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.

Health Education

HL 5150 EATING DISORDER CLINICAL 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.
**HL 5160  EATING DISORDER  3 CREDITS**

**AWARENESS AND PREVENTION**

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 i.e. women, children, males, athletes; prevention programs; resources; the latest research and information on becoming a coordinator of Eating Disorder Awareness and Prevention Week. Also presented as CO 5160.

**HL 5170  TREATMENT MODALITIES  3 CREDITS**

**FOR EATING DISORDERS**

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 560. Also presented as CO 5170.

**HL 5180  NUTRITION FUNDAMENTALS  3 CREDITS**

**AND COUNSELING 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, different diet plans, i.e. vegetarian, 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 presented as CO 5180.

**HL 5190  MEDICAL AND PHYSIOLOGICAL  3 CREDITS**

**ASPECTS 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 medial 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 presented 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  3 CREDITS**

**AND APPLICATION**

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 5400  HEALTH COUNSELING AND BEHAVIORAL CHANGE  3 CREDITS**

Focuses on understanding of the “helping relationship” and on identifying significant problem areas that face health educators/counselors. Students will work toward developing an understanding of and the facility to address given critical issues. Unscheduled.

**HL 5560  SPECIAL TOPICS IN HEALTH  1–3 CREDITS**

**EDUCATION**

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:  1–3 CREDITS**

**HEALTH EDUCATION**

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 and/or faculty committee. Offered according to demand.
**Health Promotion**

**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 is required.

**HP 5010  INTRODUCTION TO HEALTH EDUCATION AND HEALTH PROMOTION**  
3 CREDITS  
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 PROMOTION PROGRAMS**  
3 CREDITS  
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. Summer. 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 evaluations. Evaluation purposes, levels, methods, designs and measurement issues will be covered. Summer of odd years. Prerequisite: HP 5020 and ED 5030.

**HP 5070  WORKSITE 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, i.e. wellness fair or workshop. Students will learn grant writing skills, pamphlet/newsletter development and will be introduced to the field of wellness/health coaching and facilitator trainings, e.g. smoking cessation.

**HP 5080  WOMEN’S HEALTH ISSUES**  
1–3 CREDITS  
Identifies and discusses various women’s health topics relevant to our everyday lives. Helps provide learning experiences and guidance relevant to the needs, concerns, interests and aspirations that arise out of various health issues relevant to all women. Unscheduled.

**HP 5090  STRESS MANAGEMENT TECHNIQUES FOR EDUCATORS**  
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 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/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, as well as some mental health diseases. Offered spring term of even years.

**HP 5240  FIRST AID AND CPR  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. This is an online course and is offered each term.

**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. This is an online course and is offered each term.

**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  1–4 CREDITS**

**PROMOTION**
This course will cover various topics in Health Promotion.

**Physical Education**

**PE 5560  SPORT RELATED GAMES  1–4 CREDITS**

**EDUCATION: TEACHING GAMES FOR UNDERSTANDING (TGfU) MODEL**
The purpose of this course is to provide a practical, theoretical and research focus to a Teaching Games for Understanding (TGfU) model to sport-related games teaching and learning. Topics will include curriculum design, examples of games and sports units, issues related to implementation for teachers and students, inclusion and assessment.

**PE 5600  ATHLETIC ADMINISTRATION  3 CREDITS**
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  3 CREDITS**

**AND MARKETING**
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 utilized. 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. Sports, Society and Cultures 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 demonstrated by papers and discussion. Consent of a faculty supervisor, department chair and the Associate Vice President is required.

**Heritage Studies and Social Science**

### 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 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 5780 NATURE AND HERITAGE TOURISM**  
3 CREDITS  
During the 21st century, the impulse to be immersed in nature and to observe artifacts of culture and history will continue to be satisfied by the traveling public. The purpose of the course is to expand students’ awareness of how conservation of natural features, as well as preservation of historic sites and cultural landscapes, have important consequences for the tourism industry and those locales that host visitors. This course will accomplish its purpose by utilizing a range of educational vehicles: students will read and discuss works of fiction and non-fiction, participate in field work, design and implement surveys, and explore Internet sites.

**History**

**HI 5040 AMERICAN BEGINNINGS**  
3 CREDITS  
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 5050  AMERICAN CIVIL WAR AND  RECONSTRUCTION
3 CREDITS
Various causes of the Civil War followed by a treatment of the conflict and the ensuing reconstruction period. Fall of even years.

HI 5090  COLONIAL HERITAGE AND THE AMERICAN REVOLUTION
3 CREDITS
An investigation of colonial society and institutions followed by a treatment of the Revolutionary War and its outcome. Designed to give students more knowledge about this phase of American history so they can teach the subject more effectively at elementary, secondary or adult levels. Fall of odd years.

HI 5260  HISTORICAL ARCHAEOLOGY 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 4 CREDITS NEW ENGLAND: HISTORICAL SITES
Combining classroom activities and site visits, illustrates aspects of northern New England history that have had significant roles in determining the course of regional development. Included will be field trips to important museums, abandoned town and industrial sites, urban locations, tourist meccas and contemporary locations that demonstrate the impact of growth and change. Teachers will use the class and field experiences to develop class units that use the regional and local landscape as sources for teaching history and related studies. Summer.

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. Fall of even years.

HI 5800  TOPICS IN HISTORY 3 CREDITS
Specialized topics chosen for graduate seminar by individual faculty. Unscheduled.

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 course work 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 is required.

Heritage Studies

HS 5030  APPLICATION OF FOUNDATIONS 1 CREDIT
Designed to provide educators with an opportunity to apply knowledge gained from coursework in Heritage Studies. Requires the educator to develop and implement curriculum appropriate to elementary and/or secondary students with attention given to a variety of methods and approaches suited to the audience. Prerequisites: HS 5100 and one graduate education core course.

HS 5100  HERITAGE STUDIES: FOUNDATIONS 3 CREDITS
Introductory graduate-level course especially designed for elementary/secondary teachers and others interested in social studies/heritage education in schools, museums, historical societies, etc. The concepts and techniques used in research in archaeology, history and geography will be learned so participants can create examples for class exercises, plan local field trips, conduct indoor/outdoor experiments and incorporate lesson plans into existing science and social science curricula. Participants will also learn methods of social science explanation and inference about historical events, structures, artifacts, settlement patterns and religious ideologies of the past. Lectures, field trips, indoor and outdoor exercises, demonstrations and projects will be the format.
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 1–4 CREDITS STUDIES
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 5650 ARCHAEOLOGICAL FIELD METHODS: PREHISTORIC MATERIALS ANALYSIS 1–4 CREDITS
Provides an opportunity to acquire experience in prehistoric archaeological interpretation. Students will perform an analysis of prehistoric archaeological materials and will produce an interpretive report based upon their studies. This course will be held in the New Hampshire Division of Historical Resources laboratory in Concord, N.H. Students must provide their own transportation to and from Concord. Repeatable for credit.

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/institution must be arranged through the director of Heritage Studies 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 inter-

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. Unscheduled.

PO 5140 STATE AND LOCAL GOVERNMENT 3 CREDITS FOR EDUCATORS
An exploration of the many state and local governments in the United States, using the comparative approach. The study is intended to provide the foundation for understanding the peculiarities of New England political entities. Educators will benefit by completing a research project in an area of interest and by completing a simulation/activity project based on that research. Spring.

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 course work 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 is required.
Sociology

SO 5140  SPECIAL TOPICS IN SOCIOLOGY  3 CREDITS
Specialized topic chosen for graduate seminar by individual faculty. Scheduled as needed.

SO 5910  INDEPENDENT STUDY IN  1–3 CREDITS
SOCIOLOGY
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 is required.

Social Work

SW 5010  SOCIAL WELFARE POLICY I  3 CREDITS
Provides an overview of the history of social welfare policies and services, including the origins and development of a welfare state in the United States. Current social welfare policies and services will be examined in relation to professional social work. Unscheduled.

Languages and Linguistics

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 course work in the field. Selection of a reading list or a special project under faculty supervision. Consent of an appropriate faculty supervisor, department chair and Associate Vice President is required.

Language and Linguistics

LL 5001  AMERICAN AND WORLD ENGLISHES  3 CREDITS
We begin by considering Shaw’s comment that Britain and the U.S.A. are two countries separated by a common language, but we will extend this to a more global forum. Topics include the phonology, morphology and syntax of English, the history of English and world Englishes. This course examines the formal aspects of the English language system.

LL 5003  LANGUAGES AND THE MIND  3 CREDITS
This course will examine the nature of first and second language development and the role of language in cognitive development, particularly the relationship between thought and language. Topics include observed processes of early language acquisition, bilingualism and second language acquisition by children and adults, and their applications to language teaching. The course provides an overview of current theories and models of language acquisition, including the possible effects of first language transfer and the role of universal principles.

LL 5004  LANGUAGE AND LINGUISTICS  3 CREDITS
Participants will examine the nature of language, language systems and language in context. Topics covered include: the interface between semiotics (the study of signs) and semantics (the study of meaning); how individuals learn and use their first language; the influence of gender, ethnicity, age, social class and level of education on language use; written register (academic writing, e-mail, chat rooms, etc); spoken register (peer talk, family talk, slang, swearing, etc.); linguistic imperialism; ways in which language shapes and is shaped by society and individual identity; and, the implications of sociolinguistic theory on the teaching of both first and second languages.

LL 5005  LANGUAGE TEACHING METHODS  3 CREDITS
We examine various teaching methods, the history of language teaching, curriculum development and materials design. We will evaluate some of the many textbooks in common use. In doing so, participants will learn how to adapt existing textbooks. Particular consideration will be given to the ESL situation in New Hampshire. We will then look at teaching without language textbooks, focusing on CBI (Content-Based Instruction) and the use of authentic materials. We compare the multicultural and homogenous classrooms and investigate ways of combining ESOL with math, history, social studies, etc. Participants will develop the skills needed to develop curricula and materials for kindergarten, elementary school, high school and adult classes.

LL 5006  DESIGNING AND EVALUATING  3 CREDITS
LANGUAGE TESTS
The course examines the different purposes for testing and the different kinds of tests needed, such as placement, diagnostic, achievement and proficiency tests. Participants will gain experience in evaluating the validity and reliability
of national and state tests, and in constructing an item bank through devising test items of various types, such as cloze, multiple choice, short answer, essay writing, listening comprehension, speaking, etc. Other topics include weighting, criterion-referencing, multiple intelligences, test-taking strategies, peer and self assessment, portfolio assessment, and how to test for language and learning disabilities.

LL 5007  ESOL LITERACY  3 CREDITS
This course introduces participants to the theories and practice of literacy teaching in terms of both reading and writing acquisition in first and second languages. We will explore decoding language, word interpretation, top-down and bottom-up methods of reading, techniques of skimming and scanning, intensive and extensive reading, individual and shared reading and writing, guided reading and the writing process. This course should be considered as part of a trio of courses in teaching and assessment, along with LL 5005 Language Teaching Methods, which explores classroom management techniques, and LL 5006 Designing and Evaluating Language Tests, which includes techniques for assessing both reading and writing, including portfolio assessment and rubric development. The focus of the course is to develop participants’ proficiency in teaching reading and writing through, among others, phonics, whole language and integrated approaches.

LL 5010  PRACTICUM IN TESOL  6 CREDITS
This practicum serves as work experience for ESOL certification candidates and for students taking a self-designed M.Ed. with a concentration in TESOL or Applied Linguistics, without K–12 certification. It can be done in conjunction with another K–12 practicum, as part of an Alternative IV teaching position or independently. A candidate seeking ESOL teacher certification must do the practicum in a New Hampshire K–12 public school; a candidate not seeking ESOL teacher certification can do the practicum in any approved setting. Commitment includes regular meetings with the instructor and the development of a professional portfolio that addresses all appropriate teacher competencies. The number of hours teaching per week and the number of students being taught will dictate the number of credit hours. For a standard 6-credit practicum, assume a total of 240 teaching contact hours. Supervision will be done by the cooperating institution and Plymouth State University faculty. Students are strongly advised to have completed 18 Language and Linguistics (LL) credits before doing this practicum. Students with fewer than 18 Language and Linguistics credits should consult the instructor.

LL 5170  FOREIGN LANGUAGE  3 CREDITS
METHODOLOGY K–12
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; to prepare the student for a successful student teaching experience.

Spanish

SP 5910  INDEPENDENT STUDY  1–3 CREDITS
A course of study to round out the students’ background through systematic reading, intensive and extensive, to supplement course work 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 is required.

Library Media

LM 5010  LEARNING RESOURCES CENTERS  3 CREDITS
AND SERVICES
This course will focus on the role and functions of library/media centers 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 library/media centers.

LM 5020  CATALOGING AND  3 CREDITS
CLASSIFICATION
This course will introduce the principles of organization of information and information retrieval systems. Topics covered will 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 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/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  INSTRUCTIONAL MATERIALS  3 CREDITS**
**PRODUCTION AND USE**
The course covers the role of instructional materials in media centers and settings of various types, emphasizing instructional design and production techniques using different media and equipment including computers.

**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 course work 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 Plymouth faculty.

**Mathematics**
A student, with approval from the Mathematics graduate advisor, 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  1–4 CREDITS**
**IMPLEMENTATION**
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. Summer.

**MG 5010  SEMINAR IN MATHEMATICS  2–4 CREDITS**
**EDUCATION: (TOPIC STATED FOR EACH OFFERING)**
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, Algebra in the K–12 Curriculum. Course may be repeated on a different topic with permission of the department chair.

**MG 5710  TOPICS IN ALGEBRA FOR ELEMENTARY/MIDDLE SCHOOL TEACHERS  2–4 CREDITS**
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; generalization and equality. Students may repeat the course with a different topic as its focus with permission of the department chair. Summer.

**MG 5720  TOPICS IN NUMBER THEORY FOR ELEMENTARY/MIDDLE SCHOOL TEACHERS  2–4 CREDITS**
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. Summer.

**MG 5730  TOPICS IN DISCRETE MATH FOR ELEMENTARY/MIDDLE SCHOOL TEACHERS  2–4 CREDITS**
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. Summer.
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. Summer.

MG 5750  TOPICS IN STATISTICS/
PROBABILITY 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 univariate 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-onactivities, computer software or graphing calculators.
Students may repeat the course with a different topic as its
focus with the permission of the department chair. Summer.

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. Summer.

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; precalculus 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. Summer.

MG 5820  TOPICS IN NUMBER THEORY  2–4 CREDITS
FOR 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, such as 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. Summer.

MG 5830  TOPICS IN DISCRETE  2–4 CREDITS
MATHEMATICS 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. Summer.

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 the permission of the department chair. Summer.

MG 5850  TOPICS IN STATISTICS/
PROBABILITY 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. Summers.

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. Summer.

MG 5870 TOPICS IN CALCULUS FOR 2–4 CREDITS SECONDARY SCHOOL TEACHERS
Consists of topics from the study of calculus, advanced calculus and/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 and/or topics change. Summer.

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 is required.

Music and Theatre

Music Education

ME 5120 NEW ENGLAND BAND 1 CREDIT DIRECTORS INSTITUTE
A multi-faceted 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/or 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 TECHNOLOGIES  3 CREDITS
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 IN CONDUCTING TECHNIQUES  3 CREDITS
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 is required.

Music

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 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 is required.

Reading and Writing

RL 5020  SUPERVISION OF READING PROGRAMS  3 CREDITS
Examination of the relationship of general school administration to reading programs. Focus is on the unique aspects of reading/language arts supervision to long and short range planning for comprehensive services, organization and implementation of specialized services, staff development, data collection and evaluation procedures, and personnel and community relations. Fall and summer.

RL 5110  ISSUES AND TRENDS IN READING AND WRITING  3 CREDITS
An overview of current practices in the teaching of reading and writing, and K–12 adult literacy. Discussion of topics in a variety of areas, such as literacy, language arts, reading and writing processes, historical perspectives and curriculum, goals, theoretical models, vocabulary and comprehension. Survey of technological trends, methods of assessment and portfolio models, cross-cultural practices and bilingual issues, reading and writing disabilities, and methods of teaching the gifted reader and writer. Emphasis on application of current research to classroom practice through seminars that highlight “what’s new, what’s old and what has not changed” in reading and writing. A practicum experience may be included as part of this course of study. May be repeated with permission of instructor. Fall, spring and summer.

RL 5170  READING AND WRITING IN THE CONTENT AREA  3 CREDITS
Develops the importance of language in integrating all curricula through listening, speaking, reading, writing and viewing processes. Students will evaluate current research, creative practices and new technologies reference and study skills. They will explore methods and materials to promote reading and writing across the curriculum content areas.
Students will develop and present an interdisciplinary curriculum. Summer.

**RL 5300 ADVANCED CHILDREN’S/YOUNG ADULT LITERATURE**
This advanced literature course will survey prose, poetry and wordless books for school age students. Genres to be discussed include: picture books, traditional literature, modern fantasy, contemporary realistic fiction, historical fiction, multicultural and diversity literature, informational books and biographies. The course is designed to help the educator evaluate and select appropriate literature to develop literature-based reading and language arts programs, as well as choosing literature for content subjects. Students will work cooperatively on research with a current issue novel and independently write and present a novel unit. Summer.

**RL 5560 SPECIAL TOPICS IN READING, WRITING 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. Offered according to demand.

**RL 5710 ADVANCED DIAGNOSTIC TESTING AND THE IMPROVEMENT OF READING AND WRITING**
Diagnostic and instructional issues presented include: reading and writing development; factors related to reading and writing disabilities; varied approaches to individual diagnosis and proven emergent reading, corrective, standardized tests and authentic assessments currently used in reading and special education programs. Seminars in conjunction with the practicum emphasize peer coaching and the application of current literacy research. May be repeated with the permission of the instructor. Winterim and summer.

**RL 5750 INDEPENDENT RESEARCH IN READING AND WRITING**
An in-depth study of a particular topic, contemporary issue or concern. The student will propose a topic, issue or concern to the program advisor for approval.

**RL 5760 LINGUISTIC PRINCIPLES AND METHODS OF 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 IN EARLY CHILDHOOD**
An overview of the theories of reading acquisition, the grapho-phonological system, the foundations of literacy and the reading and writing process, with an emphasis on kindergarten through third grade. Topics include early literacy, orthographic knowledge, phonemic awareness, phonics instruction, and the ecology of language and literacy learning. This course includes a practicum with the development of a portfolio of literacy experiences.

**RL 5810 PRACTICUM IN READING AND WRITING**
Experiences in assessment and correction of reading difficulties. Use of developmental corrective and remedial techniques. Analysis of problems, materials and methods. Unscheduled. Prerequisites: ED 5140 and consent of instructor.

**RL 5820 PRACTICUM IN READING AND WRITING**
Seminar in the effective teaching of language arts, K–2. 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. Winterim and summer.

**RL 5830 PRACTICUM IN READING DIAGNOSIS AND 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 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 is required.

**RL 6120 CONNECTING READING, WRITING AND 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. Also presented as ED 5100.

**Sciences**

**Biology**

**BI 5090 CELL STRUCTURE AND FUNCTION 4 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, 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. Falls.

**BI 5100 BIOLOGY COLLOQUIUM 1 CREDIT**

Course is comprised of lectures featuring prominent speakers from a variety of institutions.

**BI 5180 BIOTECHNOLOGY 4 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 5210 PREDATOR/PREY ECOLOGY 3 CREDITS**

This course focuses on the nature and consequences of predator/prey interactions, which are critical in understanding ecological issues from individual behavior all the way up to food web dynamics and ecosystem function. We will explore both the theory and practice of the study of predator/prey ecology, using classic studies in ecology and recent peer-reviewed literature. Topics to be discussed may include indirect effects, phenotypic plasticity, population dynamics, coevolutionary arms races, behavior and life history evolution. Prerequisite: B.A. or B.S. in biology or related field Advanced undergraduates who have completed coursework in ecology may apply for permission of the instructor.

**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 landscape 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 5240 TERRESTRIAL ECOLOGY 3 CREDITS**

The focus of this course will examine the experimental study of the distribution and abundance of organisms in terrestrial ecosystems. This discussion will be through a combination of lectures, field experiments that test specific hypotheses and oral presentations. A large amount of class time will be spent in the field. Students will collect and analyze data, write a scientific paper and present their work to the class.
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 5360 COMMUNITY ECOLOGY  3 CREDITS
This course provides a survey of the field of community ecology, which is the study of patterns and processes involving multiple species. The key concepts in this field will be examined through a combination of lectures readings, student-led discussion and written assignments. We will rely heavily on peer-reviewed literature to explore the development of the diverse ideas and approaches to the study of ecological communities. Prerequisite: B.A. or B.S. in biology or related field. Advanced undergraduates who have completed coursework in ecology may request permission from the instructor to take the course.

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 5390 ECOLOGY  4 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 field work, experimentation and analysis of data will be incorporated. Graduate students will have additional coursework and/or projects equivalent to graduate level study. Falls

BI 5400 PALEOECOLOGY  3 CREDITS
The application of ecological principles to the study of ancient environments. Topics to be examined include: what are the evidences that we use to determine past environments, how have past environments differed from present environments, what do past environments tell us about rates of change, and what lessons from past environments can be applied to the study of present?

BI 5440 ELECTRON MICROSCOPY TECHNIQUES  4 CREDITS
Focuses on the theory and practical operation of an electron microscope laboratory. Tissue preparation, ultramicrotomy (sectioning), basic darkroom procedures and operation of the electron microscope will be covered. Springs.

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 9 graduate hours.

BI 5570 CURRENT TOPICS IN CELL BIOLOGY  3 CREDITS
This is a weekly seminar style course that requires written and oral assignments in topics of current prominence in cellular and molecular biology. The course content will vary semester by semester and will be modified to suit the needs of the current students.

BI 5760 ANIMAL BEHAVIOR  4 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 and/or instructor generated hypotheses concerning the causal mechanisms underlying behavior. Falls.

BI 5770 ANIMAL PHYSIOLOGY  4 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 and/or instructor-generated hypothesis testing and uses modern equipment including computers, Data Acquisition Units, amplifiers, transducers, stimulators and activity monitors. Spring of even years.

**BI 5780 NEUROBIOLOGY 4 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 and/or instructor generated hypotheses. Spring of odd years.

**BI 5790 BIOLOGICAL RHYTHMS 3 CREDITS**
The behavioral and ecological importance of circadian, circatidal and circannual rhythms is introduced, followed by discussion of the theoretical bases of the fundamental properties that define rhythms. Next the comparative anatomy, physiology, genetics and molecular biology of clocks will be examined. Examples at all levels of organization will be drawn from the real world and from current and classic research. Finally, we will look to the future by exploring six cutting-edge areas of research. Prerequisites: B.A. or B.S. in biology or related field.

**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. You 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 3 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.

**Chemistry**

**CH 5910 INDEPENDENT STUDY 1–3 CREDITS IN CHEMISTRY**
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 in-depth study of a problem in the field. Consent of a faculty supervisor, department chair, coordinator and Associate Vice President is required.

**Environmental Science and Policy**

**ESP 5000 ENVIRONMENTAL SCIENCE 3 CREDITS**
Students in this course will be introduced to the sciences fundamental to the understanding of major environmental issues. The adverse impacts being imposed on our air, water and land resources will be explored. Students will gain a better understanding of aspects of the physical, chemical and biological sciences that define environmental issues; the role of sound science in contemporary environmental policy; and experience in researching and presenting a contemporary environmental science topic.

**ESP 5010 ADVANCED ENVIRONMENTAL PLANNING 3 CREDITS**
The purpose of this course is to instill in students a reverence for planning that promotes understanding and appropriate use of the natural environment. The course work will help students gain the capability to envision a future that
encompasses the needs of society and reflects the principles of sustainability. This is a very hands-on course that will involve two site design projects. By the end of the course students will be equipped with an understanding of the tools and methodologies that can be used at the site and community level to plan for the future, while respecting the living landscape.

**ESP 5020  SCIENCE ETHICS  3 CREDITS**

This course is designed to offer a wide range of cases that deal with some of today’s issues in biology and environmental science. We will examine the ethical implications that make these issues important to the scientific community and the differences between what is thought to be moral and what is considered ethical. We will read and discuss case studies and gain an understanding of how the science of ethics governs what is determined to be right or wrong in the world of biology and environmental studies. Current and historical cases will be discussed.

**ESP 5030  ECOLOGICAL RESOURCES RISK ASSESSMENT  3 CREDITS**

This course will introduce students to the philosophy and methodology of ecological risk assessment. Topics include: ecosystem health and management; ecosystem disturbance, stability and diversity; environmental stressors (chemical, physical and biological); Ecological Risk Assessment (U.S. Environmental Protection Agency paradigm) including conceptual models, endpoints, exposure, effects uncertainty; and ecological status and trends. Students will complete an Ecological Risk Assessment.

**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 brownfield 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 5100  CONSERVATION LANDS IN NEW HAMPSHIRE  3 CREDITS**

Conservation Lands in New Hampshire explores the role of conservation lands in the state’s landscape. As New Hampshire’s fields and forests give way to commercial and residential developments, conservation lands become increasingly important. This course will explore the history of land conservation in New Hampshire and compare the management goals and policies of government agencies and non-governmental organizations that hold conservation lands in the state. We will evaluate tools, criteria and policies commonly used in land protection, and visit forests and reserves under a variety of ownerships to observe management in action and interact with management staff.

**ESP 5110  LONG TERM ENVIRONMENTAL RECONSTRUCTION  3 CREDITS**

This course introduces the use of natural archives (lake sediments, marine sediments, corals, tree rings, snow and cave deposits) to reconstruct diverse aspects of environmental change such as pollution history, development impacts, hurricane history and climate change. This history has sufficient resolution to influence society’s assessment of numerous important environmental issues, such as global warming. We will also focus on lake records, given their regional significance, and cover the last few centuries of record. The material will emphasize the regional scale while covering local and global scales. This course introduces the wide variety of paleo-environment fields in the Earth Sciences such as paleoclimatology, paleolimnology, paleoceanography, dendroclimatology and paleoglaciology.

**ESP 5120  ECOLOGY AND HISTORY OF THE WHITE MOUNTAINS OF NEW HAMPSHIRE  3 CREDITS**

This course will be a survey of the history and workings of the forests of the White Mountain region. The course will focus on the northern hardwood forest, but also include the spruce/fir zone and tundra. Class periods will emphasize the reading and discussion of the primary literature, texts and popular writings, such as the multitude of good logging-era books. Field trips will be a key component of the course.

**ESP 5130  APPLIED ENVIRONMENTAL GEOLOGY AND PUBLIC POLICY  3 CREDITS**

Environmental geology is the study of the human interaction with the geological environment. The goal of this course is to introduce the student to the link between
environmental geological processes and scientific principles with public policies that have resulted in local ordinances, state laws and regulations, federal laws and international treaties impacting our everyday life. Through the use of case studies, the student will learn that understanding the social, economic and political “web” is as important as mastering scientific principles in successfully minimizing the impact of man’s activities on the environment.

ESP 5140 WINTER ECOLOGY 3 CREDITS
Winter Ecology examines the natural processes and stresses of cold environments and how plants and animals adapt to winter and cold climates. The ecologically important aspects of wintertime physical and biological conditions are explored. Causes of winter and the dynamics of cold temperatures, snow and ice are investigated.

ESP 5150 GLACIAL AND PERIGLACIAL GEOLGY 3 CREDITS
Glaciation has strongly shaped the New England landscape and blanketed it with diverse sediments that influence its hydrology, biology and human development. The ice sheets of Greenland and Antarctica, themselves of significant societal concern, are remnants of ice sheets that formerly covered 30 percent of the earth’s land surface. The course will introduce glaciers and the processes and products of glacier and cold-region erosion and deposition. The course will emphasize the development, form and properties of New England glacial sediments but cover the global record. The glacial-geologic methods learned will be applied to on-going investigations of glacier and climate history around the planet.

ESP 5210 FOREST SCIENCE 3 CREDITS
This course will provide an introduction to the fundamentals of forest science and the environmental issues central to contemporary forest management. Topics to be covered include forest values, forest ecology, forest soils, forest stressors, biodiversity, monitoring and management. A field trip to the Hubbard Brook Experimental Forest and another location in the White Mountain National Forest is included.

ESP 5220 FOREST ECOLOGY 3 CREDITS
New Hampshire’s current landscape is predominantly forested. This resource is managed for both recreational and economical purposes. In this course we will examine the ecology of forests in New Hampshire and of the world. We will explore forests at the organismic, community and eco-system level. We will discuss the current health of today’s forests and current management plans used to protect and sustain them. This course is designed to build on a basic understanding of ecology. Current ecological theory and methods will be applied to gain an in-depth knowledge of forest habitats.

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 the 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 sedimentation, 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 5340 ADVANCED TOPICS IN 1–2 CREDITS WATER RESOURCES
This course covers advanced topics beyond general watershed hydrology and is designed to allow for flexible course content in hydrology that pertains to current issues in the science and management of watersheds. The format is reading and conference to encourage student interaction and participation. It serves as an integral part of the Environmental Science and Policy graduate program. Topics may include: GIS in hydrology, stream analysis, tracers in hydrology, groundwater fundamentals, hillslope hydrology, hydrometeorology, water resources planning, and riparian processes and management.

ESP 5390 TRAVEL STUDY IN 2–3 CREDITS ENVIRONMENTAL SCIENCE 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 5400 CONSERVATION AND THE 2 CREDITS INTERNET AGE
Conservation in the Internet Age will explore innovative ways in which the Internet is shaping environmental education and conservation of natural resources. Areas of emphasis will include: environmental interpretation/education using the Internet; natural resource conservation/management using networked databases; stewardship curriculum design and evaluation using the Internet; collaborative, public/private, eco-regional approaches to education; developing 21st century field trips that integrate virtual technology with forest and/or lake field experiences; and alignment with national education technology and environmental education literacy standards.

ESP 5500 SPECIAL TOPICS IN 1–4 CREDITS ENVIRONMENTAL 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 LIMNOLOGY 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.

ESP 5520 CHEMICAL LIMNOLOGY 3 CREDITS
Chemical Limnology is the second course in the limnology series, providing students with an expanded understanding of the physico-chemical processes that control surface water chemistry. Students will work with the substantial databases available for New England lakes, evaluating current scientific and regulatory issues, and data validation methods. Lakes will be studied as systems that are chemically integrated with their watersheds. The focus will be on major analytes and how lakes function, although the course content may include topical issues such as trace metal mercury biogeochemistry, depending on the interests of the students. Each graduate student will lead a class session on a topic of their choice in the second half of the course. Students are expected to have a general understanding of how lakes function, familiarity with chemical principles, experience with spreadsheets or database software.

ESP 5570 HUMBOLDT FIELD COURSES 2–3 CREDITS
The Humboldt Field Research Institute is based in Downeast coastal Maine and is known for an extensive series of advanced and professional-level natural history field seminars offered since 1987. HFRI is east of the Schoodic section of Acadia National Park and west of the Petit Manan National Wildlife Refuge and provides an excellent site for teaching field techniques. Weeklong summer field course and seminars are taught by recognized international experts and cover a broad range of specialized subjects, including many that are not typically taught at academic institutions. These courses will give students an opportunity to learn field research techniques on a variety of topics. There will be an extra fee for room and board.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESP 5590</td>
<td>DATA VISUALIZATION AND COMMUNICATION</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Visualizing data and communicating their meaning is an important part of science and translating science to laypersons. This course will explore communicating data effectively to technical and non-technical audiences. Students will learn how to display different types of environmentally related data and communicate study results successfully in presentations and written formats. This course contributes to the communication requirement of the M.S. in ES&amp;P program.</td>
<td></td>
</tr>
<tr>
<td>ESP 5600</td>
<td>NATURAL RESOURCE POLICY AND COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Public and private decisions for determining how a nation allocates natural resources reveals much about the character of its people. Such governmental, institutional, quasi-public and private sector decisions—inextricably intertwined—have become all the more critical as the finite nature of the earth’s carrying capacity becomes evident. Yet too often such decisions are made based upon badly outdated models. This course will take a closer look at how decisions impacting the environment are made, or not made, within the context of historical, political and economic factors. Students are encouraged to strike out on their own into areas of personal interest becoming “experts” in one or more related discipline—scientific, social, legal or economic.</td>
<td></td>
</tr>
<tr>
<td>ESP 5610</td>
<td>ENVIRONMENT AND SOCIETY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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 movement, greenwashing, public attitudes towards the environment and the idea of sustainability.</td>
<td></td>
</tr>
<tr>
<td>ESP 5620</td>
<td>ENVIRONMENTAL LAW AND POLICY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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 of 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.</td>
<td></td>
</tr>
<tr>
<td>ESP 5630</td>
<td>WETLANDS SCIENCE AND POLICY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course will introduce students to the regulatory background of wetlands protection, the scientific criteria for identifying freshwater wetlands, field delineation methods and wetland assessment protocols. It will help prepare students to become certified wetland scientists at the state level, and professional wetland scientists at the national level.</td>
<td></td>
</tr>
<tr>
<td>ESP 5640</td>
<td>METHODS OF SOCIAL RESEARCH</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>We encounter information about cultures and society in many ways throughout our lives. 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.</td>
<td></td>
</tr>
<tr>
<td>ESP 5650</td>
<td>SOCIAL MOVEMENTS AND ENVIRONMENTAL JUSTICE</td>
<td>3</td>
</tr>
</tbody>
</table>
|            | Sociological examinations of social movements attempt to address one of the most important questions in sociology—how does social and cultural change actually happen? Many of the characteristics of modern society that we take for granted, such as environmental awareness, voting rights and organized labor, have their origins in the struggles of
organized social movements. This course will examine the ways different social theorists and researchers analyze social movements through a focus on the environmental justice movement. The environmental justice movement asserts that throughout the world there are marked and increasing disparities between those who have access to clean and safe resources and those who do not. In this and other aspects, the environmental justice perspective differs from traditional environmental philosophies in that it seeks to combine a concern for the natural world with a consciousness of ethnic, class and gender discrimination.

**ESP 5660 PRINCIPLES OF INTERPRETATION 3 CREDITS**

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 5670 ADVANCED ENVIRONMENTAL ANALYTICAL INSTRUMENTATION 1–4 CREDITS**

Advanced Environmental Analytical Instrumentation will provide hands-on experience and background in a variety of laboratory instrumentation used in environmental research and regulation. The goal is to provide students with an understanding of how data are derived and the potential problems that can exist in reported data. An overview of the theories of instrumentation will be provided, but the main emphasis will be on applied methods, data quality assurance, and data problem identification. Students will acquire a background applicable to careers in state and federal agencies, cooperative extension, environmental or government organizations, environmental consulting, private industry, laboratories and academia. Students will work directly with laboratory staff on one or more individual projects, and may have the opportunity to participate in practica with agencies or other laboratories.

**ESP 5680 SOCIAL MARKETING IN ENVIRONMENTAL EDUCATION 3 CREDITS**

Social Marketing in Environmental Education will examine effective stewardship or environmental education outreach programs that apply strategic communications, marketing, branding and evaluation processes which 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 ENVIRONMENT 3 CREDITS**

This graduate seminar focuses on how ecological concepts and studies inform scientists about the nature of and solutions to environmental problems. Specific topics vary from year to year depending upon the interests of the faculty and the students enrolled. Regardless of the 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 versed in ecological theory and practice. The concepts are fleshed out through case studies taken directly from peer-reviewed literature.

**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 5900  MASTER’S THESIS RESEARCH  1–8 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  1–3 CREDITS
ENVIRONMENTAL 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  1–4 CREDITS
RESEARCH
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 5200  THE WORLD OF LIFE:  4 CREDITS
THE BIOSPHERE
A general introduction to ecology, emphasizing the physical and chemical variables of the environment. Special emphasis placed upon the relationships that exist between individuals, populations, communities, habitats, niches, food webs and energy pyramid, culminating in an ecosystem perspective. Summer.

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 biologic variables. An ecological approach stressing zones of life, habitats and population-community interactions. Laboratory and fieldwork are important components of the course. Summer only.

EV 5250  EARTHSCAPE: PATTERN AND  4 CREDITS
PROCESS
An examination of the spatial distribution of elements that comprise the earth’s biosphere—climate, hydrology, soils, vegetation and geomorphology/geology. Each element will be examined individually and within the context of the global ecosystem, through applications of cartographic and field methodologies. Summer.

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. Summer.

EV 5370  WETLAND COMMUNITY  4 CREDITS
ECOLOGY
This course will introduce students to unique wetland habitats using field observation, research and the principles of community ecology. We will examine a variety of wetland communities, paying particular attention to wetlands commonly found in New England. We will discuss their ecological properties and the physical factors that control these properties, including hydrology, species interactions, disturbance and succession. We will also discuss the local and national conservation practices, their successes and failures, and complete a writing project.

EV 5560  SPECIAL TOPICS IN  1–4 CREDITS
ENVIRONMENTAL SCIENCE
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  1–3 CREDITS
SCIENCE 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 course work 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 Plymouth faculty.

**EV 5910 INDEPENDENT STUDY IN ENVIRONMENTAL SCIENCE**
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 is required.

**Meteorology**

**MT 5110 AIR QUALITY**
This course addresses various aspects of the air quality subject. We will discuss the types of air pollutants, their sources, chemistry and effects on humans and the environment. We will analyze how meteorological conditions enhance or reduce the air quality of a specific region. We will produce air quality forecasts. We will also discuss current issues such as air quality monitoring and air pollution regulations. Prerequisite: MT 4300 and any computer programming course.

**MT 5200 TRANSPORTATION METEOROLOGY**
Students will learn the various weather systems that affect different modes of transportation. In particular we will study road weather, aviation meteorology and oceanic meteorology. Advanced weather analysis and forecasting skills will be applied in order to make forecasts tailored to various industries. Prerequisite: MT 4300, MT 4320 and any computer programming course.

**MT 5300 SYNOPТИC METEOROLOGY I**
Intermediate weather analysis and forecasting techniques are used to understand synoptic-scale weather systems with an emphasis on structure and evolution of extra-tropical 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, and jet streak circulations. Students participate in weekly exercises culminating in a quantitative precipitation forecasting exercise at the end of the term. This course is co-listed with MT 4300 in the undergraduate curriculum.

**MT 5310 DYNAMIC METEOROLOGY I**
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**
This course will cover the advanced topics in geophysical fluid dynamics including circulation theory, vorticity, planetary boundary layer, quasi-geostrophic theory and introductory numerical modeling concepts. Spring term. This course is co-listed with MT 4320 in the undergraduate curriculum.

**MT 5330 SATELLITE METEOROLOGY**
This course will provide students with a broad foundation on the history, theory, data and knowledge of meteorological satellites/sensors, so that they will be able to interpret and fully utilize these data for operational and/or research applications and understand their capabilities and limitations.

**MT 5340 RADAR METEOROLOGY**
This course will provide a broad overview of the hardware/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 application to real world problems, such as quantitative precipitation estimates and severe local storms detection. Prerequisite: MT 4300, MT 4320, MT 4410.

**MT 5350 BOUNDARY LAYER**
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.

**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 with MT 4410 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, 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 Nino. The results of paleoclimatic modeling are also discussed. Spring term of odd years. This course is co-listed with MT 4330 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. 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 terms. This course is co-listed with 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. This course is co-listed with MT 4470 in the undergraduate curriculum.

**MT 5550 TOPICS IN METEOROLOGY 3 CREDITS**
A rotating series of courses relating to major subdisciplines of meteorology. Topics will include mesometeorology, tropical meteorology and numerical weather prediction. May be repeated so that students can receive exposure to a variety of subject areas not covered in depth in the primary curriculum. This course is co-listed with MT 4550 in the undergraduate curriculum.

**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.

**MT 5620 NUMERICAL WEATHER PREDICTIONS 3 CREDITS**
This course is designed to acquaint students with the concepts, procedures and problems associated with numerical weather prediction through discussion and actual computer applications with real and simulated data. Students will also learn about the configuration and capabilities of current operational numerical prediction models.

**MT 5700 GRADUATE SEMINAR 1 CREDIT**
Provides graduate students with a forum to publicly present and discuss their results from literature reviews, case studies and/or research. This is a required course for all M.S. in Applied Meteorology students. This course can be repeated for credit twice for a total of 2 credits.

**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 Graduate Program Coordinator is required.
MT 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 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 is required.

Natural Science

NS 5000  PLANET EARTH  3 CREDITS
A unified approach to the study of the earth: as a planet in the solar system, its geology and geophysics, its atmosphere and oceans; the role of wind, water and other agents in developing the landscape. From assigned reading, lecture, discussion and laboratory, a global scale view of the earth will be developed. Unscheduled.

NS 5090  SPECIAL TOPICS IN SECONDARY  1–6 CREDITS
SCHOOL SCIENCE
A focused study in one of the science disciplines: life, earth or physical sciences. Course could include field, laboratory, computer and classroom study under the supervision of a faculty member with expertise in the area. Can be taken more than once. Unscheduled.

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 that gender has been achieved. Finally, students will attempt to foresee what revolutions might be going on now or might occur in the future.

NS 5200  ACTION RESEARCH IN SCIENCE EDUCATION  3 CREDITS
This course is designed to be a core course offering in the M.S. 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 constructivist 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 landscape, resources and community for real world teaching. Prerequisite: Teaching.

NS 5300  ASTROBIOLOGY  3 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: Graduate student/teacher.

NS 5400  MARINE EDUCATION METHODS  3 CREDITS
This is a multi-disciplinary 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 enrolled University 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
A laboratory/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
This course is one of the core offerings in the M.A.T. in Science 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, N.H. Fish and Game Department, Squam Lakes Association, N.H. Audubon Society, PSU Mindflight Summer Program, N.H. Department of Environmental Services and the PSU Planetarium Program to name several.

NS 5700  SCIENCE TEACHING MIDDLE AND HIGH SCHOOL
This course is designed to be a core course offering in both the M.S. in Science Education and the M.A.T. in Science programs. Several major themes such as learning theory, structure of the discipline (curriculum), teaching strategies, and 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. As an advanced learner, you will be given a great deal of independence in your learning about secondary school science teaching.

NS 5800  SEMINAR: CURRENT ISSUES IN SCIENCE EDUCATION
Current Issues, a core course in the M.S. in Science Education program, 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
This course is designed as a core course offering in the M.A.T and M.S. in Science Education programs. 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 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 is required.
Outreach and Partnerships

Local Partnerships
- Christa McAuliffe Planetarium (www.starhop.com/home.htm)
- New Hampshire IMPACT Center (www.plymouth.edu/graduate/nhimpact)
- Plymouth Elementary School: Integrated Arts
- Plymouth Regional High School: Secondary transition grant, PT3 grant
- SBI – Small Business Institute (www.plymouth.edu/graduate/sbi/)
- Squam Lakes Natural Science Center (www.nhnature.org)
- TIGER-Theater Integrating Guidance Education and Responsibility (www.plymouth.edu/graduate/tiger/)
- Whole Village Family Resource Center (www.wholevillage.net)

Regional Partnerships
Plymouth offers graduate credits for programs completed through the following organizations:
- American Institute for Creative Education (www.aiceonline.com)
- Arts Alliance of Northern New Hampshire (www.aannh.org)
- Baker River Watershed Association (www.bakerriverwatershed.org)
- Capitol Center for the Arts (www.ccapnh.com)
- Center for School Success (www.centerforschoolsuccess.org)
- Center for the Advancement of Art-Based Literacy (www.picturingwriting.org/combined.html)
- Concord Schools (www.concord.k12.nh.us)
- Ed Tech Associates (www.edtech-associates.com)
- E.E. JUST Environmental Leadership Institute (www.ejejust.org)
- High 5 (www.high5adventure.org)
- Humboldt Field Research Institute (www.eaglehill.us)
- KAT Company – Kearsarge Arts Theater (www.katcompany.org/)
- Kimball Jenkins Estate (www.kimballjenkins.com)
- Leadership Teacher (www.leadershipteacher.org)
- Mascoma Watershed Conservation Council (www.mascomawatershed.org)
- New England League of Middle Schools (www.nelms.org)
- New Hampshire Association for Supervision and Curriculum Development (www.ascd.org)
- New Hampshire Department of Education Professional Development Centers (www.ed.state.nh.us/education)
- New Hampshire Department of Environmental Services (www.des.state.nh.us)
- New Hampshire Division for Children, Youth and Families (www.dhhs.state.nh.us/DHHS/DCYF)
- New Hampshire Historical Society (www.nnhistory.org)
- New Hampshire Society of Certified Public Accountants (www.nhscpa.org)
- New Hampshire Theatre Project (www.nhtheatreproject.org)
- North Country Education Foundation (www.nc.ef.org)
- Portsmouth Music Hall (www.themusichall.org)
- Positive Behavioral Interventions and Supports (www.pbis.org)
- Project Adventure (www.pa.org)
- Southeast Regional Education Association (www.seresc.k12.nh.us)
- Squam Lakes Association (www.squamlakes.org)
- Town of Littleton (www.townoflittleton.org)
- Upper Valley Teacher Institute (www.uvti.org)
- USDA Forest Service – International Institute for Tropical Forestry (www.fs.fed.us/international/ip/)
- USDA Forest Service – White Mountain National Forest (www.fs.fed.us/r9/forests/white_mountain)

Professional Development Schools
- Gilford School District
- Newfound Regional School District
- Shaker Regional School District

School District Programs
Plymouth currently offers graduate courses and various district-initiated programs at the following schools/districts:
- Courses in Curriculum and Instruction at: Shaker Regional, Concord, Newfound School District, Gov. Wentworth Schools, Bedford, Hillsboro-Deering, Goffstown, Lebanon, Nashua, Pembroke Academy
- Courses in Mathematics: Auburn, Bartlett, Bedford, Candia, Epping, Governor Wentworth Regional, Haverhill, Hooksett, Hopkinton, Jackson, Laconia, Lincoln-Woodstock, Lyme, Manchester, Merrimack Valley, Nashua, Newfound, Rochester, Salem, Shaker Regional, Timberlane Regional, White Mountain Regional, Winnisquam Regional
• Gilford: Literacy courses, Contemporary Challenges in Arts Education: The Integrated Instructional Model Research Project
• Merrimack Valley: Reading and Writing Specialist Program, Educational Leadership

Higher Education Collaboratives
Courses are offered at the following sites:
• Keene State College (www.ksc.edu)
• New Hampshire Community Technical College – Laconia (www.laconia.tec.nh.us)
• New Hampshire Technical Institute – Concord (www.conc.tec.nh.us)

Higher Education Partnerships
• Dartmouth College (www.dartmouth.edu)
• George Mason University (www.gmu.edu)
• Smithsonian Environmental Research Center (www.serc.si.edu)

Doctoral Program Partnership
• Argosy University of Sarasota, Sarasota, Fla. (www.argosyu.edu)
• Franklin Pierce University (www.fpc.edu)

Distance Learning Courses
Graduate credit is offered for many online courses available through these affiliations:
• American Museum of Natural History (www.amnh.org)
• Association for Supervision and Curriculum Development (www.plymouth.edu/graduate/partnerships/ascd.html)
• Classroom Connect/Connected University (www.classroomconnect.com)
• Education Impact (www.eionline.net)
• INTEL: Teach to the Future (www.intel.com/education/teach/)
• National History Day (www.nationalhistoryday.org)
• New Hampshire Department of Education (www.ed.state.nh.us/education/)
• New Hampshire Public Television/Teacherline (www.nhptv.org/kn/prodel/prodel1.htm)
• OPEN NH/NHDTV (www.nheon.org/opennh)
• Teacher’s Domain (www.teachersdomain.org)
• Virtual High School (www.govhs.org/website.nsf)

New Initiatives
• Bedford School District
• Mascenic Regional High School
• Pathway Staff Development (www.pathwaySD.com)
• SAU 39 Amherst Souhegan Regional

Grants/Partnerships
• Achieving Excellence in Middle School Mathematics Grant
• Career Transformation Grant
• CEIL
• Content Enhancement Grant
• Gates Leadership Grant (SALT)
• Integrated Instruction Model (IIM)
• Making the Transition from High School to College Grant
• New Hampshire Succeeds (PBIS)
• NHHEAF Math Opportunity Grant
• OPEN NH
• PT3 Thinking Maps Grant
Plymouth State University
Administration

PRINCIPAL ADMINISTRATORS

Sara Jayne Steen
President
B.S., Bowling Green State University; M.A., Ohio State University; Ph.D., Bowling Green State University

Julie Bernier
Interim Provost and Vice President for Academic Affairs; Distinguished Graduate Teaching Award, 2003
B.S., M.Ed., Keene State College; Ed.D., University of Virginia

Richard M. Hage
Vice President for Student Affairs
A.A., Fulton-Montgomery Community College; B.S., M.S., SUNY at Albany

William R. Crangle
Vice President for Financial Affairs
B.S., Suffolk University

ASSOCIATE VICE PRESIDENTS

H. David Zehr
Interim Associate Vice President for Undergraduate Studies; Distinguished Teaching Award, 2004
B.A., Pennsylvania State University; M.A., University of Dayton; Ph.D., Kent State University

Dennise M. Maslakowski
Associate Vice President for the College of Graduate Studies; Distinguished Graduate Teaching Award in Education, 2000
B.A., M.A., Incarnate Word College; Ed.D., Virginia Polytechnic Institute and State University

DEANS

Nancy S. Betchart
Dean of the Frost School of Continuing and Professional Studies
B.A., Colorado College; M.S., Ph.D., University of Rochester

Robert E. Fitzpatrick
Dean of the Academic Experience; Distinguished Teaching Award, 2001
B.A., University of New Hampshire; M.S., Simmons College

Timothy C. Keefe
Dean of Students
B.S., SUNY College-Potsdam; M.Ed., Plymouth State College

ADMINISTRATIVE STAFF

Laura L. Alexander
Director of Human Resources
B.S., Michigan Technological University; MBA, Plymouth State College

Catherine S. Amidon
Art Gallery Director
B.A., University of New Hampshire; Diplome d’Etudes Approfondies, Licence and Maîtrise, University of Paris I, Panthéon-Sorbonne; Doctorat, University of Paris I, Panthéon-Sorbonne

Roy H. Andrews
Director of the University Writing and Reading Center,
B.A., Amherst College; M.F.A., University of Virginia

Steve Barba
Executive Director of University Relations
B.A., Michigan State University

John P. Barry
Director of the Math Activities Center; Adjunct Faculty, Mathematics
B.S., M.Ed., CAGS, Plymouth State College, Ed.D., Argosy University

David A. Beronä
Director of Lamson Library
B.S., Wright State University; M.S., Simmons College

Mary E. Campbell
Director of Curriculum Support
A.A., Massachusetts Bay Community College; B.S., Boston State College; M.Ed., Plymouth State College

Gail D. Carr
Director of Continuing Education
B.S., M.Ed., CAGS, Plymouth State College

John E. Clark
Chief of University Police; Adjunct Faculty, Criminal Justice
B.S., Franklin Pierce College; M.Ed., Plymouth State University

John P. Clark
Director of Athletics
B.A., M.Ed., Plymouth State College

Frank L. Cocchiarella
Director of Residential Life/Dining Services
B.S., St. Cloud State University; M.Ed., Plymouth State College

Peter S. Cofran
Coordinator of the Physical Education Center
B.S., M.Ed., Plymouth State College
Leo P. Corriveau
Executive Director for the Certificate of Advanced Graduate Studies Program
B.S., M.Ed., Fitchburg State College; M.A., Providence College; Ph.D., Columbia Pacific University

Stacey Curdie
Director of Online Education; Adjunct Faculty, English
B.A., Plymouth State College; M.A., University of the West Indies; CAGS, Plymouth State University

Karen Sanders
Director of the Child Development and Family Center
B.S., M.Ed., Plymouth State College

Ellen M. Shippee
Director of Physical Plant
B.S., Plymouth State College

June L. Schlabach
Director of Financial Aid
B.S., University of North Dakota; M.A., Ohio State University

Laurie R. Wilcox
Bursar
A.S., Hesser College; ALB, Ed.M., Harvard University

Christopher M. Williams
Director of Public Relations
B.A., Wayne State University; M.A., Michigan State University

GRADUATE FACULTY AND ADJUNCT FACULTY

Judith Adams
Graduate Adjunct Faculty, Literacy
B.A., Mount St. Mary College; M.Ed., Boston University; CAGS, Plymouth State College

Ruthanne Adams
Graduate Adjunct Faculty
B.A., University of Massachusetts–Amherst; M.A.T., University of Vermont

Susan Adams
Graduate Adjunct Faculty
B.S. Indiana University, M.S. Brenau University, Ed.D University of Alabama

Elizabeth Ahl
Department Chair, Associate Professor of English
B.F.A., Emerson College; M.F.A., University of Pittsburgh; Ph.D., University of Nebraska

Genevieve Aichele
Graduate Adjunct Faculty
B.A. University of New Hampshire

Elaine Allard
Associate Professor of Library and Information Science, Graduate Program Coordinator for Library Media Specialist
B.S., Plymouth State College; MLIS, University of Rhode Island

Blakeman Allen
Graduate Adjunct Faculty Heritage Studies, Graduate Program Coordinator for M.Ed Self Designed
B.A., Goucher College; M.Ed. Plymouth State University

Charles B. Allen
Graduate Adjunct Faculty, Business
B.A., Merrimack College; M.S., MBA, New Hampshire College
John E. Allen  
Graduate Adjunct Faculty, Physics  
B.S., U.S. Naval Academy; M.S., Cranfield University (U.K.); Ph.D., University of Maryland

Michael W. Allen  
Graduate Adjunct Faculty, Philosophy  
B.A., University of Southern Maine; M.A., Texas A&M University; Ph.D., Southern Illinois University

Diane Anderson  
Graduate Adjunct Faculty, Technology  
B.A., Colby College; M.A.T., NYC Teachers College

Cathy Apfel  
Graduate Adjunct Faculty  
B.A., New York University; M.Ed., Georgia State University

Randy Armstrong  
Graduate Adjunct Faculty  
B.A., Columbia Pacific University

Elizabeth Arntzen  
Graduate Adjunct Faculty, Adventure Education and Canadian-American Studies  
B.A., University of Maine; M.A., SUNY at Oneonta

Kathleen H. Arecchi  
Department Vice Chair for Music, Professor of Music  
B.A., St. Joseph College; M.M., Eastman School of Music; D.M.A., University of Maryland

Susan Auerbach  
Graduate Adjunct Faculty  
B.A., University of Maryland; M.S., Gallaudet University; Ph.D., Fielding Institute

Maria-Paz Beltran Avery  
Graduate Adjunct Faculty  
B.A., Maryknoll College–Philippines; M.A., Smith College; Ph.D., Boston University

Lourdes Avilés  
Assistant Professor of Meteorology, Faculty-in-Residence, Graduate Program Advisor for Meteorology  
B.S., M.S., University of Puerto Rico; Ph.D., University of Illinois at Urbana–Champaign

Mina Ayers  
Adjunct Faculty  
B.S., University of Connecticut; M.S., New Hampshire College

Richard Ayers  
Graduate Adjunct Faculty  
B.S., Norwich University; M.S., Ed.D., University of Colorado

Roger O. Babin  
Associate Professor of Business  
B.S., Plymouth State College; J.D., Boston College Law School; M.S.T., Bentley College

Scott Bailey  
Graduate Adjunct Faculty, Center for the Environment  
B.S., University of Massachusetts; M.S., University of New Hampshire; Ph.D., Syracuse University

Cheryl Baker  
Director of Graduate Recruitment and Outreach, Graduate Program Coordinator for Adventure Education  
B.S., Framingham State College; M.Ed., CAGS, Plymouth State University

Thomas P. Barbeau  
Graduate Adjunct Faculty, Athletic Training  
B.Ed., M.S., McGill University

John Barry  
Graduate Adjunct Faculty, Mathematics  
A.A., Suffolk Community University; B.S., M.S., CAGS, Plymouth State University; Ed.D., Argosy University

MaryClaire Barry  
Graduate Adjunct Faculty, Curriculum and Instruction  
B.A., North Central College; M.Ed., Notre Dame College

Virginia M. Barry  
Professor of Education; Distinguished Teaching Award 1985  
B.S., Florida State University; M.S., SUNY at Stony Brook and CUNY Queens College; Ph.D., Florida State University

Lynne Clark Bates  
Graduate Adjunct Faculty  
B.S., M.Ed., Plymouth State University

Diane Beaman  
Graduate Adjunct Faculty, Library Media  
B.A., Elmira College; M.S., Lehman; M.L.S., SUNY at Albany

Brian P. Beaudrie  
Associate Professor of Mathematics Education 7–12, Graduate Program Coordinator for Mathematics  
B.S., Mayville State University; M.S., University of North Dakota; Ph.D., Montana State University

Bonnie L. Bechard  
Professor of Business  
B.S., M.S., SUNY at Albany; Ed.D., Arizona State University

Frederic D. “Fritz” Bell  
Graduate Adjunct Faculty  
B.A., Earlham College; M.A., University of Michigan

Philip “Randy” Bell  
Graduate Adjunct Faculty  
B.A., M.Ed., CAGS, University of New Hampshire

William R. Benoit  
Professor Emeritus of Business/Adjunct Faculty, Distinguished Graduate Teaching Award in Business, 2006  
B.G.E., University of Nebraska-Omaha; M.S., University of Southern California; D.B.A., Nova Southeastern University
Julie N. Bernier  
*Interim Provost and Vice President for Academic Affairs; Distinguished Graduate Teaching Award in Education, 2003*
B.S., M.Ed., Keene State College; Ed.D., University of Virginia

Anne R. Bewley  
*Graduate Adjunct Faculty, Health Education*
B.S., Western Oregon State University; M.A., Chapman College; Ph.D., Union Institute

Larry G. Blaine  
*Professor of Mathematics*
B.S., Bowling Green University; M.S., Ph.D., Michigan State University

Marcia Schmidt Blaine  
*Assistant Professor of History, Program Coordinator Heritage Studies*
B.A., College of William and Mary; M.A., Ph.D., University of New Hampshire

Trent E. Boggess  
*Department Chair, Professor of Economics, Graduate Program Coordinator for MBA*
B.A., M.A., Bowling Green University; Ph.D., University of Kansas

Richard Boivert  
*Graduate Adjunct Faculty*
B.A., Beloit College; M.A., Ph.D., University of Kentucky

Danielle Bolduc  
*Graduate Adjunct Faculty, Technology*
B.S., M.Ed., Plymouth State University

Barbara Boschmans  
*Assistant Professor of Mathematics Education K–8*
B.S., M.A.T., Ed.D., Northern Arizona University

Maria E. Bove  
*Internship Supervisor, Education*
B.S., College of St. Joseph; M.Ed., Boston College; D.Ed., University of Vermont

A. Joan Bowers  
*Graduate Adjunct Faculty, English*
B.A., University of Nebraska; M.A., Cornell University

Daniel Bramer  
*Graduate Adjunct Faculty, Technology*
B.S., Iowa State University; M.S., University of Illinois

Lee Anna Brazell  
*Graduate Adjunct Faculty*
B.A., Notre Dame College; M.Ed., Plymouth State University

Nancy Brennan  
*Graduate Adjunct Faculty*
B.A., University of New Hampshire; M.A., Emerson College

Lorraine H. Bresnahan  
*Graduate Adjunct Faculty, Literacy*
B.S., Plymouth State University; M.Ed., Antioch New England Graduate School

Colleen C. Brickley  
*Contract Faculty, Business; Distinguished Graduate Teaching Award in Business, 2005*
B.A., University of Delaware; M.A., University of New Hampshire

Samuel Brickley  
*Assistant Professor of Business Law*
A.B., Cornell University; M.B.A., J.D., University of San Diego

James Brough II  
*Graduate Adjunct Faculty*
B.S., Keene State College; M.Ed., Plymouth State University

Rebecca Brown  
*Graduate Adjunct Faculty, Health Education*
B.S., Brigham Young University; M.A., Northern Arizona University; CAGS, Ed.D., Brigham Young University

Paul M. Buck  
*Professor of Accounting*
B.A., Allegheny College; M.S., Northeastern University; C.P.A

Stacey Buckley  
*Graduate Adjunct Faculty*
B.A., Syracuse University; M.Ed., Tufts University; CAGS Plymouth State University

Mardie E. Burckes-Miller  
*Professor of Health Education, Director of the Eating Disorders Institute*
B.S., University of Vermont; M.S., University of Oregon; Ed.D., Oklahoma State University

Patricia P. Bushey  
*Graduate Adjunct Faculty*
B.S., Stephen F. Austin State University; M.Ed., Plymouth State University

Gerard E. Buteau  
*Associate Professor of Education; Graduate Program Coordinator of Early Childhood Education*
B.S., M.Ed., Plymouth State College; Ed.D., Boston University

Mehmet Canlar  
*Professor of Accounting*
B.S., Cornell University; MBA, New York University; Ph.D., Hacettepe University

Patricia A. Cantor  
*Department Chair, Professor of Education; Distinguished Teaching Award 2002*
B.A., Harvard University; M.Ed., Plymouth State College; Ed.D., Boston University

Charles Carter  
*Graduate Adjunct Faculty, Athletic Training*
B.S., Bridgewater State College

Dean Cascadden  
*Graduate Adjunct Faculty*
A.B., Dartmouth College; M.A. Ed., Regent University; Ed.D., College of William and Mary
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Education Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavel Cenkl</td>
<td>Graduate Adjunct Faculty</td>
<td>B.A., Brandeis University; M.A., University of New Hampshire; Ph.D., Northeastern University</td>
</tr>
<tr>
<td>Christopher C. Chabot</td>
<td>Professor of Biology, Graduate Program Advisor for Biology</td>
<td>B.A., Colby College; Ph.D., University of Virginia</td>
</tr>
<tr>
<td>Robert Champlin</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., Rhode Island College; M.Ed., CAGS, Plymouth State University</td>
</tr>
<tr>
<td>William Church</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., Binghamton University; M.A.T., Cornell University</td>
</tr>
<tr>
<td>John E. Clark</td>
<td>Chief of University Police; Graduate Adjunct Faculty</td>
<td>B.S., Franklin Pierce College; M.Ed., Plymouth State University</td>
</tr>
<tr>
<td>Pamela Clark</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., Keene State College; M.Ed., Plymouth State College; CAGS, Ph.D. University of New Hampshire</td>
</tr>
<tr>
<td>Susan Clark</td>
<td>Contract Faculty, Health Education</td>
<td>B.S., Plymouth State College; M.Ed., Springfield College</td>
</tr>
<tr>
<td>Barbara Clarke</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., M.Ed., Monash University; Ph.D., University of Wisconsin–Madison</td>
</tr>
<tr>
<td>Doug Clarke</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., M.Ed., Monash University; Ph.D., University of Wisconsin</td>
</tr>
<tr>
<td>Laura Clauss</td>
<td>Graduate Adjunct Faculty</td>
<td>R.N., Allentown Hospital School of Nursing; B.S., New England College</td>
</tr>
<tr>
<td>Caroline Cohen</td>
<td>Graduate Adjunct Faculty</td>
<td>B.A., Ithaca College; M.S., College of New Rochelle; Ph.D., University of Connecticut</td>
</tr>
<tr>
<td>Rose Colby</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., Emmanuel College; M.S., CAGS, Rivier College</td>
</tr>
<tr>
<td>Judith Coleman</td>
<td>Graduate Adjunct Faculty</td>
<td>B.A., Syracuse University; M.P.A., University of New Hampshire; M.A., Antioch/New England Graduate School</td>
</tr>
<tr>
<td>Katherine Coltin</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S. University of New Hampshire</td>
</tr>
<tr>
<td>Theodore Comstock</td>
<td>Graduate Adjunct Faculty, School Law</td>
<td>B.A., College of Idaho; M.A., University of Oregon; J.D. Franklin Pierce Law Center</td>
</tr>
<tr>
<td>Daniel Cook</td>
<td>Graduate Adjunct Faculty, Special Education</td>
<td>B.S., Shorter College; M.Ed., CAGS, Plymouth State College; Ph.D. Argosy University</td>
</tr>
<tr>
<td>Gerard J. Corcoran Jr.</td>
<td>Professor of Music, Band Director; Graduate Program Coordinator for Instrumental Music Education</td>
<td>B.A., University of Maine; M.S., Ed.D., University of Illinois</td>
</tr>
<tr>
<td>Mary Cornish</td>
<td>Assistant Professor of Early Childhood Education</td>
<td>B.S., University of Maine; M.Ed., Tufts University; Ph.D., University of North Carolina</td>
</tr>
<tr>
<td>Leo Corriveau</td>
<td>Executive Director for the Certificate of Advanced Graduate Studies Program</td>
<td>B.S., Fitchburg State College; M.A., Providence College; M.Ed., Fitchburg State College; Ph.D., Columbia Pacific University</td>
</tr>
<tr>
<td>L. Michael Couvillion</td>
<td>Associate Professor of Economics; Distinguished Graduate Teaching Award in Business, 2000</td>
<td>B.A., MBA, Ph.D., Louisiana Technical University</td>
</tr>
<tr>
<td>Elizabeth A. Cox</td>
<td>Assistant Professor of Acting, Director of Theatre</td>
<td>B.A., M.Ed., University of Missouri; M.F.A., University of North Carolina</td>
</tr>
<tr>
<td>Catherine Crane</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., Plymouth State College; L.M.S., Clarion University</td>
</tr>
<tr>
<td>Nancy Cristiano</td>
<td>Graduate Adjunct Faculty, Library Media</td>
<td>B.S., Plymouth State College</td>
</tr>
<tr>
<td>Eric Cromwell</td>
<td>Graduate Adjunct Faculty, Technology</td>
<td>B.S., Shippensburg University; M.A., College of Notre Dame of Maryland</td>
</tr>
<tr>
<td>Irene Cucina</td>
<td>Assistant Department Chair, Associate Professor of Health and Physical Education; Graduate Program Coordinator for Health and Physical Education</td>
<td>B.S., Northeastern University; M.Ed., Cambridge College; D.P.E., Springfield College</td>
</tr>
<tr>
<td>Janet Curcio-Wilson</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., Southern Connecticut State College; M.Ed. Antioch New England Graduate School</td>
</tr>
</tbody>
</table>
Cynthia Currier  
*Graduate Adjunct Faculty*

Sarah Curtis  
*Graduate Adjunct Faculty, Psychology*  
B.A., Dartmouth College; M.Ed., Antioch New England Graduate School

Judith D’Aleo  
*Professional Staff Technical Specialist, Biology; Adjunct Faculty*  
B.A., M.A., SUNY at Geneseo

Lauren Dadmun  
*Graduate Adjunct Faculty, Art*  
B.A., Plymouth State College; M.A.T., University of New Hampshire

Laura Daily  
*Graduate Adjunct Faculty*  
B.S., University of Maine at Farmington; M.Ed. University of North Carolina at Chapel Hill; CAGS, Plymouth State College

Gary Davidson  
*Graduate Adjunct Faculty*  
B.A. University of Illinois; M.A. Hollins College

C. Lynn Davis  
*Associate Professor of Education*  
B.A., Graceland College; M.Ed., Plymouth State College; Ph.D., Lesley College

Jay Davis  
*Graduate Adjunct Faculty, Curriculum and Instruction*  
B.A., Dartmouth College; M.A., Brown University

Kenneth DeBenedictis  
*Graduate Adjunct Faculty*  
B.S., Northeastern University; M.Ed., CAGS, Boston University; Ph.D., Boston College

Rosabel W. Deloge  
*Graduate Adjunct Faculty*  
B.A., University of New Hampshire; M.S., University of Wisconsin–Madison; CAGS, University of New Hampshire

James Desmarais  
*Graduate Adjunct Faculty, Athletic Administration*  
B.S., Nasson College; M.Ed., Keene State College; CAGS, University of New Hampshire

Allan DiBiase  
*Graduate Adjunct Faculty, Philosophy*  
B.A., Wagner College; M.Ed., Ed.D., Rutgers University

Paula Dickinson  
*Graduate Adjunct Faculty*  
B.A., Mount Saint Mary College; M.Ed, Boston University

Katherine C. Donahue  
*Professor of Anthropology-Sociology; Distinguished Teaching Award, 1997*  
B.A., Connecticut College; M.A., Ph.D., Boston University

Maura Dougherty  
*Graduate Adjunct Faculty, Education*  
B.S., University of Minnesota; M.Ed Boston College; M.Ed Plymouth State University

John T. Downs  
*Professor of Art*  
B.A., M.A., University of Miami; M.F.A., Florida State University

Elizabeth Dubois  
*Graduate Adjunct Faculty*  
B.S., Keene State College; M.Ed., Southern Illinois University

Judith Dunnan  
*Graduate Adjunct Faculty*  
B.A., M.S., University of New Hampshire

Kelley Eaton  
*Graduate Adjunct Faculty, Athletic Training*  
B.S., University of New Hampshire; M.S. Springfield College

Brian W. Eisenhauer  
*Assistant Professor of Sociology; Associate Director of the Center for the Environment; Graduate Program Advisor for Environmental Science and Policy*  
B.A., Colorado State University; M.A., Humboldt State University; Ph.D., Utah State University

Angel A. Ekstrom  
*Graduate Adjunct Faculty, Adventure Education; Program Coordinator of Adventure-Based Activities*  
A.A., Anoka Ramsey Community College; B.S., Southwest State University; M.S., University of Nebraska at Omaha; CAGS, Plymouth State University

Eugene Elander  
*Graduate Adjunct Faculty, Economics*  
B.S., Bowling Green State University; M.A., University of Pennsylvania

Bonnie W. Epstein  
*Assistant Department Chair; Associate Professor of English*  
B.A., M.Ed., Plymouth State College; Ph.D., Union Institute

Patricia Erwin  
*Graduate Adjunct Faculty*  
A.B., M.L.I.S., Indiana University; M.S., Marlboro College

Richard C. Evans  
*Professor of Mathematics; Graduate Program Advisor for Mathematics; Distinguished Teaching Award, 1992*  
B.Ed., Plymouth State College; M.A.T., Brown University; Ph.D., University of Wisconsin–Madison

Paul Ezen  
*Graduate Adjunct Faculty*  
B.S., Worcester State College; M.Ed., Montana State University; Ed.D., Montana State University

Shirley Ferguson  
*Graduate Adjunct Faculty*  
B.S., Keuka College; M.A., University of West Florida at Pensacola
Keith R. Ferland  
*Professor of Mathematics*

B.A., University of Maine; M.A., Ph.D., University of Massachusetts

Gaye Fedorchak  
*Graduate Adjunct Faculty, Special Education*

B.S., M.S., CAGS, State University of New York

Linda Ferruolo  
*Graduate Adjunct Faculty*

B.A., M.Ed., Plymouth State College

Mark Fischler  
*Contract Faculty, Criminal Justice*

B.A., University of New Hampshire; J.D., University of Maine

Michael L. Fischler  
*Professor of Education; Director of the Counseling and Human Relations Center; Distinguished Graduate Teaching Award in Education, 2004*

B.Ed., M.Ed., University of Miami; Ed.D., University of Colorado

Wavell W. Fogleman  
*Professor of Chemistry*

B.S., University of North Carolina at Chapel Hill; Ph.D., Tulane University

Jane Forde  
*Graduate Adjunct Faculty*

B.A., Middlesex University; M.A., University of New York

Carol Foss  
*Graduate Adjunct Faculty, Center for the Environment*

B.A., Colby College; M.S., University of Connecticut; Ph.D., University of Maine

Elizabeth Foy  
*Graduate Adjunct Faculty*

B.A., Kenyon College; M.Ed, CAGS, Plymouth State University

Katharine G. Fralick  
*Professor of Education*

B.A., Salve Regina University; M.Ed., Ed.D., Boston University

Richard A. Fralick  
*Professor of Biology*

B.A., Salem State College; M.S., Ph.D., University of New Hampshire

Grace M. Fraser  
*Associate Professor of Anthropology-Sociology*

B.A., University of Utah; M.A., Ph.D., University of Massachusetts

Ethel Gaides  
*Graduate Adjunct Faculty*

B.S., Eastern Nazarene College; M.Ed., Bridgewater State College; CAGS, Plymouth State College

Suzan Gannett  
*Graduate Adjunct Faculty, Elementary Education*

B.A., Ohio Wesleyan University; M.Ed., Plymouth State College

Marie-Therese Gardner  
*Contract Faculty, French*

Baccalaureate Pt. I, University of Paris, France; B.A., Boston University; M.A., Boston College

James Gaylord  
*Graduate Adjunct Faculty*

Richard Gerken  
*Graduate Adjunct Faculty, Business*

A.B., Cornell University; J.D., University of Connecticut, School of Law

Nancy Gerzon  
*Graduate Adjunct Faculty, Curriculum and Instruction*

B.A., SUNY at Stony Brook; M.A., Rivier College

Steven Glazer  
*Graduate Adjunct Faculty, Heritage Studies*

B.A., Union College; M.A., University of Chicago

Gary E. Goodnough  
*Professor of Counselor Education; Graduate Program Coordinator for Counselor Education*

B.S., University of Delaware; M.Ed., Ph.D., University of Virginia

Dean Goodwin  
*Graduate Adjunct Faculty, Curriculum and Instruction*

B.S., University of Salford, England; Ph.D. University of Leicester, England

Gaye Gould  
*Assistant Professor of Linguistics-ESL; Graduate Program Coordinator for TESOL*

B.A., M.A., Ph.D., Hong Kong University

Charlotte Greenhalgh  
*Graduate Adjunct Faculty*

B.A., University of Vermont; M.S., Simmons College

Linda Griffin  
*Graduate Adjunct Faculty*

B.S., Black Hills State University; M.S., Ithaca College; Ph.D., The Ohio State University

Linn Lee Griffishts  
*Graduate Adjunct Faculty*

B.S., York College of Pennsylvania; M.Ed., Loyola College in Maryland

Heather Hamilton  
*Graduate Adjunct Faculty, Theatre*

B.A. Plymouth State College; M.A. University of California Santa Barbara

June Hammond-Rowan  
*Graduate Adjunct Faculty, Center for the Environment*

B.A., University of Chicago; M.A., University of Colorado

Edward Harding  
*Professor of Business*

A.B., Middlebury College; MBA, Dartmouth College; Ph.D., University of Massachusetts
Linda Hassan  
Graduate Adjunct Faculty, Counseling  
B.A., Suffolk University; M.S., Ph.D., Syracuse University

William C. Haust  
Professor of Art Education; Graduate Program Coordinator for Art Education  
B.S., SUNY at Buffalo; M.F.A., Goddard College; Ed.D., Nova University

Mary Heath  
Graduate Adjunct Faculty  
B.A., Notre Dame College; M.Ed., Rivier College; M.Ed.; CAGS, University of New Hampshire

Stephen Heath  
Graduate Adjunct Faculty  
B.S., M.Ed., Plymouth State College

R. Glen Hedelson  
Graduate Adjunct Faculty  
B.S., M.S., Towson University

Chehalis Hegner-Melloni  
Graduate Adjunct Faculty, Art  
M.A., Berklee College of Music; M.F.A., Art Institute of Boston at Lesley University

Robert Heiner  
Assistant Department Chair, Professor of Anthropology-Sociology  
B.A., University of Virginia; M.S., Florida State University; Ph.D., University of Virginia

Marcia Herrin  
Graduate Adjunct Faculty  
B.S., University of Montana; M.P.H., University of California-Berkeley; M.Ed., Ph.D., Columbia University

Kenneth H. Heuser  
Professor of Education  
B.A., M.A., Illinois State University; Ed.D., University of Illinois

Cathy Giebitz Higgins  
Graduate Adjunct Faculty, Technology  
B.A., North Park College; M.Ed University of Massachusetts-Amherst; CAGS, Plymouth State University

Robert Hlasny  
Graduate Adjunct Faculty, Counseling  
B.A., Boston College; M.A., Xavier University; Ph.D., University of Ottawa

Brendon Hoch  
Meteorology Technical Manager; Graduate Adjunct Faculty; Graduate Program Advisor for Meteorology  
B.S., Rutgers University; M.S., Ohio State University

Eric Hoffman  
Associate Professor of Meteorology; Graduate Program Advisor for Meteorology  
B.S., Cornell University, M.S., PhD, SUNY–Albany

Paul Hogan  
Graduate Adjunct Faculty  
B.S., M.Ed., Plymouth State College

Robin Hogan  
Graduate Adjunct Faculty  
B.S., University of New Hampshire; M.Ed, CAGS, Plymouth State University

Whitney Howarth  
Assistant Professor of History  
B.A., Moravian College; M.A., Northeastern University; Ph.D., Northeastern University

Ross Humer  
Graduate Adjunct Faculty  
B.S., Pennsylvania University; MBA, Boston University

Richard W. Hunnewell  
Professor of Art History; Distinguished Teaching Award, 1994  
B.A., Colby College; Ph.D., Boston University

Peter Hutchins  
Graduate Adjunct Faculty

Shirley Jacob  
Graduate Adjunct Faculty  
B.S., Bridgewater State College; M.Ed., Plymouth State College

Soo M. Jang  
Professor of Economics  
B.A., M.A., Seoul National University; MBA, University of Hawaii; Ph.D., University of Cincinnati

Deborah John  
Assistant Professor of Physical Education  
B.A., University of New Orleans; M.S., University of West Florida; Ph.D. Oregon State College

Kevin Johnson  
Graduate Adjunct Faculty, Curriculum and Instruction  
B.S., M.Ed., Plymouth State College; CAGS, University of New Hampshire; Ed.D., William Howard Taft University

Carol Jowdy  
Graduate Adjunct Faculty, Art  
B.A., University of New Hampshire; M.F.A., University of Pennsylvania

Mark V. Joyce  
Graduate Adjunct Faculty  
B.A. Niagara University; M.Ed. University of New Hampshire, Ed.D. Boston College

Jeffrey “Steve” Kahl  
Graduate Faculty; Director of the Center for the Environment; Graduate Program Coordinator for Environmental Science and Policy  
B.S., M.S., Ph.D., University of Maine
Nancy Keane  
Graduate Adjunct Faculty, Library Media  
B.A., University of Massachusetts; M.L.S., University of Rhode Island; M.A., George Washington University

Melissa Keenan  
Graduate Adjunct Faculty, Reading and Writing  
B.A., Vassar College; M.S., University of Pennsylvania; Ed.D. University of Maine

Esther Kennedy  
Graduate Adjunct Faculty  
B.S., Mansfield University; M.S., Antioch New England Graduate School

David L. Kent  
Professor Emeritus of Business; Distinguished Graduate Teaching Award in Education, 2001  
B.S., University of New Hampshire; MBA, Northeastern University; J.D., Boston College Law School

Jeffrey Kent  
Graduate Adjunct Faculty

Jong-Yoon Kim  
Assistant Professor, Graphic Design  
B.F.A., Hong-Ill University, Korea; M.F.A., Indiana State University

Kathleen Kimball  
Graduate Adjunct Faculty  
B.A., California State University; B.F.A., Maine College of Art; M.A., University of Arizona; Ph.D., Union Institute and University

Marjorie A. King  
Assistant Professor of Athletic Training; Graduate Program Coordinator for Athletic Training  
B.S., University of New Hampshire; B.S., Simmons College; M.S., University of Massachusetts, Amherst; Ph.D., University of Virginia

Dennis Kirkwood  
Graduate Adjunct Faculty, Science  
B.S., McDaniel College; M.S.Ed., Northern Illinois University; Ed.D., University of Maryland

Lois Knapton  
Graduate Adjunct Faculty  
B.S., East Carolina University; M.Ed., CAGS, Plymouth State College; Ed.D., Argosy University

Alan Knobloch  
Graduate Adjunct Faculty  
B.S., Boston University; M.Ed., CAGS, Plymouth State College

James Koermer  
Professor of Meteorology; Director of the Judd Gregg Meteorology Institute; Graduate Program Coordinator for Meteorology  
B.S., University Of Maryland; M.S., Ph.D., University of Utah

Frank J. Kopczynski  
Professor of Accounting  
B.S., United States Military Academy West Point; MBA, Plymouth State College; Ph.D. Union Institute

Carol Kosnitsky  
Graduate Adjunct Faculty  
B.S., M.Ed., University of New Hampshire

Barbara Krol-Sinclair  
Graduate Adjunct Faculty  
B.A., Case Western Reserve University; Ed.M., Ed.D., Boston University

John Kruckenberg  
Associate Professor of History  
B.A., Macalester College; M.A., Ph.D., University of Arizona

Adam Kurowski  
Graduate Adjunct Faculty  
B.S. Plymouth State College, M.S. Ohio University

J Jacqueline Labate  
Graduate Adjunct Faculty, Mathematics  
B.A., M.A., Vermont College of Norwich University

Scott A. Laliberte  
Graduate Adjunct Faculty, Integrated Arts  
B.A., University of New Hampshire, M.Ed., Plymouth State College

Michael Lancor  
Adjunct Faculty, School Law  
B.S., SUNY at Plattsburgh; M.S., SUNY at Albany

William Lander  
Graduate Adjunct Faculty  
B.L.S., M.Ed. Boston University; CAGS, Plymouth State College

Judith Lavoie  
Graduate Adjunct Faculty  
B.S., Clarion University; M.Ed., University of New Hampshire

Marcel R. Lebrun  
Assistant Professor of Curriculum and Instruction; Graduate Program Coordinator for Special Education and Learning Disabilities  
B.Ed., B.A., M.Ed., University of Manitoba; Ph.D., University of San José

Anita Lee  
Assistant Professor of Physical Education  
B.A., Hong Kong Baptist University; M.S., D.P.E. Springfield College

Rachel Lehr  
Graduate Adjunct Faculty  
B.A., Barnard College; M.A., University of Chicago

Vedran Lelas  
Assistant Professor of Business, Quantitative Methods and Statistics  
B.S., University of Zagreb (Croatia); Ph.D., University of Texas at Austin

David M. Leuser  
Professor of Business  
B.A., Drew University; M.A., Ph.D., University of New Hampshire
Linda Levy  
*Department Chair, Assistant Professor of Athletic Training*  
A.S., Mount Ida College; B.S., M.Ed., Keene State College; CAGS, Plymouth State University; Ed.D. Argosy University

Patricia L. Lindberg  
*Professor of Education and Integrated Arts; Graduate Program Coordinator for Integrated Arts; Distinguished Teaching Award 2003*  
B.A., B.S., University of New Hampshire; M.A., Emerson College; Ph.D., New York University

Lisa M. Lindgren  
*Instructor of Marketing*  
B.A., University of Minnesota; MBA, University of St. Thomas

Leisl Lindley  
*Professional Staff, Athletic Trainer*  
B.S., Appalachian State University; M.A., Furman University

Judith Lister  
*Graduate Adjunct Faculty, Health Education, PATH Institute*  
B.A., M.A., University of New Hampshire; Ed.D., University of Massachusetts

Robert Lister  
*Graduate Adjunct Faculty, Special Education and Administration*  
B.S., Keene State College; M.A., University of New Hampshire; Ed.D., Vanderbilt University

Raymond Lobdell  
*Graduate Adjunct Faculty, Center for the Environment*  
B.A., University of Vermont; M.S., University of New Hampshire

Barbara Lopez-Mayhew  
*Department Chair, Associate Professor of Spanish, Graduate Program Coordinator for Foreign Language*  
B.A. Catholic University of America; M.A. University of Massachusetts; Ph.D. Boston College

Jon Maatta  
*Department Chair, Professor of Mathematics*  
B.S. SUNY at Cortland, M.S., Ph.D. Cornell University

Barton L. Macchiette  
*Professor of Marketing, Marketing Coordinator*  
B.S., Nasson College; MBA, American University; Ph.D., Union Graduate School

Linda MacBride  
*Graduate Adjunct Faculty*  
B.A., Gordon College; M.Ed., Notre Dame College; CAGS, University of Massachusetts

David Mackey  
*Department Chair, Associate Professor of Criminal Justice, Graduate Program Coordinator for Criminal Justice*  
B.S., M.A., University of Lowell; Ph.D., Indiana University of Pennsylvania

Leah MacLeod  
*Graduate Adjunct Faculty*  
B.A. University of New Hampshire; M.Ed. Notre Dame College; CAGS, Plymouth State College

Robert MacLeod  
*Graduate Adjunct Faculty*  
B.S., MBA, Plymouth State College; D.H.A., Medical University of South Carolina

Deborah Mahar  
*Graduate Adjunct Faculty*  
B.F.A., University of Massachusetts

Diane Maheux  
*Graduate Adjunct Faculty, Business*  
B.S., M.B.A., Plymouth State College

Kathleen Malmbend  
*Graduate Adjunct Faculty*  

Michael Martin  
*Graduate Adjunct Faculty*  
B.S., M.Ed., M.B.A., Plymouth State College; Ed.D., George Peabody College of Vanderbilt University

James Martland  
*Graduate Adjunct Faculty*  
B.S., Chester College; M.Ed., The University of Liverpool

Carla Maslakowski  
*Graduate Adjunct Faculty, Health Education*  
B.S. in Pharmacy, Creighton University; M.S. in Hospital Pharmacy, University of Kansas; M.Ed. Plymouth State College

Dennise M. Maslakowski  
*Associate Vice President of the College of Graduate Studies; Graduate Program Coordinator for Reading & Writing Specialist; Special Education & Learning Disabilities; Distinguished Graduate Teaching Award in Education, 2000*  
B.A., M.A., Incarnate Word College; Ed.D., Virginia Polytechnic Institute and State University

Warren E. Mason  
*Professor of Business and Communication Studies; Marketing Coordinator; Distinguished Graduate Teaching Award in Business, 2003*  
B.A., St. Anselm College; M.A., Rivier College; Ed.D., Boston University

Kathleen McCabe  
*Graduate Adjunct Faculty*  
B.S., M.Ed., M.B.A., Plymouth State College

Barbara J. McCahan  
*Associate Professor of Health and Physical Education*  
B.A., Revelle College, University of California; M.A., Ph.D., University of California

Kathleen McClaskey  
*Graduate Adjunct Faculty*  
B.A. University of Massachusetts; M.Ed., Lesley College
David McDonald  
Graduate Adjunct Faculty, Astronomy  
B.A. Gordon College; M.Ed., University of New Hampshire

Douglas McDonald  
Graduate Adjunct Faculty  
B.S., M.Ed., Keene State College; CAGS, University of New Hampshire; Ed. D. George Peabody College of Vanderbilt University

Duncan C. McDougall  
Professor of Business; Distinguished Graduate Teaching Award in Business, 2004  
A.B., Amherst College; MBA, D.B.A., Harvard Business School

James J. McGarry  
Professor of Psychology  
B.A., Ph.D., Kent State University

Mary Ann McGarry  
Graduate Faculty, Center for the Environment, Graduate Program Advisor for Environmental Science and Policy, and for Science Education  
B.A., Dartmouth College; M.S. Northern Arizona University; Ed.D., University of Maine

Eric McGee  
Graduate Adjunct Faculty

Kevin McGuire  
Research Assistant, Professor of Hydrology, Graduate Program Advisor for Environmental Science and Policy  
B.S., Susquehanna University; M.S., Pennsylvania State University; Ph.D. Oregon State University

Heather McNally  
Graduate Adjunct Faculty  
B.S., Keene State College; M.Ed, Antioch New England College; Ph.D. Columbia Pacific University

Raymond McNulty  
Graduate Adjunct Faculty  
B.S., Bridgewater State College; M.Ed., Johnson State College; CAGS, University of Vermont

Gail Mears  
Associate Professor of Counselor Education; Graduate Program Coordinator for Human Relations and Mental Health Counseling  
B.A., Plymouth State College; M.Ed., CAGS, University of New Hampshire; Psy.D., Antioch University

Robert S. Miller  
Professor of Education; Distinguished Teaching Award 1989  
A.B., Amherst College; Ph.D., Dartmouth College

Samuel Miller  
Contract Faculty, Meteorology; Graduate Program Advisor for Meteorology  
B.S., M.Sc., Ph.D. University of New Hampshire

Katherine Min  
Graduate Adjunct Faculty, English  
B.A., Amherst College; M.S., Columbia University

Annette Mitchell  
Professor of Art  
B.F.A., University of Denver; M.A., M.F.A. University of Alabama

Barbara Mitchell  
Contract Faculty, Spanish  
B.A., Northeastern University; M.A., Middlebury College

Clay Mitchell  
Graduate Adjunct Faculty, Center for the Environment  
B.A. University of Arizona; M.S.E.L., J.D., Vermont Law School

Michael Moffett  
Graduate Adjunct Faculty  
B.S., M.Ed., Plymouth State College

Daniel P. Moore  
Professor of Business; Program Coordinator of Graduate Studies in Business  
B.A., Kent State University; MBA, Youngstown State University; Ph.D., Drexel University

Tom Moore  
Graduate Adjunct Faculty

Michael Morgan  
Graduate Adjunct Faculty  
B.A., University of Notre Dame; M.Ed., Plymouth State College; CAGS, University of New Hampshire

Constance Morrison  
Graduate Adjunct Faculty, Business Law  
B.S., M.S. Fitchburg State College; MBA, Anna Maria College; J.D., New England School of Law

Irene Mosedale  
Contract Faculty, Education  
B.S., M.Ed. Plymouth State College

Jay Moskowitz  
Graduate Adjunct Faculty, Art  
B.S., M.Ed., Plymouth State College

Terence M. Murphy  
Assistant Professor of Business  
B.S. Merrimack College; MBA, Suffolk University

Linda Navelski  
Graduate Adjunct Faculty  
B.S., Russell Sage College; M.Ed., University of New Hampshire; CAGS, University of Southern Maine

Kathleen Norris  
Director of Graduate Programs, Assessment and Admissions  
B.A. Boston College; M.F.A. University of Alaska; CAGS, Plymouth State University; C.A.S. Claremont Graduate University; Ed.D., University of Sarasota

Susan Noyes  
Graduate Adjunct Faculty, Curriculum and Instruction  
B.A., Notre Dame College; M.Ed., CAGS, University of New Hampshire
Catherine O’Brien
Graduate Adjunct Faculty
B.A., Alma College; M.A., University of New Hampshire

Marilyn O’Connell
Graduate Adjunct Faculty
B.A., Wellesley College; J.D., Boston University

Robert J. O’Donnell
Graduate Adjunct Faculty
B.S., University of California at Berkeley; J.D., Boston College

April O’Keefe
Graduate Adjunct Faculty
B.S., University of New Hampshire; M.Ed., Plymouth State College

Mark Okrant
Professor of Geography and Tourism Development; Director of Institute of New Hampshire Studies; Graduate Program Advisor for Environmental Science and Policy
B.S., M.S., Southern Connecticut State College; Ed.D., Oklahoma State University

Wendy Oellers
Graduate Adjunct Faculty, Art
B.S., University of Maine at Orono, M.Ed., Antioch New England Graduate School

Holly Oliver
Graduate Adjunct Faculty, Music
B.M. University of New Hampshire; M.Ed. Plymouth State College

Monika Ostroff
Graduate Adjunct Faculty
B.A., Wellesley College; M.S.W. Boston College

Darin Padua
Graduate Adjunct Faculty, Athletic Training
B.S., San Diego State University; M.A., University of North Carolina at Chapel Hill; Ph.D., University of Virginia

Eleanor Papazoglou
Graduate Adjunct Faculty
B.A., M.Ed., Keene State College; CAGS, Plymouth State College

John Pappalardo
Graduate Adjunct Faculty

P. Alan Pardy
Graduate Adjunct Faculty
B.S., M.A., University of New Hampshire; Ed.D., Boston University

Mary Anne Peabody
Graduate Adjunct Faculty
B.S., M.S.W., University of Utah; CAGS, University of South Maine

Daniel R. Perkins
Professor of Music
B.M.A., Brigham Young University; M.M., D.M.A., University of Southern California

Robin M. Peters
Graduate Adjunct Faculty, Health Education
A.S., Pennsylvania State University; B.A., M.Ed., Plymouth State College

Meg J. Petersen
Professor of English; Graduate Program Coordinator for English Education, Distinguished Teaching Award 2000; Distinguished Graduate Teaching Award in Education, 2006
B.A., Franklin Pierce College; Ph.D., University of New Hampshire

Richard C. Pfenninger
Professor of Music
B.M., Eastman School of Music; M.M., University of Michigan School of Music; D.M.A., Temple University

Melissa Pierre
Graduate Adjunct Faculty, Literacy
B.S., Worcester State College, M.A., Case Western Reserve University

James Pietrowski
Graduate Adjunct Faculty, Technology
B.S., Keene State College; MBA, Plymouth State College; M.S., Capitol College

Dennis Pope
Graduate Adjunct Faculty
B.S., M.Ed., CAGS, University of New Hampshire

Shawn Powers
Graduate Adjunct Faculty
B.F.A., New York University; M.A., Columbia University; CAGS, Plymouth State College

William Preble
Graduate Adjunct Faculty
B.A., New England College; M.Ed., University of Washington; Ed.D., University of Maine

Michael Prentice
Graduate Adjunct Faculty, Center for the Environment; Graduate Program Advisor for Environmental Science and Policy
B.A., Princeton University; M.S. University of Maine; Ph.D. Brown University

Fernand Prevost
Graduate Adjunct Faculty, Mathematics
B.S., Keene State College; M.Ed., University of New Hampshire; Ed.D. Boston University

Frederick Prince
Professor of Anatomy; Graduate Program Advisor for Biology
B.S., Pennsylvania State University; M.S., Ph.D., Ohio University

Nancy J. Puglisi
Graduate Adjunct Faculty, Director of the Paths and Approaches to Transformation and Healing (PATH) Institute
B.S., Keene State College; M.Ed. Plymouth State College; Ph.D., The Union Institute and University
Jeffrey R. Raff  
Graduate Adjunct Faculty  
B.S., James Madison University; M.Ed., Loyola College

Millie Rahn  
Graduate Adjunct Faculty, Heritage Studies  
B.A., University of Maryland; M.A., The Memorial University of Newfoundland

George S. Reid  
Graduate Adjunct Faculty  
B.S., Emerson College; M.S., University of Maine; Ed.D., Nova University

Leonard J. Reitsma  
Department Chair, Professor of Zoology; Graduate Program Coordinator for Biology; Distinguished Teaching Award, 2005  
B.S., William Paterson College; Ph.D., Dartmouth College

Anita Remig  
Graduate Adjunct Faculty  
B.A. Indiana University; M.Ed. Georgia State University; Ed.D. Rutgers University

Elizabeth Richards  
Graduate Adjunct Faculty  
B.A., Salem State College; M.Ed., University of New Hampshire

William J. Roberts  
Professor of Mathematics  
B.S., University of Massachusetts; M.Ed., University of Hartford; C.A.S., Wesleyan University; Ed.D., University of Massachusetts

Royce L. Robertson  
Assistant Professor of Curriculum and Instruction; Graduate Program Coordinator for Computer Technology Education  
B.S., Western Michigan University; M.Ed., CAGS, Plymouth State College, Ed.D. Argosy University

Paul W. Rogalus  
Professor of English  
B.A., University of Rhode Island; M.A., Boston College; Ph.D., Purdue University

Kent Rosberg  
Graduate Adjunct Faculty  
B.S., Plymouth State College; M.A., CAGS, University of New Hampshire

John M. Rosene  
Associate Professor of Physical Education  
B.S., Keene State College; M.S., Southern Connecticut State University; D.P.E., Springfield College

Marie Ross  
Graduate Adjunct Faculty  
B.A., M.Ed., Notre Dame College; CAGS, Rivier College

Norma Roth  
Graduate Adjunct Faculty  
B.A., College for Lifelong Learning; M.A., University of New Hampshire

Sharon Sabol  
Graduate Adjunct Faculty, Technology  
B.A. University of New Hampshire; M.A. Assumption College

Jeanne Sandera  
Graduate Adjunct Faculty

Leo R. Sandy  
Professor of Counselor Education; Graduate Program Coordinator for School Psychologist  
B.A., University of Massachusetts; M.Ed., Ed.D., Boston University

Pearl Sandy  
Graduate Adjunct Faculty  
B.S., University of Massachusetts at Lowell; M.Ed., Rivier College

Phillip Sanguedolce  
Graduate Adjunct Faculty  
B.A., College of the Holy Cross; M.Ed., University of Wisconsin; Ph.D., Antioch New England Graduate School

Kerry Schnell  
Graduate Adjunct Faculty  
B.A., Arizona State University; M.Ed., Keene State College; CAGS, Plymouth State College; Ed.D., University of Sarasota

Kurt Schroeder  
Professor of Geography and Environmental Planning  
B.A., University of Minnesota; M.S., Ph.D., Pennsylvania State University

Jan Scipione  
Graduate Adjunct Faculty, Curriculum Development  
B.A. Simmons College; M.Ed. University of Vermont

Thomas Shevenell  
Graduate Adjunct Faculty, Center for the Environment  
B.A., University of New Hampshire, M.Phil., Columbia University, Ph.D., University of New Hampshire

Larry Siebrands  
Graduate Adjunct Faculty  
B.S., Augustana College; M.D., Northwestern Seminary; Ph.D., Kansas State University

Sharon Silva  
Graduate Adjunct Faculty  
B.S., College for Lifelong Learning; M.Ed., Plymouth State College

William Smith  
Graduate Adjunct Faculty, Center for the Environment  
B.S., Rutgers University; M.S. Yale University; Ph.D. Rutgers University
Valerie Smith  
Assistant Professor of Special Education  
B.M.T., University of Kansas; M.Ed., University of Maine; Ph.D, Syracuse University

Michael Soreff  
Graduate Adjunct Faculty  
B.A., Tufts University; M.D., Northwestern University Medical School

Karen Soule  
Graduate Adjunct Faculty  
B.S., University of Maine; M.Ed., Plymouth State College; CAGS, University of New Hampshire

Richard E. Sparks  
Assistant Chair, Associate Professor of Marketing  
B.A., M.A., University of Missouri; Ph.D., Manchester University Business School, England

Robert Spear  
Graduate Adjunct Faculty  
B.S., M.S., Central Connecticut State College; M.Ed., University of Connecticut; Ed.D, University of Massachusetts

Larry Spencer  
Professor Emeritus of Biology; Graduate Adjunct Faculty  
B.S., Brigham Young University; M.A., Oregon State University; M.L.S., University of California Berkeley; Ph.D., Colorado State University

Jeffrey M. Spiegel  
Graduate Adjunct Faculty  
B.A., University of Wisconsin; M.A., NYU Institute for Developmental Studies; Ed.D., University of Vermont

Kathryn Staley  
Graduate Adjunct Faculty, Reading and Writing  
B.A., Purdue University; B.S., Castleton State College; M.A., Ph.D., University of New Hampshire

David Starbuck  
Associate Professor of Anthropology-Sociology  
B.A., University of Rochester; M.Phil., Ph.D., Yale University

Maggie Steir  
Graduate Adjunct Faculty  
B.A., Vassar College; M.A., Boston University; M.Ed., Antioch New England Graduate School

David Stevens  
Graduate Adjunct Faculty

Nancy Strapko  
Graduate Adjunct Faculty  
B.A., Fairmont State College; M. Ed., Trenton State College; Ph.D., New York University

Michael Sullivan  
Graduate Adjunct Faculty, Integrated Arts  
B.A., Harvard University; M.L.S., Simmons College

Robert Suprenant  
Graduate Adjunct Faculty, Curriculum and Instruction  
B.A., Westfield State College; M.Ed., Rivier College; CAGS, University of New Hampshire

Sean Sweeney  
Graduate Adjunct Faculty, Center for the Environment  
B.S., Clarkson University

Robert F. Swift  
Professor of Music, Distinguished Teaching Award, 1998  
B.S., Hartwick College; M.A., Ph.D., Eastman School of Music

David C. Talbot  
Graduate Adjunct Faculty, Business  
B.S.B.A., University of Denver; C.G.S., Brown University; MBA, Plymouth State College

Malcolm Taylor  
Graduate Adjunct Faculty, Center for the Environment  
B.Ed., University of New Hampshire; M.S., Michigan State University

Patt Taylor  
Graduate Adjunct Faculty  
B.S.E.E., University of New Hampshire; M.B.A. Ohio State University

Carol Thomas  
Graduate Adjunct Faculty, Technology  
M.A., The Milano School

Louise Thompson  
Graduate Adjunct Faculty  
B.A., MacMurray College; M.Ed., University of Illinois; Ed.D., Boston University

Judith Thurlow  
Graduate Adjunct Faculty  
B.A., Boston University; M.D., Ph.D. Andover Newton Theological School

Pamela Tinker  
Graduate Adjunct Faculty  
B.A., University of New Hampshire; M.L.S., Syracuse University

Warren C. Tomkiewicz  
Department Chair, Professor of Natural Science Education; Graduate Program Coordinator for Science Education  
B.Ed., Plymouth State College; M.S., Northeastern University; Ed.D., Boston University

Lyonel Tracey  
Graduate Adjunct Faculty  
B.S., University of Maine at Farmington; M.Ed, CAGS, University of Maine at Orono, Ed.D., George Washington University

Marianne M. True  
Associate Professor of Education; Graduate Program Coordinator of Educational Leadership, M.Ed. Program; Distinguished Graduate Teaching Award in Education, 2005  
B.A., Boston College; M.Ed., CAGS, Plymouth State College; Ph.D. University of Sarasota.
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Degree Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan Tucker</td>
<td>Graduate Adjunct Faculty</td>
<td>B.A., Emory University; B.F.A., Augusta College; M.F.A., North Texas State University</td>
</tr>
<tr>
<td>Mark P. Turski</td>
<td>Professor of Natural Science Education; Graduate Program Advisor for Science Education</td>
<td>B.S., M.Ed., University of Maine; Ph.D., University of Texas at Austin</td>
</tr>
<tr>
<td>Sarah Turtle</td>
<td>Graduate Adjunct Faculty, Biology</td>
<td>B.A., Hartwick College; M.S., Ph.D., University of New Hampshire</td>
</tr>
<tr>
<td>Robert Ulman</td>
<td>Graduate Adjunct Faculty</td>
<td>B.A., M.Ed., University of Maine</td>
</tr>
<tr>
<td>James Vailas</td>
<td>Graduate Adjunct Faculty, Athletic Training</td>
<td>B.A., M.D., Dartmouth College</td>
</tr>
<tr>
<td>Rick Van de Poll</td>
<td>Graduate Adjunct Faculty, Center for the Environment</td>
<td>B.A., Evergreen State College; M.S., San Francisco State University; M.S. Antioch New England Graduate School, Ph.D., Union Institute</td>
</tr>
<tr>
<td>Cynthia Vascak</td>
<td>Department Chair, Professor of Art Education; Graduate Program Coordinator for Art Education</td>
<td>B.A., Pan American University; M.F.A., Boston University; Ph.D., University of New Hampshire</td>
</tr>
<tr>
<td>Amy Veilleux</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., North Adams State College; M.Ed, Plymouth State University</td>
</tr>
<tr>
<td>Anil Waghe</td>
<td>Assistant Professor of Chemistry</td>
<td>B.S., University of Bombay, India; M.S., Indian Institute of Technology, India; Ph.D., University of Maine at Orono</td>
</tr>
<tr>
<td>Brenda Walker</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., M.Ed., CAGS, Plymouth State University</td>
</tr>
<tr>
<td>Diana Watson</td>
<td>Graduate Adjunct Faculty, Special Education and Development</td>
<td>B.S., M.Ed., University of New Hampshire</td>
</tr>
<tr>
<td>Veronica Lucille Watt</td>
<td>Graduate Adjunct Faculty, Library Media</td>
<td>B.A., Keene State College; M.A., University of Rhode Island</td>
</tr>
<tr>
<td>Gail Westergren</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., Keene State College; M.Ed., Notre Dame College; CAGS, Plymouth State College</td>
</tr>
<tr>
<td>Stephanie Wheeler</td>
<td>Graduate Adjunct Faculty</td>
<td>B.A., University of New Hampshire; M.Ed, Plymouth State University</td>
</tr>
<tr>
<td>Peter Whelley</td>
<td>Graduate Adjunct Faculty</td>
<td>B.A., Boston University; M.S. University of Dayton</td>
</tr>
<tr>
<td>Daniel Whitaker</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., Plymouth State College; M.A., University of Connecticut; Ph.D. Carnegie-Mellon University</td>
</tr>
<tr>
<td>Steven Whitman</td>
<td>Graduate Adjunct Faculty, Geography</td>
<td>B.A., University of Rhode Island; M.R.P. University of Massachusetts–Amherst</td>
</tr>
<tr>
<td>Joan M. Wiegers</td>
<td>Artist-in-Residence, Director of Dance</td>
<td>B.A., Hillsdale College; M.A., Goddard College; M.F.A., SUNY–Brockport</td>
</tr>
<tr>
<td>Kenneth Williams</td>
<td>Graduate Adjunct Faculty</td>
<td>B.S., M.Ed., Plymouth State College</td>
</tr>
<tr>
<td>Kimberly M. Williams</td>
<td>Associate Professor of Curriculum and Instruction</td>
<td>B.S., St. Lawrence University; M.S., Ph.D., Syracuse University</td>
</tr>
<tr>
<td>Geoffrey Wilson</td>
<td>Graduate Adjunct Faculty, Biology</td>
<td>B.S., Cornell University; M.S., University of Maine</td>
</tr>
<tr>
<td>Deborah Wiswell</td>
<td>Graduate Adjunct Faculty, Reading and Writing</td>
<td>B.S., Springfield College; M.Ed., Antioch New England College; CAGS, Plymouth State College</td>
</tr>
<tr>
<td>Eldwin Wixson</td>
<td>Professor Emeritus of Mathematics; Graduate Adjunct Faculty</td>
<td>B.S., University of Maine; M.S.T., Colby College; M.S.Ed. Temple University; Ph.D., University of Michigan</td>
</tr>
<tr>
<td>Stacey G.H. Yap</td>
<td>Professor of Anthropology-Sociology; Graduate Program Coordinator for Heritage Studies and Social Science</td>
<td>B.S., Northeastern University; M.A., Ph.D., Boston University</td>
</tr>
<tr>
<td>Kerry Yurewicz</td>
<td>Assistant Professor of Ecology; Graduate Program Advisor for Environmental Science and Policy</td>
<td>B.S., Ph.D., University of Michigan</td>
</tr>
<tr>
<td>Joseph Zabransky</td>
<td>Professor of Meteorology; Graduate Program Advisor for Meteorology</td>
<td>B.S., Pennsylvania State University; M.S., Ph.D., University of Wisconsin</td>
</tr>
<tr>
<td>Craig Zamzow</td>
<td>Contract Faculty, Business; Graduate Program Coordinator MBA</td>
<td>B.S.E.E., Iowa State University; MBA, Rivier College</td>
</tr>
</tbody>
</table>
University System of New Hampshire
Board of Trustees

Richard E. Ashooh
Bedford

John D. Crosier
Concord

Edward C. Dupont, Vice Chair
Durham

George Epstein
Conway

Jeremy Foskitt
Plymouth State University Student Trustee

Elizabeth K. Hoadley
Concord

Peter F.H. Lamb
Newmarket

John H. Lawson
Amesbury, Mass.

Andrew E. Lietz, Chair
Rye

Joel M. Maiola
Concord

John H. Moody
Derry

John J. Oullette
Keene State College Student Trustee

Hon. Walter R. Peterson
Peterborough

Eugene A. Savage
Barrington

Merle W. Schotanus
Grantham

Anne M. Sprague
Plainfield

Henry B. Stebbins
Manchester

Elizabeth M. Tamposi
Nashua

Edwinna C. Vanderzanden, Secretary
Bedford

EX OFFICIO

Helen F. Giles-Gee
President of Keene State College

Karol A. LaCroix
President of Granite State College

Hon. John H. Lynch
Governor of the State of New Hampshire

J. Bonnie Newman
Interim President of the University of New Hampshire

Stephen J. Reno
Chancellor of the University System of New Hampshire

Sara Jayne Steen
President of Plymouth State University

Stephen H. Taylor
Commissioner of Agriculture

Lyonel B. Tracy
Commissioner of Education
Index

Academic calendar 2006–2008 .................................................. 16
Academic integrity ................................................................ 22
Academic policies and procedure ........................................... 22
Academic support .................................................................. 27
Accreditation .......................................................................... 17
Administration and curriculum/assessment strand, ......... 94
  CAGS in educational leadership
  Administration course descriptions .................................... 100
  Admission requirements for M.A.T. in art education ........ 35
  Admission requirements for M.A.T. in science education .. 36
  Admission requirements for M.B.A. .................................. 38
  Admission to master of education programs .................... 46
  Adult learning and development focus, ............ 71
  self-designed M.Ed. program
  Adult learning course descriptions .................................... 122
  Adventure learning course descriptions ......................... 123
  Adventure learning focus, self-designed M.Ed program ... 71
  Advising ........................................................................... 33
  Anthropology course descriptions .................................... 139
  Applied meteorology M.S. degree program ...................... 85
  Applied meteorology admissions ....................................... 85
  Applied meteorology application requirements ............... 85
  Applied meteorology course policies ............................... 86
  Applied meteorology degree requirements ....................... 87
  Applied meteorology program of study ......................... 87
  Argosy University of Sarasota ......................................... 98
  Art course descriptions .................................................. 105
  Art education certification concentration, ...................... 75
  K-12 education M.Ed. program ....................................... 99
  Art education course descriptions ................................... 104
  Arts, leadership and learning strand, ....................... 94
  CAGS in educational leadership
  Assistantships .................................................................. 31
  Athletic administration concentration of educational ...... 58
  leadership M.Ed program
  Athletic administration focus, self-designed M.Ed. program 71
  Athletic training M.Ed. programs ................................. 49
  Athletic training course descriptions ............................. 106
  Audit, M.Ed. Course .................................................... 49
  Banner information system ............................................. 27
  Biology M.S. program ................................................... 88
  Biology admissions ........................................................ 88
  Biology course descriptions ........................................... 149
  Biology degree requirements ......................................... 89
  Biology educator 7-12 certification concentration, .......... 80
  secondary education M.Ed program
  Biology program of study ............................................... 89
  Boyd Science Center ........................................................ 20
  Business course descriptions ........................................... 109
  CAGS strands .................................................................. 93
  Center for the Environment ............................................. 20
  Certificate of advanced graduate studies (CAGS) .......... 93
  Certificate programs and institutes ............................... 84
  Chemistry course description ......................................... 151
  Class cancellation policy ................................................ 26
  Commencement ceremony .............................................. 26
  Common professional component (MBA) ...................... 39
  Computer education course descriptions ....................... 119
  Computer technology education certification .................. 76
  concentration, K-12 education M.Ed program
  Conceptual framework for teacher education (CHECK) .. 43
  Conflicts in families certificate ....................................... 55
  Counseling course descriptions ..................................... 114
  Counselor education self-designed focus, ...................... 96
  CAGS in educational leadership
  Counseling program concentrations .............................. 51
  Counseling program internship information ................. 52
  Counseling self designed concentration of .................... 55
  counselor education M.Ed program
  Counselor education M.Ed programs .............................. 51
  Counselor education certificate programs ...................... 55
  Counselor education monitoring and dismissal process ..... 52
  Counselor education screening and extended admission process 51
  Counselor education strands, CAGS in educational leadership 95
  Course add/drop withdrawal policies .............................. 24
  Course descriptions, graduate ....................................... 100
  Course enrollment ........................................................ 23
  Course incompletes and extensions ............................... 25
  Course overload information .......................................... 25
  Course policies ............................................................ 32
  Course registration and payment .................................... 23
  Course registration refund policy ................................... 24
  Course schedule ............................................................ 22
  Criminal justice M.S. program ....................................... 90
  Criminal justice, program of study ................................. 90
  Criminal justice course descriptions ............................. 121
  Curriculum and instruction focus, self-designed M.Ed. program 71
  Degree conferral information ......................................... 26
  Delta Mu Delta (DMD) ................................................... 28
  Doctoral partnerships ..................................................... 98
  Drug-free environment .................................................. 22
  Early childhood education certification concentration, ... 80
  elementary education M.Ed program
  Early childhood education course descriptions ............. 126
  Eating disorders institute ............................................... 63
  Economics course descriptions ..................................... 113
<table>
<thead>
<tr>
<th>Course Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and specialist conversion programs</td>
<td>83</td>
</tr>
<tr>
<td>Education course descriptions</td>
<td>123</td>
</tr>
<tr>
<td>Educational leadership CAGS program</td>
<td>93</td>
</tr>
<tr>
<td>Educational leadership M.Ed program</td>
<td>56</td>
</tr>
<tr>
<td>Educator certification</td>
<td>83</td>
</tr>
<tr>
<td>Elementary education M.Ed program</td>
<td>80</td>
</tr>
<tr>
<td>Elementary education with K-8 certification concentration</td>
<td>80</td>
</tr>
<tr>
<td>Elementary education M.Ed program</td>
<td>80</td>
</tr>
<tr>
<td>Emotional handicaps certification</td>
<td>72</td>
</tr>
<tr>
<td>English course descriptions</td>
<td>132</td>
</tr>
<tr>
<td>English education M.Ed. programs</td>
<td>58</td>
</tr>
<tr>
<td>English education 5-12 certification concentration</td>
<td>58</td>
</tr>
<tr>
<td>secondary education M.Ed program</td>
<td></td>
</tr>
<tr>
<td>Environmental science and policy course descriptions</td>
<td>151</td>
</tr>
<tr>
<td>Environmental science M.Ed program</td>
<td>61</td>
</tr>
<tr>
<td>Environmental science and policy M.S. program</td>
<td>90</td>
</tr>
<tr>
<td>Environmental science course descriptions</td>
<td>157</td>
</tr>
<tr>
<td>Eta Sigma Gamma (ESG)</td>
<td>28</td>
</tr>
<tr>
<td>Faculty, graduate</td>
<td>165</td>
</tr>
<tr>
<td>Fair and safe learning environment</td>
<td>21</td>
</tr>
<tr>
<td>Fair grading policy</td>
<td>24</td>
</tr>
<tr>
<td>FERPA: privacy and disclosure of education records policy</td>
<td>22</td>
</tr>
<tr>
<td>Financial aid</td>
<td>29</td>
</tr>
<tr>
<td>Financial information, general</td>
<td>28</td>
</tr>
<tr>
<td>Franklin Pierce College</td>
<td>99</td>
</tr>
<tr>
<td>French course descriptions</td>
<td>142</td>
</tr>
<tr>
<td>French education certification concentration</td>
<td>77</td>
</tr>
<tr>
<td>K-12 education M.Ed program</td>
<td></td>
</tr>
<tr>
<td>General science educator S-9 certification concentration</td>
<td>81</td>
</tr>
<tr>
<td>secondary education M.Ed program</td>
<td></td>
</tr>
<tr>
<td>General special education, M.Ed. in K-12 Education</td>
<td>72</td>
</tr>
<tr>
<td>Geography course descriptions</td>
<td>139</td>
</tr>
<tr>
<td>Grading system</td>
<td>24</td>
</tr>
<tr>
<td>Graduate academic policies and procedures</td>
<td>22</td>
</tr>
<tr>
<td>Graduate assistantships</td>
<td>31</td>
</tr>
<tr>
<td>Graduate council</td>
<td>33</td>
</tr>
<tr>
<td>Graduate course enrollment and course load</td>
<td>23</td>
</tr>
<tr>
<td>Graduate course policies</td>
<td>32</td>
</tr>
<tr>
<td>Graduate course schedule</td>
<td>22</td>
</tr>
<tr>
<td>Graduate courses at area schools</td>
<td>46</td>
</tr>
<tr>
<td>Graduate degrees and areas of study</td>
<td>7</td>
</tr>
<tr>
<td>Graduate faculty and adjunct faculty</td>
<td>165</td>
</tr>
<tr>
<td>Graduate program coordinators and advisors</td>
<td>10</td>
</tr>
<tr>
<td>Graduate student overduet account and collection policy</td>
<td>23</td>
</tr>
<tr>
<td>Graduate terms</td>
<td>23</td>
</tr>
<tr>
<td>Health and healing course descriptions</td>
<td>135</td>
</tr>
<tr>
<td>Health education M.Ed program</td>
<td>61</td>
</tr>
<tr>
<td>Health education course descriptions</td>
<td>135</td>
</tr>
<tr>
<td>Health promotion concentration, health education M.Ed. program</td>
<td>62</td>
</tr>
<tr>
<td>Health promotion course descriptions</td>
<td>137</td>
</tr>
<tr>
<td>Heritage studies M.Ed program</td>
<td>64</td>
</tr>
<tr>
<td>Heritage studies course descriptions</td>
<td>140</td>
</tr>
<tr>
<td>History course descriptions</td>
<td>139</td>
</tr>
<tr>
<td>History of PSU</td>
<td>19</td>
</tr>
<tr>
<td>Housing information</td>
<td>27</td>
</tr>
<tr>
<td>Identification cards</td>
<td>27</td>
</tr>
<tr>
<td>Inactivity in graduate program</td>
<td>32</td>
</tr>
<tr>
<td>Incompletes and extensions</td>
<td>25</td>
</tr>
<tr>
<td>Independent study information</td>
<td>25</td>
</tr>
<tr>
<td>Individual enrollment information</td>
<td>25</td>
</tr>
<tr>
<td>In-State residency status</td>
<td>28</td>
</tr>
<tr>
<td>Instrumental music education concentration,</td>
<td>68</td>
</tr>
<tr>
<td>music education M.Ed program</td>
<td></td>
</tr>
<tr>
<td>Integrated arts programs, elementary or</td>
<td>65</td>
</tr>
<tr>
<td>secondary education M.Ed</td>
<td></td>
</tr>
<tr>
<td>Integrated arts course descriptions</td>
<td>106</td>
</tr>
<tr>
<td>International outreach, M.Ed. program</td>
<td>46</td>
</tr>
<tr>
<td>Internship information</td>
<td>25</td>
</tr>
<tr>
<td>Introduction to PSU</td>
<td>17</td>
</tr>
<tr>
<td>Judd Gregg Meteorology Institute</td>
<td>20</td>
</tr>
<tr>
<td>K-12 art certification</td>
<td>75</td>
</tr>
<tr>
<td>K-12 education M.Ed program</td>
<td>75</td>
</tr>
<tr>
<td>Lamson Learning Commons</td>
<td>20</td>
</tr>
<tr>
<td>Languages and linguistics course descriptions</td>
<td>142</td>
</tr>
<tr>
<td>Learning disabilities specialist K-12 certification</td>
<td>73</td>
</tr>
<tr>
<td>Library media course descriptions</td>
<td>143</td>
</tr>
<tr>
<td>Library Media Specialist certification concentration,</td>
<td>77</td>
</tr>
<tr>
<td>K-12 education – M.Ed program</td>
<td></td>
</tr>
<tr>
<td>Location of PSU</td>
<td>18</td>
</tr>
<tr>
<td>Main campus information</td>
<td>20</td>
</tr>
<tr>
<td>Master of arts in teaching</td>
<td>34</td>
</tr>
<tr>
<td>Master of arts in teaching – art education</td>
<td>34</td>
</tr>
<tr>
<td>Master of arts in teaching – science education</td>
<td>35</td>
</tr>
<tr>
<td>Master of business administration</td>
<td>37</td>
</tr>
<tr>
<td>Master of education program content</td>
<td>46</td>
</tr>
<tr>
<td>Master of education program goals</td>
<td>43</td>
</tr>
<tr>
<td>Master of science degree programs</td>
<td>85</td>
</tr>
<tr>
<td>Math Activities Center</td>
<td>28</td>
</tr>
<tr>
<td>Mathematics course descriptions</td>
<td>144</td>
</tr>
<tr>
<td>Mathematics education M.Ed program</td>
<td>67</td>
</tr>
<tr>
<td>MBA course policies</td>
<td>39</td>
</tr>
<tr>
<td>MBA graduate certificate programs</td>
<td>41</td>
</tr>
<tr>
<td>MBA graduate concentrations</td>
<td>40</td>
</tr>
<tr>
<td>MBA transfer of credits</td>
<td>39</td>
</tr>
<tr>
<td>M.Ed. course audits</td>
<td>49</td>
</tr>
<tr>
<td>M.Ed. degree programs</td>
<td>42</td>
</tr>
<tr>
<td>M.Ed. degree requirements</td>
<td>48</td>
</tr>
<tr>
<td>M.Ed. programs and concentrations</td>
<td>49</td>
</tr>
<tr>
<td>M.Ed. self designed programs and focus options</td>
<td>71</td>
</tr>
<tr>
<td>M.Ed. special education programs</td>
<td>72</td>
</tr>
<tr>
<td>M.Ed. thesis option</td>
<td>48</td>
</tr>
<tr>
<td>M.Ed. transfer credits</td>
<td>48</td>
</tr>
</tbody>
</table>

PLYMOUTH STATE UNIVERSITY GRADUATE ACADEMIC CATALOG 2006 – 2008 181
Mental health counseling concentration of counselor........................................53
Mental health counseling focus, counselor education strand, ...............95
CAGS in educational leadership
Meteorology course descriptions.................................................................158
Middle level education focus, self-designed M.Ed. program ..............71
Mission statement.....................................................................................18
Music and theatre course descriptions.....................................................147
Music course descriptions.......................................................................147
Music education M.Ed program.................................................................68
Music education course descriptions.......................................................146
Music educator certification K-12...............................................................68
National Council for the Accreditation of Teacher Education .............17
( NCATE )
Natural science course descriptions..........................................................160
New England Association of Schools and Colleges (NEASC) .............17
New England League of Middle Schools (NELMS) .........................71
Non-discrimination policy........................................................................21
Off-campus sites/locations ......................................................................21
Out-of-state residency status.................................................................28
Outreach and partnerships.......................................................................162
Overdue account policy...........................................................................23
Parenting education certificate.................................................................55
Parking permits.........................................................................................27
Partnerships .............................................................................................164
PASS office .............................................................................................27
PATH Institute: Paths and Approaches to.............................................64
Transformation and Healing
Petition for graduate program completion .............................................26
Phi Delta Kappa (PDK)............................................................................28
Philosophy course descriptions...............................................................128
Physical education certification concentration, K-12 education .......78
M.Ed program
Physical education course descriptions...................................................138
Physical science educator 7-12 certification concentration ..........................82
Secondary education M.Ed program
Physics course descriptions...................................................................161
Play therapy certificate............................................................................56
Plymouth Academic Support Services (PASS) .....................................27
Plymouth State University administration..........................................164
Plymouth Writing Project .......................................................................59
Political science course descriptions.........................................................141
Positive Behavioral Interventions and Support (PBIS) graduate certificate
Practicum information.............................................................................25
Professional certification strands, CAGS ..............................................97
Program coordinators and advisors.......................................................10
Program completion information.............................................................26
Program of study.....................................................................................32
Project adventure course descriptions...................................................127
Psychology course descriptions...............................................................119
Reading and writing course descriptions.............................................147
Reading and writing specialist M.Ed program........................................69
Reading and writing specialist concentration......................................97
CAGS in educational leadership
Research assistantships ........................................................................31
Residency status.......................................................................................28
Right to know about toxic substances...................................................22
Scholarly societies..................................................................................28
School counseling concentration of counselor education ..............53
M.Ed. program
School counseling focus, counselor education strand, ...............95
CAGS in educational leadership
School health concentration, health education M.Ed program ........61
School principal concentration of educational leadership ..............57
M.Ed. program
School principal concentration, CAGS in educational leadership ....98
School psychologist concentration of counselor education ............53
M.Ed. program
School psychology course descriptions ..............................................119
School psychology focus, counselor education strand ..................96
CAGS in educational leadership
Science education, M.A.T., admission....................................................35
Science education, M.A.T., application requirements .......................36
Science education, M.S. program.............................................................92
Science education, M.S. program of study............................................93
Secondary education M.Ed program.........................................................80
Services for students with disabilities.....................................................27
Sexual harassment policy.........................................................................21
Silver Center for the Arts.......................................................................20
Small Business Institute .......................................................................42
Smoking policy.........................................................................................22
Social studies educator 5-12 certification concentration ....................82
Secondary education M.Ed program
Social work course descriptions..............................................................142
Spanish course descriptions...................................................................143
Spanish education certification concentration......................................78
K-12 education M.Ed program
Special education, M.Ed. programs.........................................................72
Special education administration concentration.................................98
CAGS in educational leadership
Special education administrator concentration of.........................57
Education leadership M.Ed. program
Special education course descriptions....................................................128
Specialist certification options (post-masters) .......................................84
Statement of financial responsibility......................................................28
Student handbook information...............................................................21
Student services.......................................................................................27
Superintendent of schools concentration ..............................................97
CAGS in educational leadership
Teacher certification options.................................................................75
Teaching English to speakers of other languages................................79
(TESOL) certification concentration, K-12 education M.Ed program

182  PLYMOUTH STATE UNIVERSITY GRADUATE ACADEMIC CATALOG  2006 – 2008
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching fellowships</td>
<td>31</td>
</tr>
<tr>
<td>Teaching of writing concentration, English M.Ed program</td>
<td>59</td>
</tr>
<tr>
<td>Theatre course descriptions</td>
<td>147</td>
</tr>
<tr>
<td>Tuition and fees 2006-2008</td>
<td>28</td>
</tr>
<tr>
<td>Tutoring information</td>
<td>27</td>
</tr>
<tr>
<td>Undergraduate student opportunities for graduate study</td>
<td>33</td>
</tr>
<tr>
<td>USNH board of trustees</td>
<td>179</td>
</tr>
<tr>
<td>USNH policies and protocols</td>
<td>21</td>
</tr>
<tr>
<td>Values statement</td>
<td>18</td>
</tr>
<tr>
<td>Vision statement</td>
<td>19</td>
</tr>
<tr>
<td>Withdrawal from graduate program</td>
<td>32</td>
</tr>
<tr>
<td>Writing and reading center</td>
<td>27</td>
</tr>
</tbody>
</table>